Capital ratio consultation

Presentation for FSO 5 Dec 2018.

RESERVE BANK
OF NEW ZEALAND
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State of play

Consultation paper in draft form, awaiting 4 key decisions from FSO.

- The output floor and scalar settings
- Proposed communication of escalation and supervisory responses (ESR) in relation to the conservation buffer
- CCyB buffer
- Proposed level for the leverage ratio

Immediate next steps

- *Aide Memoire* (jointly with Treasury) to Prime Minister, MoF and Minister for Commerce and Consumer Affairs, for December 7 meeting with NZ Bankers Association Council – AM to be provided today
- *Draft* consultation paper to MoF and Treasury, Thursday 6 Dec
- Webpage and comms briefed and feedback sought, Friday 7 Dec
- Next draft circulated within RBNZ, Monday 10 Dec
- Final draft written and (if there is a demand) re-circulated within RBNZ, Wed 12 Dec
- APRA briefed, Thurs 13 Dec

	Week beginning:	2018: 19 Nov, 26 Nov, 3 Dec, 10 Dec, 17 Dec; 2019: Jan, Feb, Mar, Apr, May, Jun, Q3, Q4; 2020: Q1, Q2
Ratio Analysis	- Briefing for Minister of Finance and Treasury	6 Dec
	- 2nd draft circulated internally	10 Dec
	- Final draft circulated	12 Dec
	- Release of consultation paper	Publish 14/17 Dec; Submissions close end-March 2019
	- Banking forum/ workshop	1st wk Feb
Final Decisions	- Tier 1 capital instruments for mutuals	Jan
	- Draft Regulatory Impact Statement (RIS), summary of submissions, and final decisions → FSO	April
	- Publish RIS, technical note on calibration, and final decisions	Apr / May
	- Consult and finalise exposure drafts (BPR / BPG)	Publish exposure drafts in May; finalise in Q3 2019
'Small' Policy changes & Handbook Restructure	- Consult on 'small P' changes (incl. APRA changes)	Consult on 'small P' changes (incl. APRA) →
	- Ongoing revisions to exposure drafts due to 'small P' changes	Ongoing revisions to exposure drafts (BPR/ BPG) →
Transition Period	- Numerator decisions in effect (i.e. New issues need to comply straight away)	Jun
	- Grandparenting of noncompliant capital instruments	Transition period for noncompliant instruments →
	- Transition period for dual reporting/ output floor etc.	Transition period for dual reporting, output floor, etc. →

Calibrating the scalar and output floor for the IRB approach

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Background

- In July the Bank announced the in-principle decision to apply an output floor to limit the extent to which IRB RWAs can fall below RWAs as they would be calculated under the standardised approach.
- Principles of the Capital Review:
  - *Capital requirements should be set in relation to the risk of bank exposures*
  - *Where there are multiple methods for determining capital requirements, outcomes should not vary substantially between methods*
- FSO agreed in November that setting a combination of a **higher IRB scalar** and an **output floor** was the preferred approach to closing the gap between IRB and Standardised outcomes, rather than relying only on the output floor.
- Rationale: a combination of the two tools can achieve the same outcome while better preserving risk sensitivity in the framework.

How large is the gap at present?

RBNZ s105 [redacted]

Source: QIS returns
Note: excludes Sovereign and Bank as these are moving to standardised treatment. Includes slotted exposures.

- The key question for FSO is how large of a gap in RWA outcomes should be possible under the revised framework.
- RBNZ s105 [redacted]
- Under this assumption, the four IRB banks' RWAs sit at about 80% of the standardised outcome at present.
- RBNZ s105 [redacted]

How to set the floor and scalar

- The **IRB scalar** multiplies RWA calculated under IRB by a fixed amount. This means that changes to the IRB scalar change the capital outcome while fully preserving the risk sensitivity of the framework.
- The **output floor** is more of a robust backstop, as RWA from the IRB approach cannot go below X% of the standardised outcome. However, relying on a tightly binding output floor would lessen the framework's risk sensitivity.
- Consistent with the review's principle of preserving a risk-sensitive capital framework (and decision to retain IRB), FP's preference is to use both tools:
  - Set a high IRB scalar to do most of the heavy lifting of closing the difference in average outcomes under IRB and Standardised, while preserving risk differentiation.
  - Set an output floor at a level that is not usually expected to be binding, but which will act as a hard backstop to prevent RBNZ s105 [redacted] from happening in future.

Calibration options

- It is FSO’s judgement how big of a gap between IRB and Standardised should be available - we can pick a combination of the scalar and floor to produce any outcome north of the current 80%.
- ~85% of Standardised has historically been used as the Bank’s benchmark outcome, reflected in earlier calibrations of the mortgage and farm lending IRB asset classes.
- Banking Steering Group endorsed a calibration where IRB banks’ average RWA outcome is 90% of the standardised outcome, including the output floor at 85% (i.e. option C).

		Status quo	Option A	Option B	Option C
IRB RWA as % of Standardised	**Average outcome**	**80%**	**85%**	**85%**	**90%**
	Range of 4 banks	78 – 86%	85 – 86%	84 – 93%	88 – 98%
IRB scalar setting		1.06	1.06	1.14	1.2
Output floor setting (hard minimum)		None	85%	80%	85%
Number of banks for which floor binds		N/A	3	0	0

Bank-by-bank outcomes under these options

RBNZ s105 [redacted]

Note: As at March 2018. Based on QIS estimates. RBNZ s105 [redacted]

Bank-by-bank capital ratio outcomes with a 90% target

RBNZ s105 [redacted]

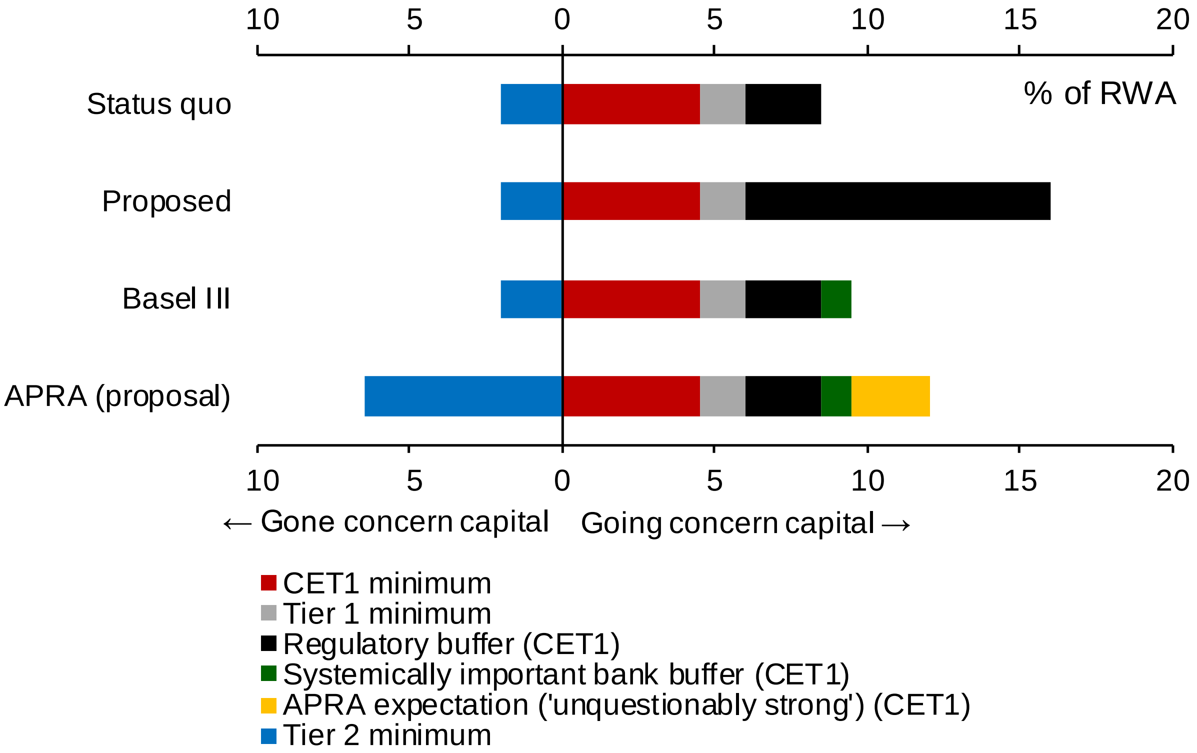
- RBNZ s105 [redacted]
- Net impact of changes is equivalent to reducing aggregate capital ratio by 150bps.
- RBNZ s105 [redacted] net impact of policy framework changes is equivalent to reducing capital ratio by ~100bps.

Consultation paper: expectations

- Our assumption is that we will indicate a preferred calibration in the consultation paper.
- We can expect Standardised banks to support a higher calibration – arguments in this direction focus on competitive neutrality, and the perceived limitations of internal models not justifying such a large gap as at present.
- IRB banks will argue for a lower calibration – arguments in this direction focus on consistency with Basel/APRA (floor at 72.5%), whether the Standardised approach is the appropriate benchmark for IRB, and the need for a ‘payoff’ for the operational costs banks face to comply with IRB requirements.

Buffers

Recap: proposed capital hard minimum and buffer



Escalating Supervisory Response (ESR)

	capital in excess of RBNZ requirements	standard prudential actions, no capital response
Capital below RBNZ buffer requirements	a, b, c	a = subject to increased monitoring, b = must submit an acceptable capital restoration plan c = cannot make capital distribution or pay management fee if doing so would leave the bank under-capitalised
	d, e	d = bonuses and salary increases to senior executives restricted e = prior approval for acquisitions, branching and new lines of business
	f, g	f = activity restrictions: business lines, extension of credit for any highly leveraged transaction, pay interest on liabilities that exeeds the weighted average cost of funds prevailing in the market g = growth of total assets must be restricted
	h, i	h = must raise additional capital or be merged with a suitable institution i = after 60 days must be placed in receivership unless specific statutory provisions are met
	Bank likely to be in resolution	
	prudential response is increasingly restrictive on the bank	

Dividend restrictions

Tier 1 / RWA less 6%	Dividend restrictions (% of earnings that can be paid out) Option A (graduated)	Option B (linear)	Option C (hard)
7.5% - 10%	80%	60%	0%
5 - 7.5%	40%	40%	0%
2.5 - 5%	0%	20%	0%
0 - 2.5%	0%	0%	0%

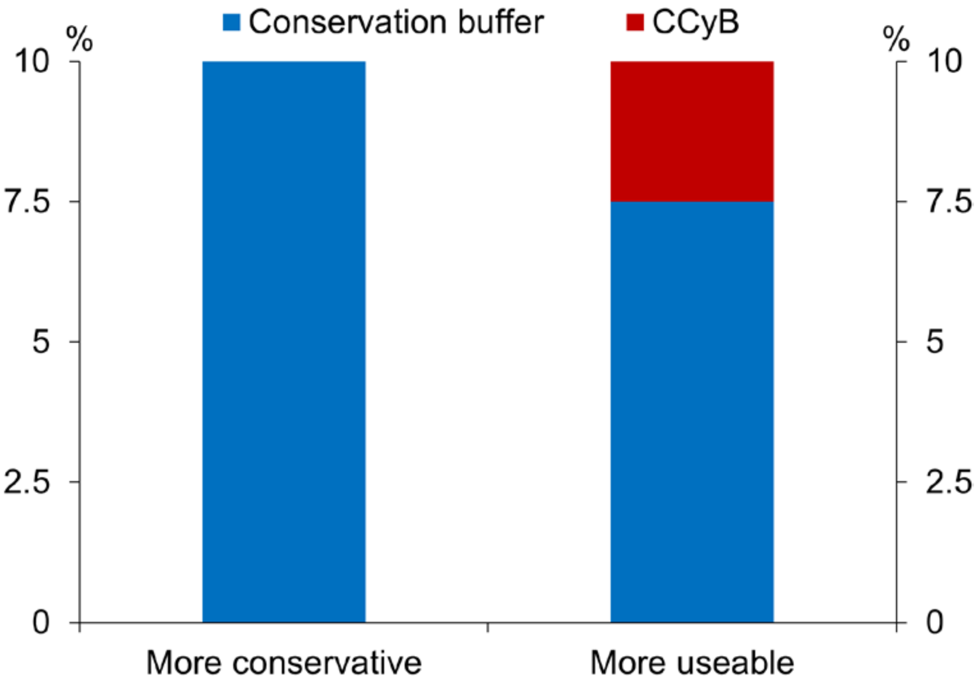
CCyB

Composition of the capital buffer

- 16% Tier 1 capital ratio
- Normal buffer = 10%

Options

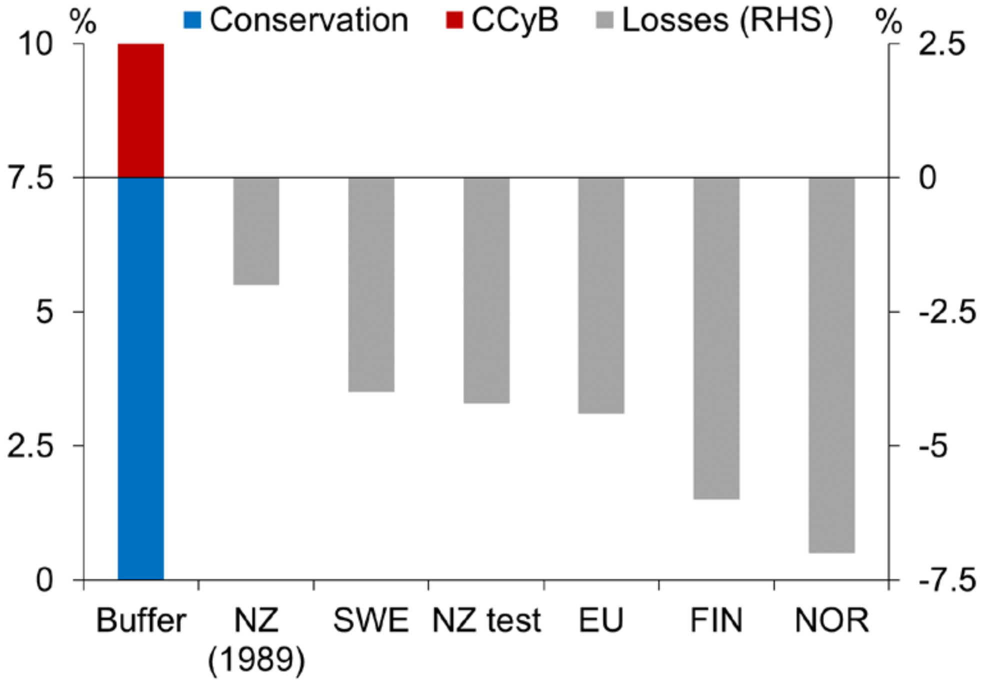
- More conservative
  - More certainty buffer will be there when needed
- More useable
  - More likely to support lending in crisis



Degree of conservatism

- CCyB = 2.5% on average
  - Cut to 0% in crisis
  - Risk of cutting too early or face sequence of shocks

- Conservation = 7.5%
  - Minimum + conservation buffer = 13.5% T1 capital
  - 1/100 crisis probability



Degree of lending support

- In theory, could support up to 15% more lending per annum
  - Based on leverage ratio ($10.50 of lending for every $1 of capital) and assumes linear relationship between capital and lending

- In practice, may be closer to 2%
  - Around $1 capital for $1 of lending
  - Based on empirical study of the impact of changes in BoE Pillar 2 reqs
  - Likely to be an underestimate

Buffers: Things to consider

There are complex issues to consider regarding the CCyB:

- Dynamics of time varying buffers for small versus large banks
- Reciprocity implications of CCyB > 0

These issues relate to a potential D-SIB buffer:

- What framework for deciding what banks are ‘systemic’
- How large should a D-SIB buffer be
- How would the D-SIB relate to the CCyB (could they be one and the same? = e.g. Canada’s recent reform)
- Dollar impacts of 10% buffer on small versus large banks – see next slide

Dollar impact on small versus big 4

Capital impacts with proposed Tier 1 target	Small banks	Big four
Current RWA $bn	38.4	251
New RWA (post floor and scaler) $bn	38.4	290
Current Tier 1 $bn	5.2	33.6
Current Tier 1 as % of current RWA	13.6%	13.4%
Proposed Tier 1 using 16% of RWA, $bn	6.1	46.4
Increase required in Tier 1 $bn	0.9	12.8
Annual dividend, average past 5 years $bn	0.006	3.4
Increase in Tier 1 / to annual dividend (years)	**15.7**	**3.8**
non-compliant AT1 to be replaced $bn	0.2	6.2
Total new and replacement Tier 1/annual dividends (years)	**18.3**	**5.6**

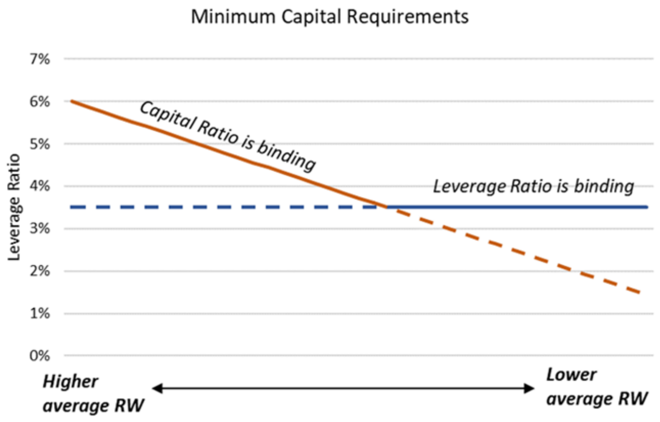
Leverage ratio

Options for Leverage Ratio

- It was previously agreed in FSO that we would consult on minimum and disclosure leverage ratio requirements.
- A final decision on whether to adopt leverage ratio requirements will be made after consultation. This paper sets out the proposed options for leverage ratio minimums to consult on.
- There are two options proposed for minimum leverage ratio requirements:
  - 3% for all banks, or
  - 3.5% for IRB banks (in line with APRA) and 3% for standardised
- Given the Tier 1 Capital Ratio (with buffers) of 16%, and the risk-weights from the output floor and scalar, the proposed leverage ratio requirements are very unlikely to influence the risk-sensitivity of bank's credit allocation.

When should a leverage ratio be binding?

- A key question is when it is acceptable for the leverage ratio to be binding rather than the minimum capital ratio. Is it only in exceptional circumstances? Where do we draw the line?
- A leverage ratio acts as a backstop, limiting a bank's potential vulnerability to risks that aren't captured in the risk-based framework, and limiting the amount of deleveraging that may occur in a crisis.
- However, setting a leverage ratio too high can create some perverse incentives for banks near the minimum leverage and minimum capital ratio.
- A 3% leverage ratio would only be binding before the capital ratio for a couple of small banks. A 3.5% leverage ratio would be binding for some of the IRB banks.



Timing and transitions

Transition plan

- Finalised decisions on capital regime, 2Q 2019
- Draft handbook changes, released for consultation, June 2019
- Exposure draft of new handbook, released for consultation, Sep 2019
- New capital definition takes effect, with grandfathering, Sep 2019
- New RWA rules take effect, with grandfathering, Sep 2019
- New capital ratios take effect, with transition period, Jan 2020

Transitional Arrangements for 'Big P' Capital Review decisions

<table>
<tr><th>Status</th><th>Capital Review</th><th>Q1 2019</th><th>Q2 2019</th><th>Q3 2019</th><th>Q4 2019</th><th>Q1 2020</th><th>Q2 2020</th><th>Q3 2020</th><th>Q4 2020</th><th>2021</th><th>2022</th><th>2023</th></tr>
<tr><td>In-principle decision announced in Dec. 2017</td><td>Phase-out of non-compliant AT1 instruments</td><td></td><td colspan="10">New capital instruments need to be compliant from Jun. 2019 onwards;
20% of non-compliant AT1 de-recognised each year (Grandparenting) after revised exposure draft is confirmed</td></tr>
<tr><td>In-principle decision announced in Dec. 2017</td><td>Tier 1 instrument for mutual societies</td><td>Confirm decision in Jan 19</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>In-principle decision announced in Jul. 2018</td><td>Dual reporting</td><td></td><td colspan="4">12 month transition period for system build</td><td>Disclosure requirements in effect</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Consultation on design of floor vs scalar closes March 2019</td><td>Output floor</td><td></td><td></td><td>Consult on exposure draft in Q3 2019</td><td>Revised exposure draft published in Q4 2019</td><td></td><td>In effect Q2 2020</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Consultation on design of floor vs scalar closes March 2019</td><td>Scalar</td><td></td><td></td><td></td><td>In effect Q4 2019</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>In-principle decision announced in Jul. 2018</td><td>Require standardised approach for Sovereign and Bank portfolios</td><td></td><td></td><td>Consult on exposure draft in Q3 2019</td><td>Revised exposure draft published in Q4 2019</td><td></td><td>In effect Q2 2020</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>In-principle decision announced in Jul. 2018</td><td>Standardised Measurement Approach for Operational Risk Capital requirements</td><td></td><td></td><td></td><td></td><td>Consult on exposure draft for Op Risk (Q1 2020)</td><td>Publish revised exposure draft for Op Risk (Q3 2020)</td><td>In effect Q3 2020</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Consultation on calibration of capital requirements closes March 2019</td><td>Transition to higher ratio requirements
> 5 year phase-in</td><td></td><td colspan="4">10% required Tier 1 from Q2 2019 to Q1 2020</td><td colspan="3">11.5% required Tier 1 from Q2 2020 to Q1 2021</td><td>13.0%</td><td>14.5%</td><td>16%</td></tr>
<tr><td>Consultation on whether to introduce leverage ratio and potential calibration, closes March 2019</td><td>Leverage Ratio</td><td></td><td></td><td></td><td colspan="2">Consult on Leverage Ratio exposure draft (Q4 2019 – Q1 2020)</td><td>Publish revised draft for Leverage Ratio (Q2 2020)</td><td>Minimum Leverage ratio and disclosure requirements in effect</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Consult on revised disclosure requirements once various Capital Adequacy exposure drafts are revised</td><td>Disclosure requirements</td><td></td><td></td><td></td><td></td><td>Consult on changes to Order-in-Council (OIC)</td><td colspan="2">Publish revised OIC; new disclosure requirements in effect</td><td></td><td></td><td></td><td></td></tr>
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