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Monitoring Capital Review Implementation

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Executive Summary

The Reserve Bank's 2019 Capital Review focused on improving the quality and quantity of capital that banks are required to have. The Capital Review decisions introduced higher capital requirements to make the banking system safer for New Zealanders and to ensure that bank owners have a meaningful stake in their businesses. Specifically, capital requirements, including buffers, are in the process of gradually shifting up to 18% of risk weighted assets (RWAs) for the four largest banks, and 16% for other banks. The equivalent number was 10.5% of RWAs, prior to the Capital Review changes.

The Capital Review decisions included a Regulatory Impact Assessment (RIA) with a detailed cost-benefit assessment¹ of the potential impacts of higher capital requirements. The RIA concluded that the benefits of greater stability in the financial system, in particular the reduction in the risk of the significant costs associated with bank failure, outweighed the costs of modestly higher interest rates.

This Bulletin article commences regular monitoring on the impacts of the Capital Review decisions that the Reserve Bank committed to as part of the 2019 decisions. The next assessment is scheduled for two years from now.

The full impact of the Capital Review decisions will not be clear until 2028, once all the changes are fully implemented. While it is too soon to reach definitive conclusions, the key observations covered in this Bulletin are:

- The largest banks, designated as Domestic Systemically Important Banks (DSIBs), have met the increases in buffers in 2022 and 2023, increasing their resilience and system-wide stability.
- Banks have used a combination of retained earnings and issuances of new capital instruments to increase their capital.
- While implementation is still only in its early stages, the costs of capital are tracking broadly in line with estimates in the 2019 RIA, supporting the conclusion of only modest increases in interest rates.
- We have not found any evidence of financial market disruptions from changes to capital requirements.
- The smaller banks have not yet faced any increases in capital requirements, and are well-placed to meet the increases scheduled to affect them from July 2024 onwards.

¹ [Capital Review - Regulatory Impact Assessment and Cost-Benefit Analysis 2019 \(rbnz.govt.nz\)](https://www.rbnz.govt.nz/capital-review-regulatory-impact-assessment-and-cost-benefit-analysis-2019)

Background

From 2017 to 2019, the Reserve Bank of New Zealand – Te Pūtea Matua undertook a review of the capital adequacy framework for locally incorporated registered banks in New Zealand, known as the Capital Review.

Rationale for Capital Review Decisions

The central factor underpinning the Capital Review decisions was to make the banking system safer for all New Zealanders – more capital in the banking system better enables banks to withstand economic volatility and maintain good, long-term customer outcomes.²

As described during the Capital Review, the concept of ‘moral hazard’ is part of the backdrop to these issues. This concept suggests that, in the absence of regulation, there will be a socially sub-optimal level of bank capital as banks do not sufficiently consider the wider social and economic costs of their failure. This is largely due to the expectation of government bailouts. Shareholders and creditors will generally expect governments to bail out banks that are at risk of failing and whose failure would bring widespread social and economic costs. The expectation of bailouts means that creditors are prepared to lend to banks when capital levels are low, generating socially sub-optimal levels of bank capital.³

The 2019 reforms were aimed at addressing this ‘moral hazard’ problem by ensuring the capital provided to banks by owners and others is better aligned with the risks posed to wider New Zealand society by those banks.⁴

Capital Review concluded that benefits of higher capital would outweigh costs

The Reserve Bank undertook a two-year consultation process⁵ before completing a Regulatory Impact Assessment (**RIA**), including a detailed cost-benefit assessment (**CBA**) that set out the rationale and estimated impacts of the final Capital Review decisions.⁶ The CBA acknowledged that higher capital requirements were likely to increase banks’ funding costs and that this was likely to contribute to a small increase in interest rates. The CBA concluded that the benefits of greater stability in the financial system, by increasing banks’ capacity to absorb losses and remain resilient to economic and financial shocks, more than outweighed the costs of modestly higher interest rates.

One of the key factors addressed in the CBA was the Modigliani-Miller (**MM**) theorem. This is an important input to assessing the impact of higher capital requirements on a bank’s funding costs and the extent to which higher capital leads to higher interest rates for borrowers.

² [Capital Review - Reserve Bank of New Zealand - Te Pūtea Matua \(rbnz.govt.nz\)](#)

³ For a comprehensive discussion of the ‘moral hazard’ problem associated with expected bank bailouts see Barth, James A., Gerard Caprio, Jr., and Ross Levine (2012) *Guardians of Finance: making regulators work for us*. MIT Press.

⁴ The decisions are summarised in this document: <https://www.rbnz.govt.nz/-/media/project/sites/rbnz/files/consultations/banks/review-capital-adequacy-framework-for-registered-banks/decisions/capital-review-decisions.pdf>

⁵ [Capital Review - Reserve Bank of New Zealand - Te Pūtea Matua \(rbnz.govt.nz\)](#)

⁶ [Capital Review - Regulatory Impact Assessment and Cost-Benefit Analysis 2019 \(rbnz.govt.nz\)](#)

The MM theorem suggests that when banks are funded with more equity, the risk to investors falls, as the bank is more resilient to shocks and less likely to become insolvent and fail. Consequently, investors' required return on equity falls. Likewise, when banks are funded with more debt and less equity, the risk to investors increases, requiring a higher rate of return on equity to compensate for that additional risk.

Higher capital requirements can therefore have two opposite effects on total funding costs:

- A higher amount of capital can add to funding costs as capital tends to be more expensive than debt.
- A higher amount of capital will reduce funding costs since the required return on capital and debt will fall as risk is lower.

The impact of higher capital on funding costs depends on the relative impacts of each of these offsetting factors.

The 2019 RIA concluded that the potential effects of the MM theorem would hold only partially. In the context of the Capital Review decisions, this meant that the RIA expected a small increase in a bank's effective funding costs, with the impact of more capital – the first point above – exceeding the reduction in costs from lower risk – the second impact above.

In the RIA, the Reserve Bank concluded that banks would attempt to pass on some of these higher funding costs to customers in the form of higher interest rates for borrowing and lower interest rates for deposits than would otherwise be the case. The RIA concluded that any interest rate increases were likely to be modest – and estimated that interest rates could increase by around 0.2 percentage points, once all of the new requirements are phased in. A more detailed description of the analysis is available in the 2019 RIA.

Capital Review Implementation and Assessment

The Reserve Bank announced the final decisions for the Capital Review in 2019. Implementation was planned to commence in 2020, however, this was delayed until 2021 due to the COVID-19 pandemic. In June 2021, the Reserve Bank published the new Banking Prudential Requirements (**BPR**), which implemented the 2019 Review decisions. The first BPRs took effect in October 2021.

In the RIA, the Reserve Bank committed to assessing the impacts of the Capital Review changes on a regular basis.⁷ The first assessment was initially due to be published in November 2021. However, given the implementation delay due to COVID-19, it was necessary to delay the first assessment to provide a longer period to assess possible impacts.

Future assessments of implementation will be carried out every two years (biennially) rather than annually. Monitoring Capital Review implementation over two-year horizons provides more value to readers as the report will cover longer time periods over which to assess the impact of the changes.

⁷ See section 9 - [Capital Review - Regulatory Impact Assessment and Cost-Benefit Analysis 2019 \(rbnz.govt.nz\)](https://www.rbnz.govt.nz/capital-review/regulatory-impact-assessment-and-cost-benefit-analysis-2019)

Purpose of this Bulletin article

This Bulletin article is the first biennial assessment of the Capital Review changes.⁸ The purpose of the assessment is to publish information on the Capital Review decisions that:

- provides a summary of the Capital Review changes that have been implemented from 2021 to the end of 2023;
- analyses the estimated impacts of the currently phased-in Capital Review changes; and
- assesses whether currently phased in Capital Review changes are performing as intended.

The Bulletin is split into the following sections:

- **Implementing the new capital requirements** – this section provides background information about capital requirements and the changes that are in the process of being phased in.
- **Stakeholder feedback from 2019** – this section summarises some of the feedback from stakeholders from the 2019 Capital Review consultation process.
- **Monitoring the progress of Capital Review changes** – this section recaps the status of changes compared with the overall implementation schedule.
- **Expected benefits of higher capital** – this section summarises the benefits of the higher levels of capital to date.
- **Preliminary capital cost information** – this section assesses the effect of the Capital Review changes on the costs of capital in comparison with 2019 Capital Review estimates.
- **Activity Summary** – this section summarises some recent data and signals some of the key variables that we will continue to monitor.

Implementing the new capital requirements

Bank capital requirements are split into two broad categories: standard minimum requirements and prudential capital buffer (PCB) requirements.⁹

Standard minimum requirements

The current standard minimum consists of a 'hard floor' for capital requirements. Locally incorporated registered banks in New Zealand must comply with the following minimum capital ratios, which are calculated as the amount of capital a bank must have as a proportion of risk-weighted exposures (including market and operational risk):

- A Common Equity Tier 1 capital ratio of 4.5% of RWAs.
- A Tier 1 capital ratio of 6% of RWAs.
- A total capital ratio of 8% of RWAs.

⁸ The authors would like to thank the Prudential Policy Department as well as all the other teams that contributed to the completion of this bulletin

⁹ See [Capital Review - Decisions 2019 \(rbnz.govt.nz\)](https://www.rbnz.govt.nz/capital-review/decisions-2019) for more detail

Common Equity Tier 1 capital (CET1), Additional Tier 1 (AT1) and Tier 2 (T2) capital can all be used to make up a bank's minimum capital requirements. However, there are maximum allowances in place for how much AT1 and T2 capital a bank can use – banks can use only up to a maximum of 1.5% of AT1 to meet Tier 1 capital ratio requirements and only up to 2% of Tier 2 to meet their total capital requirements. Outside of those maximum limits on AT1 and T2, the rest of their capital must comprise of CET1 capital.

If banks go below their standard minimum, they are in breach of their Conditions of Registration and are subject to responses from the Reserve Bank. The Capital Buffer Response Framework (CBRF) covers this in more detail.¹⁰

The current minimum total capital ratio requirement is 8% of RWA, and this will rise to 9% in July 2024 as a result of 2019 Capital Review decisions. Key components of this framework are detailed in Box A.

Prudential capital buffer requirements

PCB requirements are a 'cushion' that sit above the 'hard floor' made up of the minimum requirements described above. These differ for banks of different sizes. The four largest banks (ANZ, ASB, BNZ and Westpac NZ) have been designated as Domestic Systemically Important Banks (DSIBs). To reflect the importance of the DSIBs for financial stability, these banks have a higher PCB than other banks.

The PCB is made up entirely of CET1 capital. Once fully implemented in 2028 it will be set at 9% for DSIBs and 7% for all other banks. Banks that 'dip' into their PCB are not considered to be in breach of their Conditions of Registration, but the 'dip' can trigger responses under the Capital Buffer Response Framework (CBRF).¹¹ The CBRF imposes increasingly strong responses on a bank as they 'dip' further into the buffer, including through dividend restrictions, combined with other responses set out in the CBRF.¹²

Overall capital requirement

Figure 1 below shows an overview of the Reserve Bank's capital requirements at three different points:

1. **2016: Pre-Review:** which shows the capital requirements before the Capital Review
2. **2023: Current post-Review:** which shows the current requirements, part way through the implementation of the Capital Review decisions
3. **2028: Final post-Review:** which shows the final requirements when all Capital Review decisions are fully phased in.

By showing capital requirements at these three points in time, Figure 1 shows the material increase in high-quality capital that the Review has introduced compared with the old requirements. Figure 2 shows the profile of the phasing in of the higher capital ratio requirements.

¹⁰ See [Capital buffer response framework explainer \(rbnz.govt.nz\)](#) for more detail

¹¹ A bank's Conditions of Registration (CoR) sets out the requirements the RBNZ has imposed on that bank. Banks must follow their CoR. The actual CoR imposed on an individual bank may vary depending on the circumstances of the bank. See [Standard conditions of registration - Reserve Bank of New Zealand - Te Pūtea Matua \(rbnz.govt.nz\)](#) for more detail.

¹² For more information on the CBRF see [Capital buffer response framework explainer \(rbnz.govt.nz\)](#)

Figure 1: Capital Ratios Pre-Capital Review vs Post-Capital Review (2023) & (2028)¹³

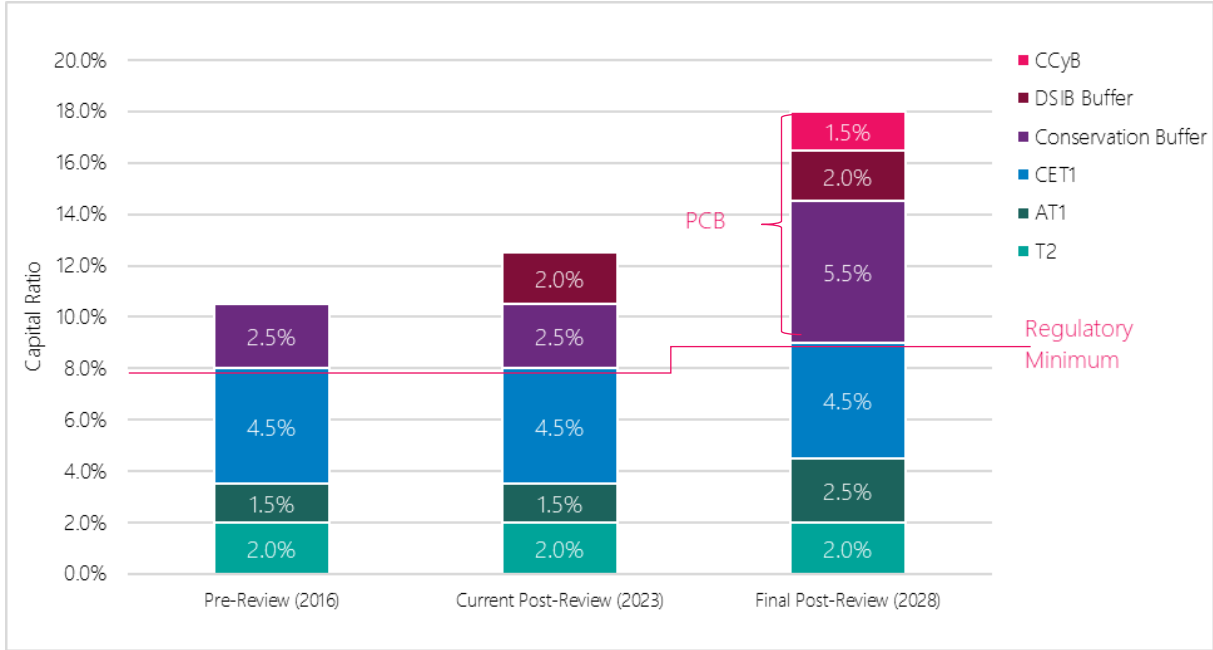
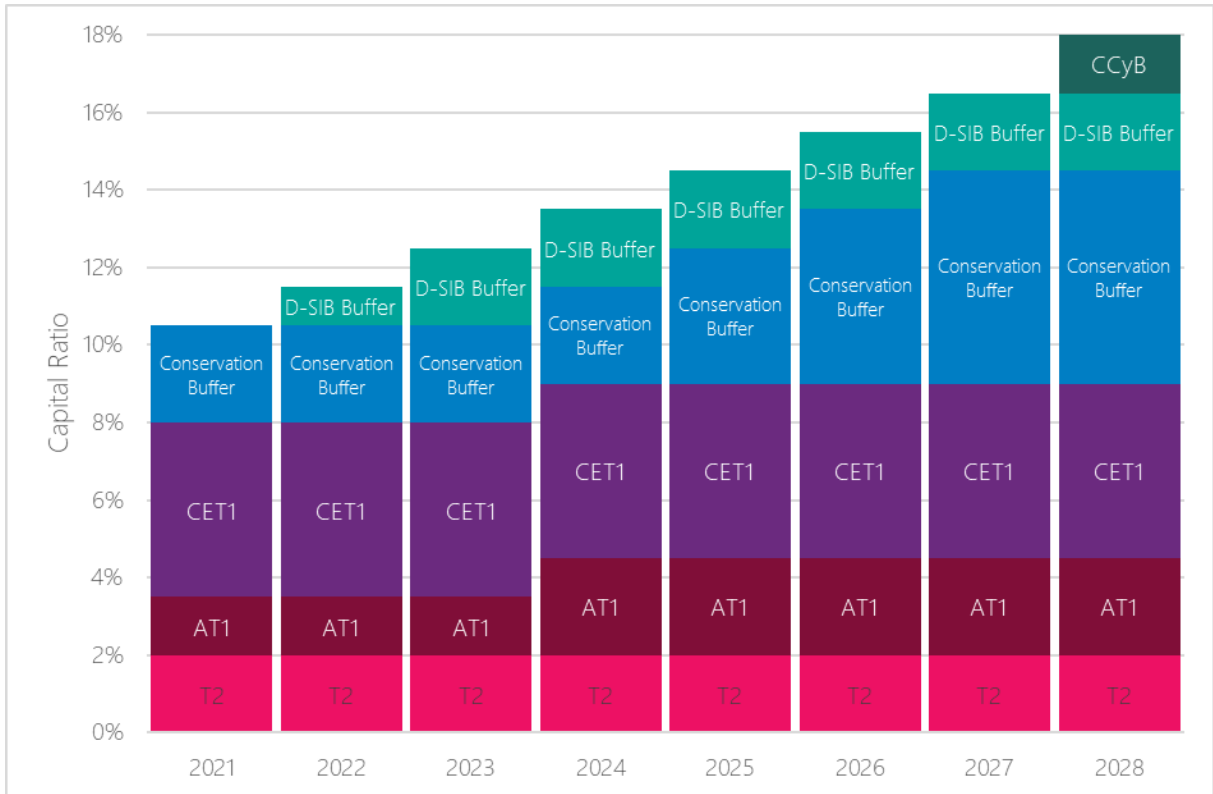


Figure 2: Phasing in of Capital Review changes



¹³ The AT1 and T2 ratios in Figure 1 are depicted via their maximum allowances for Tier 1 purposes in the case of AT1 and for total capital purposes in the case of Tier 2. This means that, although we have shown AT1 at 2.5% and T2 at 2%, these are limits, not requirements. Banks may choose to have more CET1, rather than issue AT1 or Tier 2 capitalbanks can issue lower levels of these types of capital so long as the regulatory minimum and PCB requirements are met (i.e.: they would have to make up the capital difference via the issuance of CET1 capital).

Changes to capital definitions

In addition to the headline changes in capital ratios described above, changes to what qualifies as capital (the numerator in the capital ratio) and changes to the calculation of risk weighted assets (the denominator in the capital ratio) have also been implemented.

Common equity or 'CET1' (consisting of ordinary shares and retained earnings) is the highest quality form of bank capital. However, under the international bank capital standards (in particular the 'Basel III' rules), a range of other funding instruments were also accepted as Tier 1 capital around the world, including in New Zealand.

The Reserve Bank concluded in the Capital Review that redeemable, perpetual, preference shares with no contractual contingent features ('RPPS'), have the qualities required of Tier 1 capital. However, as part of this decision, the Reserve Bank concluded that AT1 and Tier 2 capital instruments with debt-to-equity conversion features or write off mechanisms which would be triggered when capital fell to a prescribed level, would no longer be eligible to count as part of a bank's required capital.

A key rationale for this decision was to remove a feature from the framework that added significant complexity to the system, as well addressing the uncertainty around whether conversion and write-off mechanisms would operate to effectively recapitalise a bank. For example, the RIA noted some issues in the context of New Zealand subsidiaries with overseas parent companies. Because of the way that some instruments had been issued, and as allowed for under the previous requirements, convertible AT1 and Tier 2 issued by the New Zealand subsidiary were able to be structured in a way that conversion of AT1 and Tier2 instruments could recapitalise the parent, but it was less clear if that would result in the New Zealand subsidiary being recapitalised. A full discussion of the range of concerns that drove the decision is available in the 2019 decision documents.

Changes to risk weights

Capital ratio requirements are specified as a percentage of risk weighted assets (**RWA**). This means that the requirement is not applied to aggregate balance sheets directly, but to assets that are risk weighted. For credit risk purposes, this is a process to convert the actual dollar amount of each exposure into a 'risk weighted asset' with a higher risk weight for higher risk exposures. As a result, the level of capital associated with a given capital ratio for a given set of assets will depend on the risk weights prescribed for those assets – a high risk weighting for those assets means a higher level of capital is required to achieve a given capital ratio.¹⁴

For credit risk, the DSIBs are accredited to use the Internal Ratings Based (IRB) approach, where they use their own Reserve Bank-approved models to calculate risk weights. All other banks must use the Standardised Approach, which directly specifies risk weights for categories of exposures. The 2019 Review concluded that, in some areas the IRB risk weights were considered too low relative to the risks they represented, and too low relative to the Standardised Approach. As a result, the Capital Review decisions included the creation of an 'output floor' that limits the difference in credit risk IRB RWA outcomes to a maximum of 85% of the outcome of using the IRB approach. That is, a bank accredited to use IRB models must calculate the RWA outcome under the Standardised Approach for their exposures, and must then use 85% of this number for their credit risk RWAs, if it is a bigger number than the outcome of their IRB credit risk models.

¹⁴ Risk weight calculations must also be carried out for market risk and operational risk. See here for more information: [rbnz.govt.nz/regulation-and-supervision/oversight-of-banks/standards-and-requirements-for-banks/capital-and-credit-risk-requirements](https://www.rbnz.govt.nz/regulation-and-supervision/oversight-of-banks/standards-and-requirements-for-banks/capital-and-credit-risk-requirements)

Box A: Explaining capital types and the new capital buffers

As shown in Figure 1 above, the Capital Review decisions raised total capital ratios, made up of minimum requirements and buffer requirements, from 10.5% of RWA for all banks to 18% of RWA for DSIBs and 16% of RWA for non DSIBs. These new ratio requirements are being phased in gradually until 2028. As of the increases that took effect on 1 July 2023, total capital ratios, including prudential buffers, must be above 12.5% for DSIBs and 10.5% for other banks. By increasing the amount of capital required through the Capital Review decisions, the size of the buffers that banks must maintain increases, which means that the banking system is better placed to absorb economic shocks.

Below we have summarised the different types of capital and capital buffers.

Types of Capital

Common Equity Tier 1 (CET1): CET1 is classified as equity and is largely made up of the paid-up value of ordinary shares or retained earnings. CET1 absorbs losses as they arise, by depleting capital and is therefore said to be *loss absorbing on a going-concern basis*. It is the most effective loss absorbing type of capital.

Additional Tier 1 (AT1): AT1 must be issued as equity and is made up of perpetual preference shares. Cancellation of dividends provides a mechanism for AT1 to absorb losses as they arise. This means AT1 is more effective at absorbing losses than T2 but less so than CET1.¹⁵

Tier 2 (T2): T2 capital is classified as subordinated debt and absorbs losses only when a bank cannot continue operating and must be wound up (i.e. it is loss absorbing on a *gone-concern basis*).

The Capital Buffers

Prudential Capital Buffer (PCB): The Capital Review introduced the PCB, which is a buffer on top of the regulatory minimum requirements. The PCB must be made up of entirely CET1. The PCB comprises the Conservation Buffer, DSIB Buffer and Counter-Cyclical Capital Buffer (CCyB).

Conservation Buffer: This buffer was already required pre-Capital Review and will increase from 2.5% of RWA to 5.5% of RWA of CET1 capital between July 2025 to 2027.

DSIB Buffer: The Capital Review introduced the DSIB buffer, which only applies to the four largest New Zealand banks.

Counter-cyclical Capital Buffer (CCyB): The Capital Review introduced the CCyB which will be a macroprudential policy instrument set by default at 1.5% of RWA of CET1 capital, that can be varied with the financial cycle. This is due to be implemented in 2028.

The Reserve Bank calibrated these requirements in such a way that the system as a whole has sufficient capital to absorb the losses associated with a once-in-200-year shock. This provides greater confidence in the stability of the banking system and more capacity to absorb losses during a shock.

¹⁵ A simplified explanation of why this is, is because of the bank pay-out hierarchy when the bank is under duress – depositors are always paid out first – this works to protect bank customers. If there are available funds after paying out depositors and other relevant creditors – the order of pay-out is as follows – subordinated debtors (T2), preference shareholders (AT1), ordinary shareholders (CET1). CET1 holders sit lower in the payout hierarchy and thus requires the biggest premium. This is a key reason why CET1 is most costly to banks. See [Capital Review - Decisions 2019 \(rbnz.govt.nz\)](#) for more information.

Monitoring the progress of Capital Review changes

Summary of Capital Review implementation

Table 2 below provides a summary of Capital Review decisions that have been phased in so far.¹⁶ Most of the changes only affect DSIBs, except for those relating to capital definitions.¹⁷ The heightened regulatory focus on DSIBs under the Capital Review's new requirements recognises their systemic role in the financial sector and the severe consequences a failing DSIB would have on New Zealand's financial stability.

The overall implementation scheduled was delayed during COVID-19. Since then, implementation has largely proceeded as planned.¹⁸ Dual Reporting was due for implementation by the end of September 2022, but was deferred while consultations were concluded. A recent Response Document summarises the updated plans for Dual Reporting requirements, which are now expected to be implemented in time for disclosure statements with reporting dates around mid-2024 or later.¹⁹

Table 2: Summary of phased-in Capital Review changes as of 1 July 2023

Date	Capital Review Decision	Summary	Impact
October 2021	New BPRs come into effect, including revised definitions for regulatory capital.	Implementation of twelve BPR documents (BPR100 to BPR160) that underpin the new capital adequacy rules and replace several previous Banking Supervision Handbook documents. ²⁰ This affects all banks.	Changes covered a range of factors to simplify the documentation as well as incorporating Capital Review decisions, including those that related to the definitions of capital discussed in a previous section. Revised definitions of AT1 and Tier 2 have simplified the capital framework.
	New process for recognition of capital instruments takes effect.	The implementation of this Review decision saw a new process for banks to undertake to issue eligible capital. This affects all banks.	Changes make the issuance process faster. ²¹ Ensures that banks are responsible for ensuring instruments are compliant with requirements.

¹⁶ See [Capital Review - Decisions 2019 \(rbnz.govt.nz\)](#) for more detail on the rationale behind some of these decisions

¹⁷ [Requirements for domestic systemically important banks - Reserve Bank of New Zealand - Te Pūtea Matua \(rbnz.govt.nz\)](#)

¹⁸ [2021.04.21 Updated Capital Review implementation timeline reflecting 20 April FSC decisions \(rbnz.govt.nz\)](#)

¹⁹ [Capital Review dual reporting and other changes to bank disclosure statements - Reserve Bank of New Zealand - Te Pūtea Matua \(rbnz.govt.nz\)](#)

²⁰ The full list of BPRs can be found at [Capital Requirements and Credit Risk Requirements - Reserve Bank of New Zealand \(rbnz.govt.nz\)](#)

²¹ See Capital Review RIA for more detail.

Date	Capital Review Decision	Summary	Impact
January 2022	Derecognition of non-compliant capital instruments begins.	A series of transitional periods that gradually derecognises capital instruments that were compliant under the old rules but are no longer eligible (referred to as “transitional capital instruments”). This affects all banks.	By phasing in derecognition periodically, banks are incentivised to issue capital eligible under the new capital definitions without jeopardising financial stability by completely stranding ineligible capital.
	Output floor for IRB credit risk weighted asset calculations set at 85%. ²²	The output floor binds DSIB IRB credit risk RWA outcomes to at least 85% of the equivalent standardised credit risk RWA outcomes. ²³ This only affects DSIB banks.	This change alters the outcome for risk weighted assets (for credit risk) for banks accredited to use the IRB approach. It creates a floor that limits the difference in credit RWA outcomes to a maximum of 85% of the outcome of using the Standardised Approach to estimate the RWA of the same exposures.
July 2022	DSIB buffer of 1% applied.	This implemented the DSIB buffer at 1% of RWA. The buffer must be made up of CET1 capital.	This change raises capital requirements for DSIBs, recognising their systemic role in the financial sector.
October 2022	IRB scalar increases from 1.06 to 1.20.	Essentially, this change increases IRB RWA by 14% (multiplied by a multiplier of 1.20 in lieu of 1.06.).	This change retains the risk differentiation from IRB modelling while also helping to level the playing field by bringing IRB RWA outcomes closer to standardised calculations of the equivalent portfolio.
July 2023	DSIB buffer increases from 1% to 2%.	This increased the DSIB buffer from 1% of RWA (as implemented in July 2022) to 2% of RWA for DSIBs. The buffer must be made up of CET1 capital.	This change raises capital requirements for DSIBs and recognises their systemic role in the financial sector.

²² The four DSIBs are accredited by the Reserve Bank to use their own Internal Ratings Based (IRB) models for the purposes of calculating RWA for credit risk. All other banks must use the Standardised Approach that specifies how to calculate credit risk weights.

²³ See Table 10 in Capital Review RIA.

Monitoring the progress on deferred Capital Review topics

During the Capital Review, some stakeholders raised topics that related to long-standing features of the capital adequacy framework, which were outside the scope of the Capital Review decisions. The Reserve Bank responded to some points as part of the Capital Review, but for the most part, deferred the topics for future consideration.

Since then, consultations have been completed on a number of these deferred topics to continue refining the capital adequacy requirements. Table 3 below provides key updates on deferred Capital Review topics.

Table 3: Summary of updates on deferred Capital Review topics

Topic	Synopsis	Timeline/ Outcome ²⁴
Mutual capital instruments (MCI)	Other options for banks structured as mutual entities to raise CET1 capital, since they cannot issue ordinary shares without potentially compromising their mutual status.	Mar 2022: Consultation paper published. Dec 2022: Exposure Draft ²⁵ of preferred MCI design published. Mar 2023: Feedback from the Exposure Draft Consultation incorporated. Jul 2023: MCI Decisions finalised.
Technical amendments to risk weights	The treatment of loans underwritten by Kāinga Ora, Sovereigns, Public Sector Entities, Multilateral Development Banks, Reverse Residential Mortgages, Cross-Method Guarantees, the Business Growth Fund and Qualifying Central Counterparties in RWA calculations.	Sep 2022: Consultation paper published. Apr 2023: Treatment of Business Growth Fund decisions published. Jun 2023: Decisions regarding remaining RWA topics published alongside Exposure Draft of the decisions.
Connected Exposures policy	A comprehensive review of the approach to and scope of managing risks related to exposures to connected persons, including more alignment with the prudential capital framework.	Nov 2021: Consultation paper published. Jan 2023. Exposure Draft published, Aug 2023. Final decisions published, taking effect on 1 October 2023.
Operational Risk and counter-cyclical capital buffer (CCyB) implementation	A comprehensive review of the approach to operational risk and an approach to implementing the CCyB. ²⁶	These two consultations have been deferred to and will be carried out alongside policy consultations for the Capital Standard under the Deposit Takers Act.

²⁴ Further information about all of this material is available at the following link, sorted by date: rbnz.govt.nz/regulation-and-supervision/oversight-of-banks/how-we-regulate-and-supervise-banks/our-policy-work-for-bank-oversight/capital-review

²⁵ An Exposure Draft is a marked-up version of the BPRs which contains our preferred changes following stakeholder feedback on the initial Consultation paper. We incorporate feedback from Exposure Drafts before publishing our final decisions.

²⁶ Operational Risk covers the risks resulting from the way internal processes are designed, including legal risks. See [Statement of Financial Risk Management – 10 July 2022 \(rbnz.govt.nz\)](#) for more detail.

Path to higher capital to-date

The DSIBs have met the increases in the PCB in 2022 and 2023, lifting resilience and supporting system-wide financial stability. The smaller banks have not yet faced any increases in their buffers, or minimum requirements, but are well-placed to meet the increases scheduled to affect them from July 2024 onwards.

Table 4 below shows the average bank capital ratios by capital type as of December 2023.

Table 4: Capital ratios split by capital type as of December 2023

Average bank capital ratios 2023 by capital type		
	DSIB	Non-DSIB
CET1 ratio	13.3%	13.8%
AT1 ratio	1.1%	0.5%
T2 ratio	1.4%	1.2%
Total Capital Ratio	15.8%	15.5%
(= PCB ratio +	7.8%	7.5%
Minimum requirements ²⁷)	8%	8%

Table 5 shows the capital requirements by capital type in 2023 and in 2028, when all Capital Review decisions have been fully phased in.

Table 5: Capital requirements and buffers by capital type in 2023 vs 2028

	Capital Requirements 2023		Final Capital Requirements 2028	
	DSIB	Non-DSIB	DSIB	Non-DSIB
CET1 ratio	4.5%	4.5%	4.5%	4.5%
AT1 ratio	≤1.5%	≤1.5%	≤2.5%	≤2.5%
T2 ratio	≤2%	≤2%	≤2%	≤2%
Minimum required Capital ratio	8%	8%	9%	9%
PCB ratio	4.5%	2.5%	9%	7%
Total Capital Ratio (minimum + PCB)	12.5%	10.5%	18%	16%

Tables 4 and 5 provide an indication of progress towards the higher regulatory requirements. They show that banks are currently above the minimum requirements and the PCB. In the case of DSIBs, total capital ratios currently sit around 15%, above the total minimum requirement plus PCB of 12.5%. However, further increases will be required to meet the increases in minimum requirements and buffers between now and 2028.

²⁷ Minimum requirements are currently be made up of a requirement of 4.5% CET1, up to 1.5% AT1 and up to 2% of T2 capital.

Changes in risk weighted assets

The transition to new capital requirements is being phased in gradually to increase the resilience of banks and reduce the risk of bank failure. The extended transition period provides time for banks to meet the new requirements and to minimise adjustment costs in the economy. A shorter transition period could increase the risk of sudden changes to the availability of credit or generate unexpected economic costs.

While the increases are being phased in slowly, the changes have already seen capital levels increase significantly in dollar terms, as shown below in Table 6, alongside substantial growth in RWA.

The increase in RWAs has been driven by a range of policy changes over recent years, including:

- the IRB scalar, which has increased from 1.06 to 1.20, to scale up the output from IRB models;
- the imposition of the output floor, and
- a requirement for IRB banks to use standardised calculations for operational risk capital and sovereign and bank exposures (which previously could be internally modelled).

Additionally, the overall level of lending has gradually increased over time – increasing RWAs.

The capital increases shown in Table 6 reflect retained earnings and some issuances of new capital. At the same time, on-going dividend payments have limited the overall increase in capital.

Table 6: Aggregate bank capital in 2021 vs 2023 (\$ 000s NZD)

Capital Type	Mar 2021	Dec 2023
CET1	42,516	50,374
AT1	6,302	3,909
T2	3,135	5,149
Total T1 Capital	48,817	54,282
Total Capital	51,952	59,432
Risk Weighted Assets	326,402	376,201

Preliminary cost of capital information

Banks have a range of options available for raising capital, each with different costs.

The Capital Review introduced higher capital requirements which results in shareholders contributing more towards bank funding. Shareholders will absorb any losses before depositors and other creditors, so generally expect a higher return than depositors. This means that the risk for shareholders is generally higher than depositors and results in shareholders requiring a higher rate of return.

Some stakeholders who opposed raising capital requirements noted that banks might pass the increased shareholder funding costs onto customers by increasing lending rates and lowering deposit rates. If, as demonstrated in the RIA, this results in an increase in the steady state interest rates in the economy, then this increase would adversely impact economic output.

The CBA in the RIA weighed the costs of higher capital requirements against the benefits of higher stability in the banking system (i.e. an increased resilience to severe shocks) and concluded that the benefits of higher capital more than outweighed the costs.

Implementation of all the Capital Review decisions is still in its early stages. While the requirements for new capital instruments are now fully in place, this is not true for capital ratio requirements and buffers. Here, only the increase in the DSIB capital buffer has taken effect, with further increases in capital requirements and buffers due over the next few years up to 2028. It is therefore too soon to reach strong conclusions and to fully assess the policy's impacts. Nevertheless, we have included below some preliminary information about costs based on the first two years of implementation. We will continue to build on, and refine, this analysis during the rest of the implementation period.

Summary of capital issuance

Banks are required to disclose capital instrument information in semi-annual disclosure statements. Table 7 below uses that publicly available information to summarise banks' issuance of AT1 and T2 capital under the new capital adequacy framework within the period covered by this Bulletin article (October 2021 to the end of 2023).

Bank disclosure statements show that there have been ten issuances of AT1 and T2 capital by eight different banks under the new capital adequacy framework during this period. Aggregate capital issuance totalled approximately \$4.6bn, with \$0.8bn derived from AT1 and \$3.8bn from T2 issuance. Over 85% of this issuance has come from DSIBs, with their capital issuances totalling just over \$4bn.²⁸

Table 7: Capital instruments issued during assessment period²⁹

Date	Bank	Capital Type	Amount	Cost to Banks (p.a.) and margin	Maturity
Jun 21	BNZ ³⁰	T2	550m	Reset every three months, based on 1.36% margin + 90-day bank bill rate.	Jun 2031
Sep 21	ANZ ³¹	T2	595m	Fixed rate of 2.999% including margin of 1.25%.	Sep 2031
Nov 21	KWB ³²	AT1	246m	2.6% margin + 5 year swap rate.	N/A
Nov 21	Co-op ³³	T2	35.46m ³⁴	3.75% margin + 90-day bank bill swap rate.	Nov 2031

²⁹ Most capital instruments during the period covered by this Bulletin were issued in the domestic market. However, two issuances did occur in overseas markets: (the November 2021 Co-operative Bank Tier 2, which was issued in Australia, and the June 2022 ASB and August 2022 Tir 2 instruments that were issued in the US

³⁰ [bnz-financial-disclosure-statement-2023-03-31.pdf](#) – See Note 11: Subordinated Debt

³¹ [ANZ-Bank-NZ-Ltd-DS-31.3.23](#) – See page 36 and in terms sheet available here: [anz.co.nz/about-us/media-centre/investor-information/domestic-notes/](#)

³² [General Disclosure Statement Jun23.pdf \(kiwibank.co.nz\)](#) – See Note 26: Equity and Kiwibank PPS Final Terms Sheet Oct21.pdf (see page 5)

³³ [17997 \(co-operativebank.co.nz\)](#) – See Note 20: Subordinated Notes

³⁴ Co-operative Bank's T2 instrument was issued in AUD. We have carried the NZD converted figure from Co-operative Bank's Disclosure Statement linked in a previous footnote

Date	Bank	Capital Type	Amount	Cost to Banks (p.a.) and margin	Maturity
Jun 22	ASB ³⁵	T2	935m ³⁶	Fixed rate of 5.284% for 5 years, based on margin of 2.25% over 5 year US Treasuries.	Jun 2032
Jul 22	ANZ ³⁷	AT1	550m	Fixed rate 6.95% until July 2028 and floating rate of 3 month bank bill plus 3.25% margin thereafter.	N/A
Aug 22	ANZ ³⁸	T2	765m ³⁹	5.548% (Margin not reported in disclosure statement).	Aug 2032
Sep 22	WNZL ⁴⁰	T2	600m	Fixed at 6.19% for five years then resets to floating rate 90 day Bank Bill Rate + margin of 2.10%.	Sep 2032
Feb 23	SBS ⁴¹	T2	8.33m ⁴²	Fixed at 6.85% then floating. Includes margin of \$2.5%.	10 years
Apr 23	HBL ⁴³	T2	100m	Fixed for five years at 7.5% then floating rate based on 5 year swap rate + margin of 3.2%.	Apr 2033
May 2023	KWB ⁴⁴	T2	200m	Fixed at 6.40% for five years with margin of 2.2%. Refixed after years.	May 2033

Cost and margins comparison of AT1 and T2 capital

The Capital Review Cost Benefit Assessment, included in the RIA, provided an analysis of how the decisions were estimated to affect the costs of CET1, AT1 and T2 capital.⁴⁵ A key part of this analysis was to estimate the new weighted cost of funding to banks, given an increasing proportion of funding will come from capital once the requirements are fully implemented, and a decreasing proportion coming from debt.

Risk to investors varies across the different types of capital, and the CBA assessed the extent to which the costs for each type would change as a result of the Capital Review decisions. The cost of each type was then used to estimate the blended cost of funds and this assessment was then used to help estimate the expected changes in interest rates.

Table 8 below summarises the results of the 2019 analysis of the required margins for investors, which is an intermediate input in calculating expected changes in bank funding costs, which can affect interest rates.

³⁵ ASB Disclosure Statement for the year ended 30 June 2023 – See Note 33: Loan Capital and here for margins: [ASB US dollar tier-two attracts strong offshore interest | KangaNews](#)

³⁶ ASB's T2 instrument was issued as 600m USD. We have carried the NZD converted figure from ASB's Disclosure Statement which is linked in a previous footnote

³⁷ See page 35 in ANZ disclosure statement previously linked in a footnote

³⁸ See page 36 in ANZ disclosure statement linked in a previous footnote

³⁹ ANZ's T2 instrument was issued as 500m USD. We have carried the NZD converted figure from ANZ Disclosure Statement linked in a previous footnote.

⁴⁰ [Westpac-NZ-Disclosure-Statement-March-2023.pdf](#) – See page 39

⁴¹ [SBS Disclosure Statement No. 50 March 2023.pdf \(sbsbank.co.nz\)](#) – See Note 16: Funding and margin provided here: [CapitalBond No.2 A4-flyer Feb 2024 PRINT \(sbsbank.co.nz\)](#)

⁴² SBS Bank is continuously issuing this instrument after Feb 2023 until it reaches an aggregate face value of \$150 million NZD. This means the exact rate reset dates and maturity dates are dependent on when the issuance date is. See SBS Disclosure Statement linked in a previous footnote for more detail.

⁴³ We note that Heartland Bank have issued a T2 instrument in April 2023, but this has not been captured in their latest disclosure statement which is dated to December 2022. We have provided a Final Terms Sheet from Heartland Bank which outlines the details of this instrument. See [Heartland Bank Limited - Final Terms Sheet \(nzx-prod-s7fsd7f98s.s3-website-ap-southeast-2.amazonaws.com\)](#)

⁴⁴ See note 20: Subordinated debt in Kiwibank Disclosure Statement linked in a previous footnote and here for the margin: [kiwibank.co.nz/about-us/governance/investor-centre/kiwibank-capital-instruments/](#)

⁴⁵ See Table A7.2 - [Capital Review - Regulatory Impact Assessment and Cost-Benefit Analysis 2019 \(rbnz.govt.nz\)](#)

Table 8: 2019 Capital Review estimates of required margins for investors

Funding source	Required margin prior to Capital Review	Required margin once Capital Review fully implemented
Equity (CET1)	7%	6.75%
AT1	4%	4%
Tier 2	2%	1.5%

As shown in Table 8, the CBA estimated there would be a small fall in the required margins for CET1 and Tier 2 compared to the situation before the requirements were increased. The CBA assumed this would occur due to a reduction in risk. With equity more expensive than debt, and the amount of equity increasing, the net impact of an increase in capital requirements resulted in an estimated increase in the blended funding costs – that is, equity and debt – of just under 0.2%. This was a key input into the estimate of a 0.2% increase in interest rates.

A different set of estimates for the required margins in Table 8 would lead to a different blended cost of funding and therefore a change in the estimated impact on interest rates. We have therefore considered the extent to which the estimated margins look reasonable, based on actual issuance of capital instruments since the new capital requirements started to take effect.

Table 9 below compares the 2019 CBA estimates on AT1 and T2 capital from the third column above to the actual figures we have seen over the period covered by this Bulletin article. It compares two variables - the required margin for investors and the total cost of capital.

To compile the information in table 9 we have used information available in bank disclosure statements. Where needed, we have also supplemented this with other publicly information published by banks to extract information about the margins included in the contracts. The footnotes to Table 7 provide links to all of this publicly available information. Our general approach has been to simply use the margins specified in that material by the issuing bank.

Table 9: AT1 and T2 cost of capital instruments compared to 2019 estimates (% p.a.)

	2019 Capital Review Estimates	2021	2022	2023	Average (2021 – 2023)
Additional Tier 1 (AT1) Capital					
Required Margin (for investor)	4.00	2.60	3.25	-	2.93
Total Cost of Capital instruments	7.04	4.93	6.95	-	5.94
Tier 2 (T2) Capital					
Required Margin (for investor)	1.50	2.07	2.18	2.85	2.29
Total Cost of Capital instruments	3.00	2.34	5.67	7.23	5.39

We have identified the following trends from Table 9:

- The total cost of capital associated with capital instruments for banks has gradually increased from 2021 to 2023, through an increase in the margin required for investors.
- Average AT1 margins have come out lower than the CBA estimates (2.93% vs 4.00%).
- Average T2 margins have come out higher than the CBA estimates (2.35% vs 1.50%).

Total cost of capital

Most of the increase in the total cost of AT1 and Tier 2 funding capital is due to increases in the benchmark rates.⁴⁶ There are various factors that can influence the benchmark rate for banks, and it is complex to determine which factors are contributing most. For example, one factor could be rising interest rates in the economy.⁴⁷ The total costs of AT1 over the assessment period have tracked within our 2019 estimates, while the total costs of T2 have tracked slightly ahead of our 2019 estimates.

Required margins for investors

The required margin for investors is the key factor for considering the impact of the increases in capital requirements on costs of capital faced by banks. This is because the margin outlines the return required above the alternative risk-free rate for investors to fund banks with capital. Different types of capital require different levels of margin.⁴⁸ To date, AT1 margins have been slightly below the CBA estimates, while T2 margins have tracked slightly ahead of expectations.

We will continue to monitor these trends, but at this point we have concluded that the margins are tracking broadly in line with the estimates during the Capital Review. We have found no evidence that higher than expected costs of AT1 or T2 are contributing to higher interest rates in the economy. Future issuances will provide further information about how these costs are tracking over time.

Costs of CET1 capital

Ordinary shares and retained profits make up eligible CET1, along with a range of technical adjustment factors. As a result, the margins cannot be easily observed in the same way as for AT1 and T2, where margins are published in disclosure statements.

In the Capital Review methodology, returns on equity were expressed as an equity risk premium, which is conceptually related to the market value that investors would assign to the equity in New Zealand banks (not the book value of equity).

As most New Zealand banks are not publicly listed, it is not possible to directly observe a market value for their equity. This means that calculating the costs of CET1 involves a reasonable degree of uncertainty. In contrast, the costs of AT1 and T2 capital can generally be directly observed through financial markets or other publicly available information.

⁴⁶ A benchmark rate is an interest rate that determines other rates. In the context of bank funding capital, the benchmark rate + required margin by investors = the total cost of bank capital. In our CBA, we used the average wholesale swap rate over 2019 (which equated to 1.5%) as the common benchmark rate for calculating the costs of different types of capital. In practice, the benchmark rate can vary across banks. A commonly used benchmark rate by banks is the 90-day bank bill rate, which tracks quite closely to the OCR. We encourage readers to refer to [Wholesale interest rates \(B2\) - Reserve Bank of New Zealand - Te Pūtea Matua \(rbnz.govt.nz\)](#) for more information on wholesale rates.

⁴⁷ There are various factors that can influence the cost of funding for banks, and it is difficult to determine which factors are contributing most. For simplicity, we have only mentioned interest rates.

⁴⁸ See [Capital Review - Regulatory Impact Assessment and Cost-Benefit Analysis 2019 \(rbnz.govt.nz\)](#) for more detail

The 2019 CBA included an analysis of all costs of funding. For CET1 this used a number of simplifying assumptions to estimate the market value of investors' equity.⁴⁹ Insufficient time has passed since capital requirements have begun to increase, so it is too soon to do a meaningful re-estimation of the costs of CET1. We are deferring a re-estimation of CET1 costs to future biennial assessments, once the phasing-in of Capital Review decisions is further along.

Nevertheless, we do note that relevant external commentary remains broadly in line with the initial 2019 RIA estimates. The Price-Waterhouse-Cooper (PWC) 2022 Cost of Capital statement,⁵⁰ which used Capital Asset Pricing Model (CAPM) estimates,⁵¹ found the New Zealand financial sector reported a cost of equity range between 8.1% and 11.0% for the financial year ended June 2022. The estimate of the cost of CET1 of 10.6% in the RIA is within the range of these findings, indicating that at these early stages of implementation banks do not appear to be encountering capital costs significantly different from those 2019 estimates.

Transitional capital instruments

Transitional capital instruments (those that are ineligible under the new capital adequacy rules) are being derecognised on a scheduled timeline to recognise that these instruments do not meet the new specifications. The derecognition period began in January 2022 and effectively creates a cap on the permitted amount of transitional capital instruments. It is initially set at the level of such instruments in September 2021 and then gradually declines at a rate of 12.5% annually.⁵² This gradual derecognition profile provides time for banks to replace the capital.

As of July 2023, banks recognise the amount of eligible regulatory capital as either 75% of the transitional capital instruments on 1 September 2021 or the actual current value of their capital instruments, whichever figure is lower. Over the assessment period for the Bulletin, banks have begun redeeming transitional capital instruments, but they generally did not immediately reissue compliant instruments as their capital ratios and levels were well above our requirements. Banks instead relied on increasing retained earnings to increase CET1.

Stakeholder feedback from 2019

The Reserve Bank received substantial feedback from stakeholders, with submissions from 161 individuals and organisations.⁵³ As noted at the time, much of the feedback supported strengthening capital requirements to support financial stability. However, some stakeholders opposed the proposals stating the costs of higher capital would offset the benefits. Feedback from these stakeholders generally covered the level of ratio requirements, changes to the definitions of capital instruments and modifications to the way risk weighted assets are calculated. Each of these areas is summarised below. A full description of stakeholder feedback and the Reserve Bank's response is available in the *Response to Submissions* document published in 2019.⁵⁴

49 More detail on the assumptions we used for calculating costs of CET1 in the CBA is available in Annex 2, though we encourage readers to refer to the CBA itself for our full analysis.

50 See Financial section - [cost-of-capital-report-2022.pdf \(pwc.co.nz\)](#)

51 CAPM estimates model the cost of equity via the following equation: Risk-free rate + Beta (market return – equity risk premium) = cost of equity. For PwC's analysis in particular, the long-term risk-free rate used was 3.9%, reflecting the 10-year government bond yields as of 30 June 2022. The beta was derived from using 5-year monthly data and measured at multiple points through the month to reduce the potential for spurious variations. In the event beta estimates for the business could not be used, PwC instead used the relevant sector average asset beta.

52 See section 8.3 in [Capital Review – Regulatory Impact Assessment and Cost-Benefit Analysis 2019 \(rbnz.govt.nz\)](#)

53 [Summary-of-submissions-Capital-Ratio \(rbnz.govt.nz\)](#)

54 [rbnz.govt.nz/-/media/project/sites/rbnz/files/regulation-and-supervision/banks/capital-review/capital-review-hmcie-response-to-submissions.pdf](#)

Table 1: Feedback from stakeholders that opposed the changes to capital requirements

Feedback from 2019	Insights from Bulletin paper
<p>Some stakeholders stated that increasing total capital ratios to 18% would drive up costs to banks, leading to sizable interest rate increases and reductions in economic activity.⁵⁵</p> <p>These stakeholders suggested that this high cost estimate would exceed any of the benefits associated with higher capital.</p>	<p>Although it is early in the implementation process, costs of capital are so-far tracking broadly in line with 2019 estimates. These estimates indicated an increase in interest rates of around 0.2 percentage points. The long-run level of economic activity was estimated to fall by 0.2 percentage points once all changes were fully phased in.</p> <p>There are no signs of higher capital requirements significantly driving up funding costs to a greater degree than estimated in the RIA at the time of the 2019 decisions. This indicates no additional pressures on interest rates, relative to those estimated in 2019.</p>
<p>Some stakeholders opposed the removal of conversion and write-off features as part of eligible regulatory capital definitions.⁵⁶</p> <p>There were a range of reasons for this, including differences compared with approaches in other jurisdictions, including Australia, where such instruments can be used. An unfamiliar design of capital instruments in New Zealand might have been unattractive or costly to issue to investors.</p>	<p>Banks have issued a number of AT1 and Tier 2 capital instruments since the requirements changed in 2021.</p> <p>This Bulletin shows that the costs of these instruments has tracked broadly in line with the estimates included in the 2019 RIA.</p> <p>This suggests that the design of the new instrument is not imposing additional costs on banks through higher payments to capital holders.</p>
<p>The big banks suggested that the changes to the IRB process were unnecessarily conservative. They suggested that the IRB approach means that accredited banks are better able to understand and measure their credit risk, and this improved understanding of risk can justify a lower safety margin in terms of regulatory capital.</p> <p>The small banks suggested that there should not be a large, or any, difference in RWA outcomes between the IRB and the Standardised Approach, in line with their view that portfolios with equal underlying risk characteristics should receive the same regulatory capital requirement.</p>	<p>The changes to the calculation of RWAs have contributed to an increase in calculations of risk weighted assets for banks using the IRB Approach and have closed the gap between risk weight calculations from the IRB Approach and those of the Standardised Approach.</p> <p>Dual Reporting, where IRB accredited banks will need to publish detailed information about RWAs and resulting capital ratios recalculated as if the bank was subject to the Standardised Approach, is due to proceed in 2024. The main objective of dual reporting is to show how the use of internal models affects a bank's RWA outcomes compared to using the Standardised Approach.⁵⁷</p>

Activity summary

The graphs below summarise data across some of the key variables that we intend to monitor throughout the phasing in of higher capital requirements. As we are still in the early stages of implementation, we do not intend to draw any strong conclusions from this information.

⁵⁵ Capital Review submissions – Reserve Bank of New Zealand – Te Pūtea Matua (rbnz.govt.nz)

⁵⁶ See BPR110 Capital Definitions (rbnz.govt.nz) for more detail

⁵⁷ rbnz.govt.nz/have-your-say/2022/capital-review-dual-reporting-and-other-changes-to-bank-disclosure-statements

Figure 3: Aggregate Dividends Paid (\$bn)

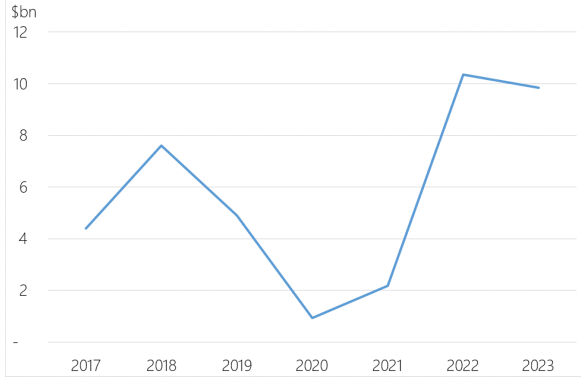


Figure 4: Avg. Net Interest Margins (% all banks)

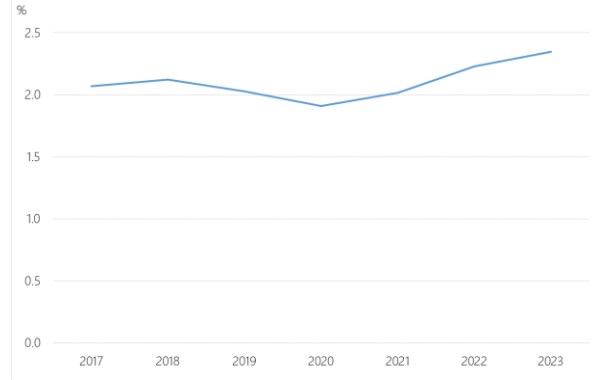


Figure 5: Aggregate Profit before Tax (\$bn)

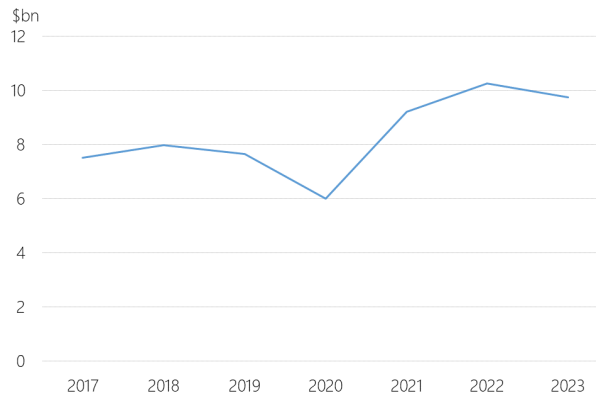
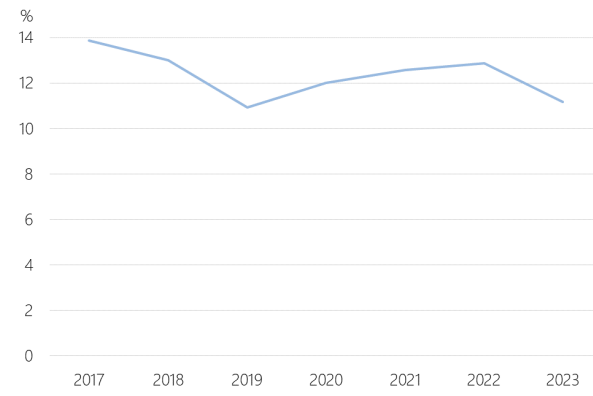


Figure 6: Avg. Return on Equity (% all banks)



Dividends

Dividends paid refers to what banks pay out to shareholders out of its profits for their equity investment. Figure 3 refers to the aggregate dividends paid out to shareholders from 2017.

During the COVID-19 pandemic, the Reserve Bank disallowed dividend payments from all banks from April 2020 to March 2021. In March 2021, these restrictions were relaxed to up to 50% of net profit after tax to be paid as dividends. In July 2022, the dividends restrictions were entirely removed. Since then, banks have increased dividends to shareholders (see Figure 3).

Lending rate spreads indicate average lending margins

Figure 4 shows average aggregate net interest margins (NIM) across all registered banks. This represents the difference between interest-based revenue (i.e., from loans given out) and interest-based costs (i.e., interest paid on deposits and debt instruments). The aggregate NIM of all registered banks in New Zealand has recovered since the COVID-19 pandemic. The recent uptick in profitability partly reflects the slower adjustment of banks' deposit funding costs to tightening monetary policy compared to lending rates.⁵⁸ However, in the context of volatile wholesale rates, it is complex to determine at this stage whether the Review decisions have significantly affected NIMs at the industry level. We expect future biennial assessments to take a more in-depth approach to considering this further, given there will be a longer transition period to analyse.

⁵⁸ See Special Topic 3 - [Financial Stability Report May 2023 \(rbnz.govt.nz\)](https://www.rbnz.govt.nz/financial-stability-report/2023) for more detail.

Profit and return on equity

Figures 5 and 6 above tell broadly similar stories to Figure 5. In Q1 2023, there was a slight decrease in return on equity (RoE). However, banks have rebounded strongly from the pandemic and have posted robust profits since 2021.⁵⁹ The return on equity in figure has been around 10% in the past couple of years. This is close to the implicit returns used in the analysis in the RIA in 2019.⁶⁰

Looking Ahead

Looking ahead, banks are well capitalised relative to the current requirements at this stage of the transition period.

In two years' time we intend to produce a further Bulletin to summarise developments relating to the implementation of Capital Review decisions in the period up to 2025. In that Bulletin we expect to build on the information reported in this document. By that point there will be a longer time period with increased requirements in place. As a result, we expect that the next version will focus more on assessing the impact of higher capital requirements on banks' cost of funding and interest rates.

Dual Reporting information will also be available from the IRB banks to compare outcomes between the standardised and IRB approaches when we write the next Bulletin. We therefore expect to include an assessment of this information in this next Bulletin.

Conclusion

The Capital Review introduced a variety of changes to the capital adequacy framework to promote the maintenance of a sound and efficient financial system and to avoid the significant damage that could arise from a bank's failure.

The Reserve Bank made several key changes to:

- the level and structure of capital requirements;
- the response framework which applies when banks fail to meet these requirements;
- the types of capital that can be issued;
- the processes around issuance; and
- how risk weighted assets are calculated and reported.

As shown by the information and analysis provided in this biennial assessment, New Zealand banks have continued to meet capital requirements. These increases are gradually increasing the resilience of banks and supporting financial stability. Moreover, the information summarised in this paper suggests that the cost of capital remains largely in line with our 2019 estimates, although we will continue to refine this analysis in the future.

⁵⁹ Trends in bank profitability - Reserve Bank of New Zealand - Te Pūtea Matua ([rbnz.govt.nz](https://www.rbnz.govt.nz))

⁶⁰ See page 103: [rbnz.govt.nz/-/media/project/sites/rbnz/files/consultations/banks/review-capital-adequacy-framework-for-registered-banks/decisions/capital-review-cost-benefit-analysis.pdf](https://www.rbnz.govt.nz/-/media/project/sites/rbnz/files/consultations/banks/review-capital-adequacy-framework-for-registered-banks/decisions/capital-review-cost-benefit-analysis.pdf)