Reserve Bank of New Zealand
Te Pūtea Matua

Cost-Benefit Analysis

2025 Review of Key Capital Settings

27 February 2026

Contents

Introduction

This paper summarises the quantitative cost-benefit analysis (CBA) we used to assess the options considered during the 2025 Review of Key Capital Settings[1] (**2025 review**).

The CBA is one of many components that we used to inform the evaluation of the options for our final policy decisions. We sought feedback on an initial CBA as part of our consultation into key capital settings.[2]

The CBA used for our final decisions incorporates feedback received from this consultation and from international experts. See our response to submissions for further information on how we incorporated feedback.[3]

This paper consists of three parts:

- **Summary of results,** which covers the final quantitative net benefit analysis for the chosen option alongside the counterfactual.
- **Overview of analysis,** which explains the models and parameters used.
- **Appendices,** which provide options analysis tables and responds to alternative cost-benefit analysis approaches.

A glossary of technical terms can be found in our response to submissions.

Summary of results

The CBA quantifies the impacts capital has on financial stability, interest rates and expected output (that is, Gross Domestic Product (**GDP**)).

A range of options were evaluated before making the final decisions. Appendix 1 provides further details regarding the full spectrum of options considered. However, the primary assessment is of the costs and benefits of the chosen option against the expected outcomes of the 2019 reforms once fully implemented (**the counterfactual**).[4]

The counterfactual is the situation that would exist if the policy was not changed, the "do nothing" or "do minimum" scenario (The Treasury's Guide to Social Cost Benefit Analysis).[5] As outlined in that guide, if the counterfactual scenario evolves over the period, then it will be necessary to forecast the end state. Forecasting was necessary given the 2019 reforms would not have been fully implemented until 2028.

We show the final capital stack decision for each deposit taker group,[6] as compared with the counterfactual in Figure 1.

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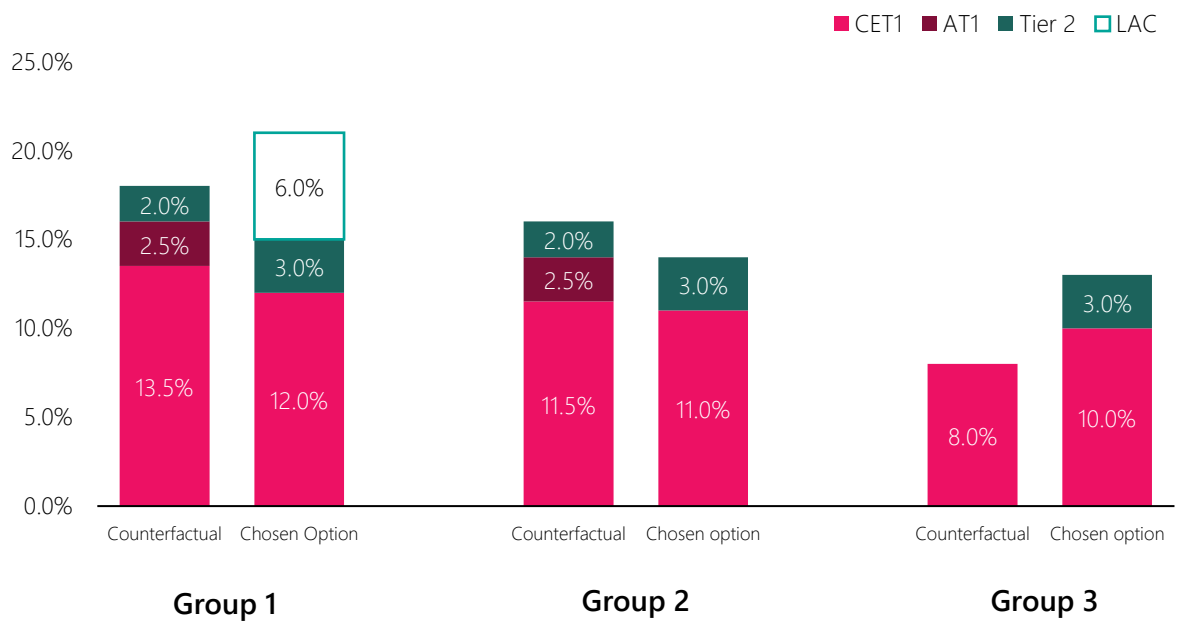
[1] 2025 Review of key capital settings - Reserve Bank of New Zealand - Te Pūtea Matua
[2] Review of Key Capital Settings Consultation Paper
[3] Summary of Submissions and Policy Decisions: https://www.rbnz.govt.nz/-/media/project/sites/rbnz/files/regulation-and-supervision/banks/capital-review/2025/summary-of-submissions.pdf
[4] Capital Review - Decisions 2019
[5] Guide to Social Cost Benefit Analysis - July 2015
[6] Proportionality Framework for developing standards under the Deposit Takers Act

Figure 1: Capital stacks of the chosen option and counterfactual for Groups 1, 2 and 3



Overall, we estimate the chosen option will have a positive net benefit for New Zealand. Under the central estimate, we calculate the annual net benefit to be +0.12% of GDP or approximately $500m per annum.

We test the estimate under several parameter sensitivities to confirm the robustness of the conclusion that the option has a positive net benefit. Under the majority of sensitivities, the chosen option has a positive net benefit over the counterfactual (see Table 1 and Figure 2).

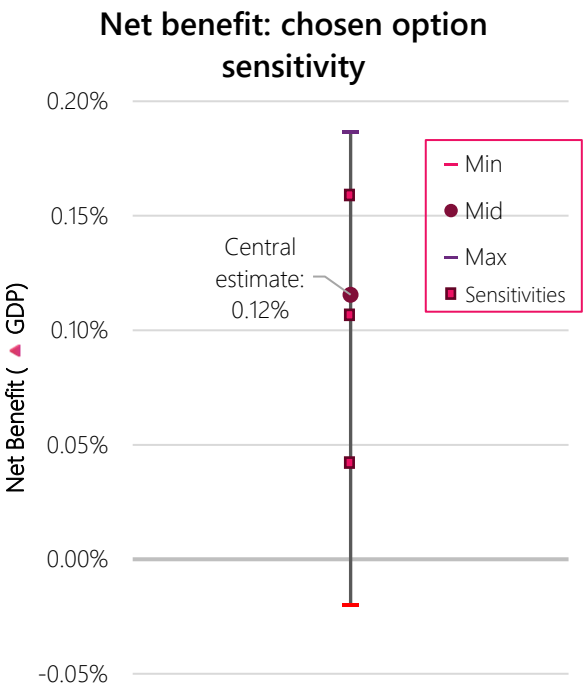
The scenario where the chosen option is not expected to have a net benefit (-0.02% of GDP) for New Zealand is where deposit takers only pass on half of the cost savings to New Zealanders and instead return those savings to overseas capital owners.

Alternatively, the highest net benefit (+0.19% of GDP) is expected where deposit takers' cost savings are higher than expected, and cost savings are fully passed through to New Zealanders.

Table 1: Total net benefit

Impact on expected GDP		Chosen option (rounded to 2dp)
Indirect impact	Lower lending rates	+0.15%
	More frequent deposit taker failures	-0.15%
	Net indirect benefit	**-0.01%**
Direct impact	Net wealth transfer cost	+0.12%
Total net benefit, compared to 2019 decisions		**+0.12%**
Sensitivity range of total net benefit		**-0.02%, +0.19%**

Figure 2: Net benefit sensitivity



Overall, we expect the chosen option to:

- Lower funding costs for deposit takers, which is expected to lower borrowing costs for New Zealanders. We expect deposit takers' funding costs to reduce by 12 basis points (bps), and for lending rates to reduce by between 11 and 19bps relative to the counterfactual.
- Increase costs from deposit takers failing. We expect risks of financial instability to increase, with the expected costs of crises to increase by 0.15% of GDP relative to the counterfactual.

The magnitude of the results is sensitive to the assumed benefit on lending rates and, to a lesser extent, the assumed costs of financial instability. The results support our view that the chosen option is preferred compared to the counterfactual.

Overview of analysis

Model overview

The CBA estimates the net benefit (NB) from quantifiable costs and benefits to New Zealanders.

There are three key elements that we measure within the CBA. These are the expected GDP impact from a change in:

- lending rates (Δl).
- costs from financial crises (Δc).
- wealth transfers from New Zealand borrowers to overseas owners of deposit takers' capital (Δw).

Figure 3: Net benefit formula

$$Net\ benefit\ (NB) = \underbrace{(\Delta l - \Delta c)}_{\text{Indirect impact}} + \underbrace{\Delta w}_{\text{Direct impact}}$$

The model used within the 2025 review applies the same underlying approach as the 2019 Capital Review (**2019 review**).[7] This method has been quality assessed both internally and by external experts.[8]

The method measures the costs and benefits of the changes through their impacts on New Zealand's expected annual GDP. In Appendix 2 we discuss an alternative methodology for estimating the costs of capital settings, suggested to us in submissions.

The model has been updated since the 2019 review with revised cost figures and the incorporation of Loss Absorbing Capacity (**LAC**) to the overall capital stack.

There are many other possible costs and benefits that are not included in the CBA, including behavioural and market dynamic changes. Benefits and costs to non-New Zealanders are ignored for the purposes of the CBA.

In the following sections, we discuss how each element is measured.

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[7] 2017 to 2019 Capital Review - Reserve Bank of New Zealand - Te Pūtea Matua. For reference, the full 2019 CBA can be found here: Capital Review - Regulatory Impact Assessment and Cost-Benefit Analysis 2019

[8] Dr. James Cummings, one of the Capital Review External Experts, reviewed our analysis and advice during the 2019 Capital Review, and we tested the CBA methodology with NZIER at the time.

Expected change in lending rates (Δl) and wealth transfers (Δw)

Deposit takers' funding structure

Deposit takers are funded through a combination of debt and equity. They choose their funding structure to minimise overall funding costs, subject to their risk appetite and regulatory constraints.

Capital requirements change the mix of debt and equity of a deposit taker, by requiring them to operate with a minimum amount of equity. All else constant, having more equity means that a deposit taker's debt funding is less risky, because equity absorbs losses first. A deposit taker with more equity is less likely to become insolvent. In banking, equity and some forms of debt are referred to as capital or regulatory capital.

Funding costs are a component when deposit takers set their lending rates.[9] In the following sections, we outline how deposit takers' funding costs are estimated.

Costs from equity and debt are included when estimating a deposit taker's funding costs under each option

When assessing the impacts of capital changes, we compute a weighted average funding cost (**WAFC**) before and after the changes to capital ratios, taking into account expected changes in both equity and debt. A WAFC is a way of assessing the average costs a deposit taker incurs to fund its lending.

Funding costs are calculated by estimating the amount of equity and debt each deposit taker will have under each option and multiplying this by the expected cost of that funding

We estimate the amount and type of funding each Group 1 and Group 2 deposit taker is expected to use under the chosen option and the counterfactual. This is different to the 2019 analysis, where the WAFC was calculated at a system level. Group 3 deposit takers are grouped together due to their size and limited information on their cost structure.

This approach requires an estimate of the amount of each tier of funding for each deposit taker. The tiers are Common Equity Tier 1 (**CET1**), Additional Tier 1 (**AT1**), Tier 2, senior debt, and other debt (including transaction deposits).

We assume each deposit taker chooses the amount of each tier of funding to minimise their funding costs while complying with the regulatory requirements under each option. There are two exceptions to this assumption:

- Firstly, we assume deposit takers choose to hold a 1% management buffer above their CET1 requirements. For example, we assume Group 1 deposit takers have 13% CET1 under the chosen option (12% + 1%).
- Secondly, deposit takers do not fall below their pre-2019 Tier 1 ratio under any option. Even if regulations allow them to have less, deposit takers will choose a level of capital based on a range of factors – such as the amount needed to obtain a particular credit rating or favourable access to funding markets. We chose the period before the 2019 review because during this

[9] Box A, How a bank manages the pricing of loans and deposits: Financial Stability Report November 2025.

time deposit takers had large management buffers above the regulatory requirements, suggesting that the regulatory minimum was non-binding during that period.

For each tier we calculate the cost of funding by estimating a required margin (essentially a risk premium) above a defined base interest rate. We then determine how the required margin would change under each option. We apply these estimated funding costs (base plus margin) to the deposit taker's balance sheet for each scenario.

Funding costs on debt and equity depend on the deposit takers' assumed mix

We assume the required margin of each type of funding is dependent on the mix of debt and equity. Specifically, the cost of each tier of funding depends on how much junior (or equal) ranking funding the deposit taker has to absorb losses before (or alongside) that funding.

In our 2019 review, the amount of regulatory capital was increasing. This mean the risk (volatility of earnings) for each unit of equity was reducing, which lowers the required margin on equity. In comparison, the 2025 changes reduce equity, increasing the required margin on equity.

Appendix 1 provides the full breakdown of assumed required returns on each type of funding under each sensitivity (Table 7). Overall, in our central estimate we assume:

- the required margin on equity is 16bps higher in the chosen option than in the counterfactual, consistent with the sensitivity used in 2019.
- the required return on Tier 2 capital (and LAC) for the chosen option is 42bps higher for the chosen option, as compared to the counterfactual.
- other marginal debt is expected to be 1bp higher than in the counterfactual. Other marginal debt includes returns for depositors.

Although we assume required margins on equity and debt change depending on the mix of debt and equity, we still assume that (at current levels) deposit takers' WAFC should reduce if deposit takers increase their debt funding relative to equity funding. That is, the savings from the change in balance sheet composition outweighs the cost of each funding tier increasing.

The extent to which the higher required margin on equity offsets the increase use of debt financing on deposit takers' WAFC is commonly referred to as the "MM offset". This is named after the Modigliani-Miller theorem which argued that the increase in required margin should exactly offset the change to more debt funding (that is, a 100% MM offset).

Our assumptions for changes in required margins are based on results from an Australian study of bank equity risk premia and capital levels.[10] This study found an "MM offset" of around 36% - that is, the estimated increase in the equity risk premium resulting from less equity capital was around 36% of the increase that would be expected if the MM theorem held exactly.

As part of the sensitivity analysis, we test our conclusions by varying how responsive equity and debt returns are to changes in the deposit taker's funding mix. For example, we test how the overall WAFC is expected to change if the MM offset is doubled or halved (Table 5, Sensitivity 1 and 2).

[10] Nguyen, L., & Cummings, J. R. (2016). Impact of additional equity capital on bank funding costs: Australian evidence. *CIFR Paper*, (132). 922245_Cummings_Impact-of-additional-equity-capital-on-bank-funding-costs-Australian-evidence.pdf

We estimate deposit takers' funding costs to reduce under the chosen option

Overall, we estimate the chosen option results in the WAFC of the banking system being 11.9bps lower (from 4.455% to 4.431%) relative to the counterfactual.

If we kept the required returns fixed and varied only the balance sheet composition (that is, a 0% MM offset), the WAFC is estimated to be 15.5bps lower under the chosen option than the counterfactual. We note that the exact WAFC is highly dependent on the base rate used.

Lower funding costs should benefit New Zealanders

The CBA measures the benefit to people in New Zealand, consistent with The Treasury's Cost Benefit Analysis guidance. New Zealanders are expected to benefit from the chosen option through lower borrowing rates. That is, we expect the lower funding costs for deposit takers should flow through to lower borrowing rates for New Zealanders.

We expect lower borrowing rates to benefit New Zealanders both directly (wealth transfer, Δw) and indirectly (through increased investment from lower lending rates, Δl). That is, households are expected to react to lower interest rates by spending more, whiles firms are likely to invest more.

The 'output multiple', which is the relationship between the change in interest rates and the change in output (GDP), is set at -1. This means, for example, a 10bps increase in lending rates reduces expected output by 10bps, and vice versa. The assessment is based on international evidence - a Basel Committee on Banking Supervision (**BCBS**) paper[11] that collated international literature - found a range between 0.1 to 7. The output multiple of 1 is roughly equal to the median output multiple across the eight studies referenced in the BCBS paper.

The wealth transfer directly impacts the financial flows from New Zealanders to overseas owners of deposit takers. The wealth transfer impact is partly offset by less tax paid by overseas-owned deposit takers in New Zealand. A lower net wealth transfer corresponds to higher annual GDP.

Under the central estimate we expect lending rates to fall by 14.7bps as compared to the counterfactual.

Lending rates are expected to fall but the magnitude is uncertain

The central estimate assumes 100% of the cost savings are passed through to lower lending rates, as in 2019. This means the CBA assumes none of the benefit is retained by capital owners or passed through to depositors. Deposit rates (as well as returns on non-lending assets) are generally insensitive to deposit takers' capital structures. Instead, they can vary depending on other factors, including wholesale rates, and households' and businesses' willingness to save.

However, there is an argument that some of this benefit could be passed on to current capital owners. We therefore test our conclusions by assuming only 50% of the cost savings are passed through to borrowers via lower lending rates (Table 5, Sensitivity 1a). Under this sensitivity, lending rates fall by 7bps.

[11] BCBS (2019a) 'The costs and benefits of bank capital – a review of the literature', BCBS Working Paper 37, June 2019, https://www.bis.org/bcbs/publ/wp37.htm

Expected change in costs from financial crises (Δc)

Minimum capital requirements reduce the risks of bank failures and therefore the negative impacts on society and the wider economy if a bank was to fail. Lowering capital requirements increases the expected costs of financial crises.

Overall, the expected costs of financial crises, Δc, is calculated by multiplying the probability a crisis will occur by the expected present value cost if that crisis was to occur.

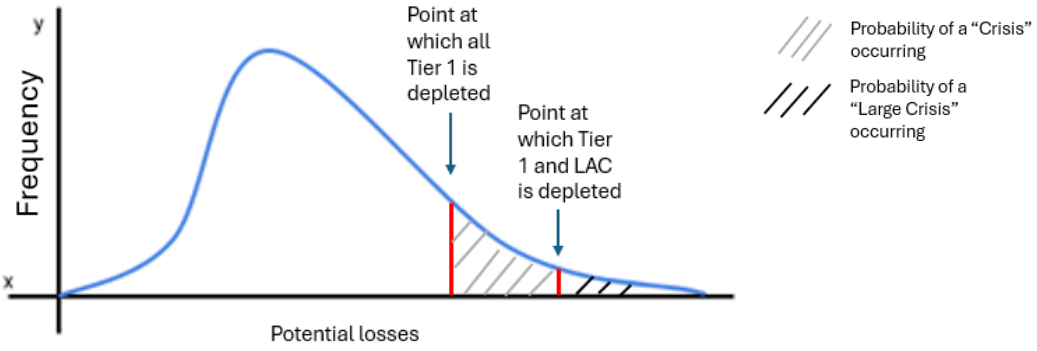
Modelling the probability and cost of financial crises is subject to significant uncertainty. For simplicity, the cost-of-crisis model retains the core structure of the framework used in the 2019 review, with updates to reflect the options analysed. Specifically, the updated model includes LAC and incorporates different requirements for medium and small deposit takers.

We updated the 2019 model to estimate the probability of depleting a given level of capital

The model is an asymptotic single factor risk model that quantifies the probability and extent of potential credit losses. The probability-of-crisis model inverts normal credit loss models to allow us to set a level of capital and to compute the probability that the level of capital is depleted. Broadly, a smaller amount of capital increases the probability that the capital is depleted by downturn losses.

Figure 4 provides a stylised example of the credit-loss model used to assess the probability of a crisis under each option. The area under the curve represents the probability of the crisis events occurring.

Figure 4: Stylised probability of a crisis for Group 1 deposit takers



To determine the shape of the probability curve, we used the same inputs as the 2019 review. The amount of capital, expressed as a proportion of exposure at default (**EAD**), is adjusted depending on the option analysed.

To estimate the cost of crisis under each option, we used similar inputs as the 2019 Review

The expected present value cost if a large crisis was to occur is set at 63% of GDP, as in 2019. The 63% figure is guided by a 2010 BCBS paper[12] that assessed the long-term economic impact of banking crises.

In 2019, the BCBS reviewed the literature on the costs of financial crises and found that the estimate of 63% of GDP is below the average estimate of 98% of GDP for the optimal capital studies.[13] Given the targeted scope of the 2025 review we have maintained the 63% cost assumption.

However, we note that there are arguments that this should be higher or lower. In response, we have tested how sensitive our conclusions are to the 63% figure (Table 5, Sensitivities 3 and 4). Our analysis shows the results are more sensitive to the lending rate and associated wealth transfer impact, than to the cost of crisis assumptions (Appendix 1).

A LAC feature was added to the model for Group 1 deposit takers

For this review, we have added a bail-in feature to the model as a way of analysing the costs and benefits of options with LAC. This is a new feature relative to the 2019 CBA. To do this we have modelled the cost and probability of two separate events:

- a "crisis" event where all tier 1 capital in the system is depleted apart from Tier 2 capital and LAC; and
- a "large crisis" event where all tier 1 capital and LAC is depleted (Tier 2 need not be depleted, as we assume this is used for resolution purposes).

Both events, as defined, are hypothetical events but help support option analysis.

The cost of the newly defined "crisis" event is set at 20% of GDP, recognising that there could still be significant economic costs from financial system distress if losses deplete all pre-set Tier 1 capital. This level was guided by a Bank of England paper[14] that estimated an orderly crisis resolution reduces the cost of crisis by over 60%, as well as a BCBS study that found a 19% present value fall in GDP from a crisis event, assuming no permanent effects.[15]

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[12] Bank for International Settlements. (2010). *An assessment of the long-term economic impact of stronger capital and liquidity requirements.* https://www.bis.org/publ/bcbs173.pdf

[13] Bank for International Settlements (2019). *The costs and benefits of bank capital – a review of the literature.* https://www.bis.org/bcbs/publ/wp37.pdf

[14] Brooke, M., Bush, O., Edwards, R., Ellis, J., Francis, B., Harimohan, R., Neiss, K., & Siegert, C. (2015). Measuring the macroeconomic costs and benefits of higher UK bank capital requirements. *Financial Stability Paper No. 35.*

[15] BCBS (2010) 'An assessment of the long-term economic impact of stronger capital and liquidity requirements', https://www.bis.org/publ/bcbs173.htm

Calculating the expected cost of financial crisis

In summary, the model calculates the probability (p) of two types of events occurring - a crisis event (p_c) and a large crisis event (p_{lc}). These probabilities are then multiplied by the respective expected present value cost on output of those events occurring (c_c, for the cost of a crisis and c_{lc}, for the cost of a large crisis). The expected costs of each event are then summed to calculate the expected cost of crises for each option analysed.

$$Cost\ of\ crises\ under\ each\ option = (p_c * c_c) + (p_{lc} * c_{lc})$$

Where:

- *Cost of crises is the expected present value change in output (GDP) from a crisis and large crisis event.*
- $\boldsymbol{p_c}$ *is the probability of a crisis event occurring for the capital stack option being analysed.*
- $\boldsymbol{c_c}$ *is the expected present value change in output if a crisis event was to occur.*
- $\boldsymbol{p_{lc}}$ *is the probability of a large crisis event occurring for the analysed capital stack option*
- $\boldsymbol{c_{lc}}$ *is the expected present value reduction in output if a large crisis event was to occur.*

Appendix 1: Options analysis tables

The tables provide a summary of the options analysed and the outputs. Ultimately, option 2 was chosen. The tables and figures use data as at 30 September 2025.

Table 2: Options analysed

	2019 decisions fully implemented	**Option 1** No LAC	**Option 2** LAC	**Option 2a** + 1% CET1	**Option 2b** - 1% CET1	**Option 2c** - 1.5% LAC	**Option 3** 'APRA'[16]
Description of option	Counter-factual	Option 1 ratios, as consulted. Overall, reductions in Tier 1 for G1 and G2.	**Chosen Option** Option 2 ratios, as consulted. Large reductions in Tier 1 for G1 and G2, introduce LAC for G1.	Adjusts Option 2, by adding 1% CET1 to G1's capital stack.	Adjusts Option 2, by reducing CET1 by 1% from G1's capital stack.	Adjusts Option 2, by setting LAC requirements at 4.5% for G1.	Uses the headline requirements under APRA's rules, as suggested in consultation.
Risk weights	No changes	Lowered, including further adjustments after the consultation paper to the Standardised approach, to increase risk weight granularity.					
Output floor	85%	85%	85%	85%	85%	85%	85%
AT1	✓	Removed					
Tier 1	G1: 16% G2: 14% G3: 11%	G1: 14% G2: 11% G3: 10%	G1: 12% G2: 11% G3: 10%	G1: 13% G2: 11% G3: 10%	G1: 11% G2: 11% G3: 10%	G1: 12% G2: 11% G3: 10%	G1: 10.5% G2: 8% G3: 8%
Tier 2	G1: 2% G2: 2% G3: 2%	G1: 3% G2: 3% G3: 3%	G1: 3% G2: 3% G3: 3%	G1: 3% G2: 3% G3: 3%	G1: 3% G2: 3% G3: 3%	G1: 3% G2: 3% G3: 3%	G1: 3.25% G2: 3.5% G3: 3.5%
LAC	G1: 0%	G1: 0%	G1: 6%	G1: 6%	G1: 6%	G1: 4.5%	G1: 4.5%

[16] 'APRA' option is based on headline capital ratio requirements in Australia. The Australian Prudential Regulation Authority (**APRA**) is the prudential regulatory of financial services in Australia. This option was suggested by submitters as part of our 2025 Review consultation.

Figure 5: Summary of results

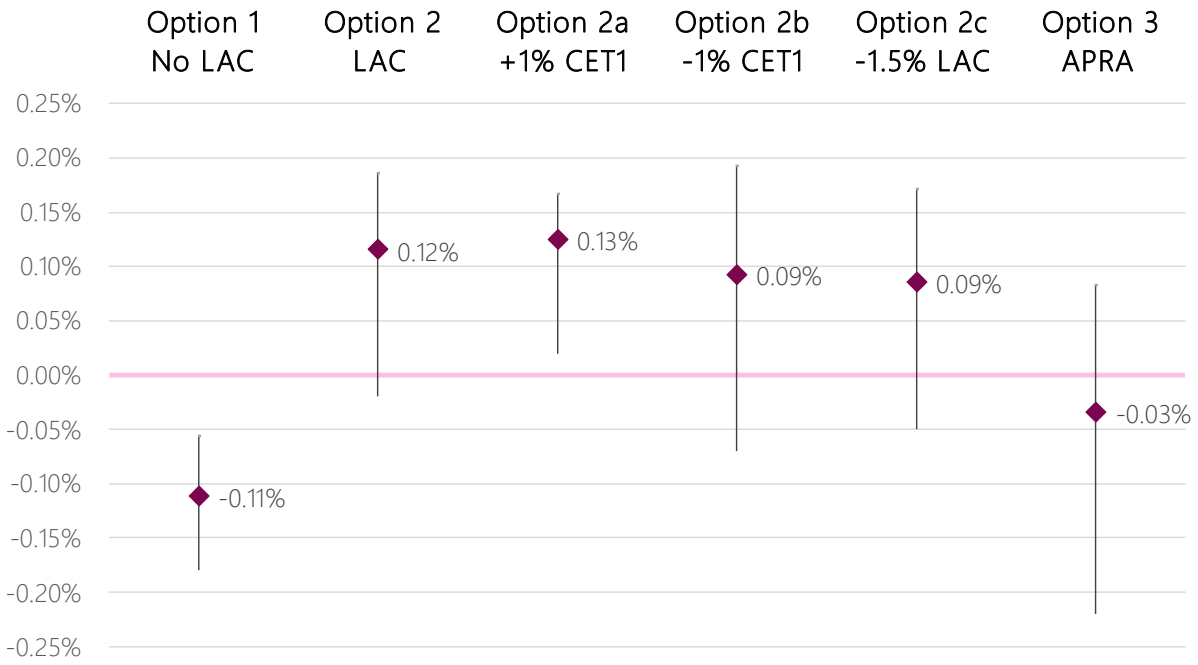

Table 3: Central estimate results

		Option 1 No LAC	**Option 2** LAC	**Option 2a** + 1% CET1	**Option 2b** - 1% CET1	**Option 2c** - 1.5% LAC	**Option 3** APRA
Indirect impact on Expected GDP	Lower lending rates	0.09%	0.15%	0.11%	0.18%	0.15%	0.20%
	Cost of crises	-0.27%	-0.15%	-0.08%	-0.24%	-0.19%	-0.41%
	Net expected GDP benefit	**-0.18%**	**-0.01%**	**0.03%**	**-0.06%**	**-0.04%**	**-0.20%**
Direct impact	Net wealth transfer cost	0.07%	0.12%	0.09%	0.15%	0.12%	0.17%
Total net benefit, compared to 2019 decisions		**-0.11%**	**0.12%**	**0.13%**	**0.09%**	**0.09%**	**-0.03%**
Sensitivity range of total net benefit		**-0.18%, -0.06%**	**-0.02%, 0.19%**	**0.02%, 0.17%**	**-0.07%, 0.19%**	**-0.05%, 0.17%**	**-0.22%, 0.08%**

Table 4: Option sensitivities

Sensitivity and description	Lending rate	Crisis costs	Overall impact and result. As compared to central estimate.
Central estimate	100% pass through ~37% MM offset	-63% GDP if large crisis occurs -20% if crisis occurs	
Sensitivity 1 Equity (CET1) and debt (Tier 2 and marginal) costs do not adjust as capital requirements change	**100% pass through** **0% MM offset**	No change to central estimate assumptions	Larger lending rate benefit. Supports lower capital levels (e.g. Option 2b)
Sensitivity 1a WAFC savings are not fully passed onto borrowers, 50% is absorbed by the deposit taker	**50% pass through** **~37% MM offset**	No change to central estimate assumptions	Smaller lending rate benefit Supports higher capital levels (e.g. Option 2a)
Sensitivity 2 Equity (CET1) and debt (Tier 2 and marginal) costs adjust more than expected from capital requirements changes	**100% pass through** **Doubles the MM offset used in the central estimate**	No change to central estimate assumptions	Smaller lending rate benefit Supports high capital levels (e.g. Option 2a)
Sensitivity 3 Cost of large crisis is reduced from 63% to 50%	No change in central estimate assumptions	**-50% GDP if large crisis occurs** **-20% if crisis occurs**	Smaller crisis costs Supports reliance on CET1 (e.g. Option 1)
Sensitivity 4 Cost of crisis is reduced from 20% to 15%	No change in central estimate assumptions	**-63% GDP if large crisis occurs** **-15% if crisis occurs**	Larger crisis costs Supports introduction of LAC (e.g. Option 2 and 3)

Table 5: Sensitivity results table

		Option 1 No LAC	Option 2 LAC	Option 2a + 1% CET1	Option 2b - 1% CET1	Option 2c - 1.5% LAC	Option 3 APRA
Sensitivity 1: No MM – Larger lending rate impact							
Indirect impact on Expected GDP	Lower lending rates	0.11%	0.19%	0.14%	0.24%	0.20%	0.27%
	Cost of crises	-0.27%	-0.15%	-0.08%	-0.24%	-0.19%	-0.41%
Transfer of wealth	Net wealth transfer cost	0.09%	0.15%	0.11%	0.20%	0.16%	0.22%
Total net benefit, compared to 2019 decisions		**-0.07%**	**0.19%**	**0.17%**	**0.19%**	**0.17%**	**0.08%**
Sensitivity 1a: 50% Pass through – Smaller lending rate impact							
Indirect impact on Expected GDP	Lower lending rates	0.04%	0.07%	0.06%	0.09%	0.08%	0.10%
	Cost of crises	-0.27%	-0.15%	-0.08%	-0.24%	-0.19%	-0.41%
Transfer of wealth	Net wealth transfer cost	0.04%	0.06%	0.05%	0.08%	0.06%	0.08%
Total net benefit, compared to 2019 decisions		**-0.18%**	**-0.02%**	**0.02%**	**-0.07%**	**-0.05%**	**-0.22%**
Sensitivity 2: Double MM - Smaller lending rate impact							
Indirect impact on Expected GDP	Lower lending rates	0.06%	0.11%	0.09%	0.13%	0.11%	0.14%
	Cost of crises	-0.27%	-0.15%	-0.08%	-0.24%	-0.19%	-0.41%
Transfer of wealth	Net wealth transfer cost	0.05%	0.09%	0.07%	0.11%	0.09%	0.12%
Total net benefit, compared to 2019 decisions		**-0.16%**	**0.04%**	**0.08%**	**-0.01%**	**0.01%**	**-0.15%**

		Option 1 No LAC	Option 2 LAC	Option 2a + 1% CET1	Option 2b - 1% CET1	Option 2c - 1.5% LAC	Option 3 APRA
Sensitivity 3: Reduction in cost of large crisis from 63% to 50%							
Indirect impact on Expected GDP	Lower lending rates	0.09%	0.15%	0.11%	0.18%	0.15%	0.20%
	Cost of crises	-0.21%	-0.16%	-0.09%	-0.23%	-0.18%	-0.36%
Transfer of wealth	Net wealth transfer cost	0.07%	0.12%	0.09%	0.15%	0.12%	0.17%
Total net benefit, compared to 2019 decisions		**-0.06%**	**0.11%**	**0.11%**	**0.10%**	**0.09%**	**0.01%**
Sensitivity 4: Reduction in cost of crisis from 20% to 15%							
Indirect impact on Expected GDP	Lower lending rates	0.09%	0.15%	0.11%	0.18%	0.15%	0.20%
	Cost of crises	-0.27%	-0.11%	-0.04%	-0.19%	-0.15%	-0.36%
Transfer of wealth	Net wealth transfer cost	0.07%	0.12%	0.09%	0.15%	0.12%	0.17%
Total net benefit, compared to 2019 decisions		**-0.11%**	**0.16%**	**0.16%**	**0.14%**	**0.12%**	**0.02%**

Table 6 Estimated Dollar Amount of each Funding Tier ($bn)

	Group	Counter-factual	Option 1 No LAC	Option 2 LAC	Option 2a + 1% CET1	Option 2b - 1% CET1	Option 2c - 1.5% LAC	Option 3 APRA
CET1 (incl. management buffer)	Group 1	50.5	49.2	42.6	45.9	39.4	42.6	37.7
	Group 2	8.3	6.6	6.6	6.6	6.6	6.6	6.6
	Group 3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
AT1	Group 1	8.7	0	0	0	0	0	0
	Group 2	0.6	0	0	0	0	0	0
	Group 3	0	0	0	0	0	0	0
Tier 2 + LAC	Group 1	7.0	9.8	29.5	29.5	29.5	29.5	25.4
	Group 2	1.2	1.0	1.0	1.0	1.0	1.0	0.7
	Group 3	0	0	0	0	0	0	0
Total non-regulatory debt funding	Group 1	540.3	547.6	534.5	531.2	537.8	539.4	543.5
	Group 2	82.0	84.6	84.6	84.6	84.6	84.6	84.9
	Group 3	3.1	3.1	3.1	3.1	3.1	3.1	3.1

Figure 6: Estimated Dollar Amount of Funding (all Groups, $bn)

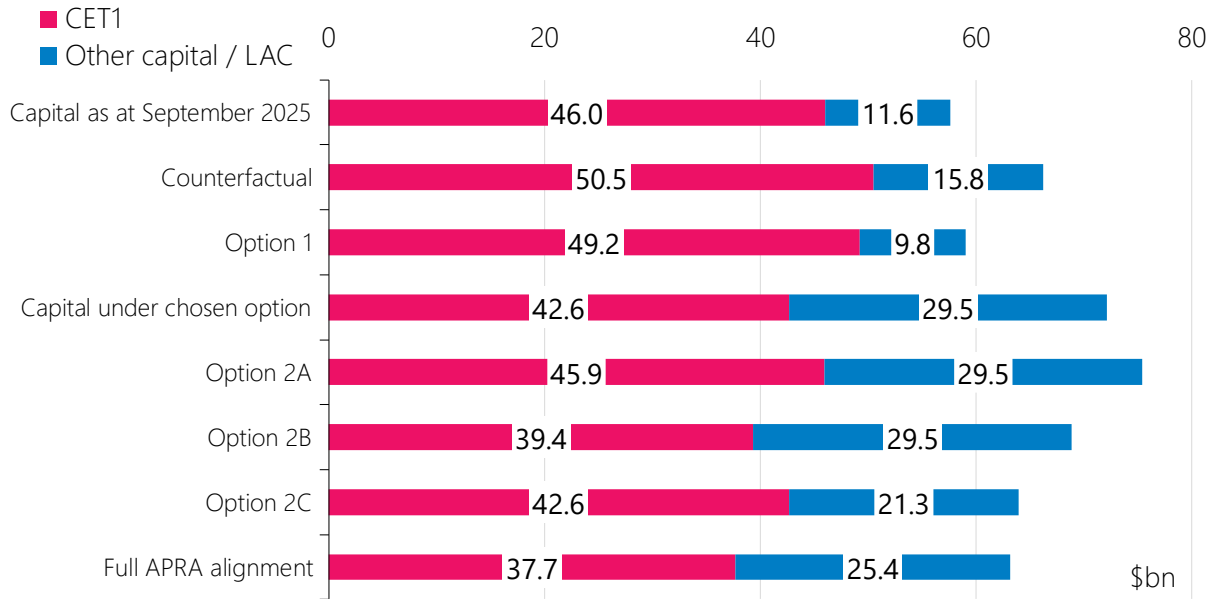

Table 7 Expected cost of funding tiers

	Counter-factual	**Option 1** No LAC	**Option 2** LAC	**Option 2a** + 1% CET1	**Option 2b** - 1% CET1	**Option 2c** - 1.5% LAC	**Option 3** APRA
CET1	12.60%	12.65%	12.76%	12.71%	12.81%	12.76%	12.84%
AT1	7.96%			NA			
Tier 2 + LAC	4.42%	4.69%	4.84%	4.76%	4.91%	4.84%	4.94%
Weighted average non-regulatory debt cost	2.87%	2.89%	2.86%	2.85%	2.87%	2.87%	2.88%
Weighted average regulatory capital funding cost	11.7%	11.9%	10.8%	10.8%	10.8%	11.1%	11.1%
Weighted average total funding cost; WAFC	**4.55%**	**4.48%**	**4.43%**	**4.46%**	**4.40%**	**4.43%**	**4.38%**
(change)		**(-7.1bps)**	**(-11.9bps)**	**(-9.1bps)**	**(-14.8bps)**	**(-12.2bps)**	**(-16.5bps)**

Appendix 2: Alternative Cost-Benefit Analysis approaches

For the 2025 Review we utilised the same general analytical framework as in the 2019 Review. The framework compares the benefits of higher capital (a lower probability/cost of banking crises) with the costs of higher capital (a reduction in long-run GDP arising from increased credit intermediation costs).

This methodology has been quality assessed both internally and by external experts. It is also commonly used in academic literature, for example in BIS and Bank of England studies.

We received feedback that alternative approaches to assessing the costs of capital suggested there were substantially higher economic costs from prudential regulation than the RBNZ had modelled, in the order of $10-14bn (ongoing, annual cost to the economy).

We have considered this feedback but are not convinced that this alternative analysis provides credible or reasonable inputs to our decisions for the calibration of capital settings, for the following reasons:

- The $10-14bn figure is said to represent the whole cost of "excess regulatory overreach" by the RBNZ over the past 30 years, not the 2019 Capital Review changes alone.
- The majority of the $10-14bn cost comes from an assumption that New Zealand banks' net interest margins are currently 70-100bps higher than they otherwise would be, based on observed trends in Australian bank net interest margins, due to the cumulative effects of regulation on financial institutions including the RBNZ's 2019 Capital Review. The 70-100bps figure is significantly higher than our estimate of the 2019 Review changes (21bps).
- We note that net interest margins are only one component of bank profitability, and margins can vary over economic cycles, and depend on banks' business models (e.g. institutional vs. retail-focussed banking). Other important aspects are non-interest income and operating costs which also need to be taken into account when comparing trends over time. Australian banks have tended to generate higher non-interest income than New Zealand banks over recent years (non-interest income amounted to 0.5% of assets in the year to September 2025, compared to 0.35% in New Zealand).
- The submission cites developments including Westpac's purchase of Trustbank (1996), ANZ's purchase of National Bank (2003), Credit Contracts and Consumer Finance Act 2003, Financial Market Conduct Act 2013, and Retail Payment System Act 2022 as contributing to the $10-14bn cost – none of which were RBNZ initiatives. Moreover, Australia has seen similar trends in industry consolidation, and regulatory reforms over the comparable period.
- Part of the $10-14bn figure is accounted for by an assumption that the New Zealand banking industry now employs 3000 extra staff in operational risk and compliance than it otherwise would have, due to FMA and RBNZ regulations.
  - As a comparison, in 2024, New Zealand banks' spending on personnel was 0.59% of total industry assets – this compares to 0.61% for Australian banks' spending on personnel in the same year. This doesn't suggest there is excess staffing in New Zealand compared to the Australian benchmark.

- If excess regulatory requirements were imposing such a large cost burden on registered banks, we might expect to see the development of the non-bank (wholesale funded) lending industry, outside of the RBNZ's regulatory perimeter. However, the non-bank lending sector remains small and, if anything, has declined in prominence over recent decades, as seen in the exit of several securitisation-funded residential mortgage lenders from the New Zealand market.