

Reference: 20210313

13 September 2021



Dear [REDACTED]

Thank you for your Official Information Act 1982 request, received on 12 July 2021. You requested the following:

I am writing to request information Treasury holds in relation to its interpretation of the word “prudent” as incorporated in s 26G(1) of the Public Finance Act 1989.

Specifically I am interested in:

- 1. What Treasury’s legal interpretation of the provision is,*
- 2. What Treasury’s interpretation of the policy implications of the provision is,*
- 3. How the provision influences Treasury’s debt track modelling,*
- 4. How the provision influences how Treasury advises on debt management and the overall fiscal strategy,*
- 5. If, and if so how, the interpretation of s 26G(1) has been influenced by the living standards framework.*

I note there is some discussion of the term ‘prudent’ in the November 2019 A Guide to the Public Finance Act that states:

The Public Finance Act does not define the term “prudent”. Each Government is therefore required to interpret this term and to justify its interpretation to Parliament and the public.

There is no one level of debt, for example, that could be considered prudent at all times. What may be considered prudent at any given time is influenced by the prevailing structure of the economy and its vulnerability to shocks, demographic changes, the cost of debt servicing in relation to total government spending and the structure of the Crown’s balance sheet. These and other relevant factors are likely to change over time.

- 6. Given this statement, I was interested in what modelling approaches Treasury uses to determine what is “prudent at any time given the prevailing structure of the economy and its vulnerability to shocks...” and to what extent this modelling is informed by the Living Standards Framework/He Ara Wairoa.*

1 The Terrace
PO Box 3724
Wellington 6140
New Zealand
tel. +64-4-472-2733

<https://treasury.govt.nz>

7. Finally, I was interested if Dr King's Living Standards Analysis Model (WP 18/05) has been revised with greater flexibility regarding debt:GDP limits. Noting her commentary at section 3.4.1 and the expression (126) assumes a strict interpretation of debt:GDP being limited at 20%.

On 19 July 2021, Treasury officials contacted you with a phone call and addressed the specific questions posed in the request. During this phone call, the scope of the request was also clarified and narrowed. The scope was confirmed in an email on 27 July 2021 with a subsequent clarification on 3 August 2021. You agreed to refine the scope of the request as below:

- *Fiscal Strategy Advice since 2019 relating to prudent debt. This includes legal advice on the interpretation of 'prudent' debt under section 26G(1) of the Public Finance Act 1989.*
- *Key material on fiscal headroom/prudent debt since 1 January 2020.*
- *The full version of [Treasury Report T2019/661: Options for the fiscal strategy beyond 2021/22 - August 2019 - Budget 2019 Proactive Information Release](#)*

Your request was extended by 20 days on 16 August 2021.

Information being released

Please find enclosed the following documents:

Item	Date	Document Description	Decision
1.	8 April 2019	T2019/661: Options for the fiscal strategy beyond 2021/22	Released in part
2.	1 May 2020	T2020/1271: Strategy and options for allocating the Covid Response and Recovery Fund	Released in part
3.	28 May 2020	T2020/1564: COVID-19 Response: Macroeconomic Strategy	Released in part
4.	May 2020	Assessing New Zealand's fiscal headroom	Released in part

I have decided to release the relevant parts of the documents listed above, subject to information being withheld under one or more of the following sections of the Official Information Act, as applicable:

- section 9(2)(g)(ii) – to maintain the effective conduct of public affairs through the protection of ministers, members of organisations, officers and employees from improper pressure or harassment;
- section 9(2)(k) – to prevent the disclosure or use of official information for improper gain or improper advantage, including to reduce the possibility of staff being exposed to phishing and other scams; and
- section 9(2)(g)(i) – to maintain the effective conduct of public affairs through the free and frank expression of opinions.

Information publicly available

The following information is also covered by your request and is publicly available on the Treasury and Budget websites:

Item	Date	Document Description	Website Address
5.	20 March 2019	Fiscal Strategy for the 2019 Wellbeing Budget	https://www.treasury.govt.nz/sites/default/files/2019-08/b19-4082209.pdf
6.	4 September 2019	Fiscal Strategy Options	https://www.treasury.govt.nz/sites/default/files/2020-07/b20-t2019-2447-4157146.pdf
7.	26 September 2019	Further advice on the fiscal strategy	https://www.treasury.govt.nz/sites/default/files/2020-07/b20-t2019-2887-4171975.pdf
8.	30 October 2019	Fiscal Strategy for the 2020 Budget Policy Statement	https://www.treasury.govt.nz/sites/default/files/2020-07/b20-t2019-3343-4191405.pdf
9.	26 February 2020	Fiscal Strategy for Budget 2020	https://www.treasury.govt.nz/sites/default/files/2020-07/b20-t2020-15-4244718.pdf
10.	27 March 2020	COVID-19: Next steps on macroeconomic advice	https://www.treasury.govt.nz/sites/default/files/2020-07/b20-t2020-784-4259982.pdf
11.	3 April 2020	Options for fiscal objectives at Budget 2020	https://www.treasury.govt.nz/sites/default/files/2020-07/b20-t2020-759-4258534.pdf
12.	5 November 2020	Immediate fiscal strategy decisions	https://www.budget.govt.nz/information-release/2021/pdf/b21-t2020-3342-4368425.pdf
13.	26 November 2020	Fiscal strategy intentions and objectives	https://www.budget.govt.nz/information-release/2021/pdf/b21-t2020-3417-4376525.pdf
14.	9 February 2021	Information on Fiscal Strategy Model	https://www.treasury.govt.nz/publications/fsm/fiscal-strategy-model-bps-2021
15.	4 March 2021	Fiscal Strategy for Budget 2021	https://www.budget.govt.nz/information-release/2021/pdf/b21-t2021-316-4418617.pdf
16.	26 March 2021	Confirming the Fiscal Strategy for Budget 2021	https://www.budget.govt.nz/information-release/2021/pdf/b21-t2021-657-4430273.pdf

17.	June 2021	Background Paper for the 2021 Statement on the Long-term Fiscal Position: How Fiscal Strategy Affects Living Standards	https://www.treasury.govt.nz/sites/default/files/2021-06/lfts-21-bg-how-fiscal-strategy-affects-living-standards.pdf
18.	22 June 2021	Speech by Caralee McLiesh, Secretary to the Treasury: 'New challenges for macroeconomic stabilisation policy: The role of fiscal policy'	https://www.treasury.govt.nz/sites/default/files/2021-06/sp-macroeconomic-workshop-jun21.pdf
19.	July 2021	Draft Statement on the Long-term Fiscal Position/Long-term Insights Briefing	https://www.treasury.govt.nz/sites/default/files/2021-07/Treasury_LTFS%20Consultation%20Doc%20Draft%20June%202021_v22_Single%20pages%20FINAL.pdf

Accordingly, I have refused your request for the documents listed in the table above under section 18(d) of the Official Information Act: the information requested is or will soon be publicly available.

Some relevant information has been removed from the documents listed in the table above and should continue to be withheld under the Official Information Act, on the grounds described in those documents. This includes information withheld under section 9(2)(h) of the OIA: to maintain legal professional privilege.

In making my decision, I have considered the public interest considerations in section 9(1) of the Official Information Act.

Please note that this letter (with your personal details removed) and the enclosed documents may be published on the Treasury website. You have the right to ask the Ombudsman to investigate and review my decisions regarding your request.

Yours sincerely



Katy Simpson
Team Leader, Macroeconomic and Fiscal Policy

Table of Contents

1.	<u>T2019/661: Options for the fiscal strategy beyond 2021/22</u>	1
2.	<u>T2020/1271: Strategy and options for allocating the Covid Response and Recovery Fund</u>	23
3.	<u>T2020/1564: COVID-19 Response: Macroeconomic Strategy</u>	30
4.	<u>Fiscal headroom assessment - ELT slides</u>	39



Treasury Report: Options for the fiscal strategy beyond 2021/22

Date:	8 April 2019	Report No:	T2019/661
		File Number:	MC-1-5-3

Action Sought

	Action Sought	Deadline
Minister of Finance (Hon Grant Robertson)	Discuss with officials. Indicate your preferred approach to the post-2021/22 fiscal strategy.	4:30pm on 17 April.

Contact for Telephone Discussion (if required)

Name	Position	Telephone		1st Contact
Anna Hamer-Adams	Analyst - Macroeconomic and Fiscal Policy	s9(2)(k)	N/A	✓
Renee Philip	Manager - Macroeconomic and Fiscal Policy	s9(2)(g)(ii)		

Actions for the Minister's Office Staff (if required)

Return the signed report to Treasury.

Note any feedback on the quality of the report

Enclosure: No

Treasury Report: Options for the fiscal strategy beyond 2021/22

Executive Summary

The Public Finance Act 1989 requires the Fiscal Strategy Report to state the Government's long-term objectives for fiscal policy, consistent with the principles of responsible fiscal management. The 2019 Budget Policy Statement signalled the Government would provide more detail on its post-2021/22 fiscal strategy at Budget 2019.

This report provides the Treasury's initial thinking on designing future Budget Responsibility Rules (BRRs) and options for the approach to take in Budget 2019.

There are choices around the post-2021/22 fiscal strategy, including the choice of fiscal rules and how to manage any change in the fiscal strategy.

Options for Budget 2019

There are three broad options for change at Budget 2019:

- the 2019 Fiscal Strategy Report could provide broad direction about the post-2021/22 fiscal objectives without announcing any significant change to the existing BRRs. For example, indicating that the Government's objective is to reduce net debt to 20 percent of GDP within five years of taking office, and then maintain net debt around 20 percent of GDP thereafter,
- specify new post-2021/22 rules in detail (eg, augmenting the current BRRs with new BRRs for the post-2021/22 period), or
- announce new BRRs to replace the current BRRs in Budget 2019.

Given the limited time to take decisions before Budget, we recommend retaining the current BRRs and limiting the Budget announcement on the post-2021/22 fiscal strategy to broad directional statements. If you wish to make a more significant change to the BRRs at Budget 2019, officials could provide further detailed advice on the specification of new rules.

Future Budget Responsibility Rules

The BRRs underpin the Government's fiscal strategy and provide guidance for Budget decisions. This report sets out the Treasury's initial thinking on the key considerations for potential future BRRs, including what is required to comply with the Public Finance Act 1989.

The ultimate objective of fiscal rules is to support intergenerational wellbeing. Sustainable debt is necessary to avoid debt crises or sharp fiscal consolidation and the accompanying severe adverse wellbeing consequences. Sufficient fiscal buffers are needed to enable fiscal policy to support financial/physical and human capital following major negative shocks without jeopardising fiscal sustainability (eg, spending to support recovery after a natural disaster or recession). At the same time, there should be consideration of borrowing for high-value public investment with intergenerational benefits, conditional on not exceeding a prudent level of debt.

As with the current BRRs, the Treasury recommends that the long-term fiscal strategy includes a debt anchor and an operating balance rule. However, we recommend changes to the specification of the current debt anchor and operating balance rules. In particular,

- maintaining net debt within a range (rather than targeting a point in a particular year), subject to any significant shocks; and

- being more specific about the minimum level of operating surpluses targeted, and giving greater prominence to the operating balance rule to guide Budget decisions alongside the debt anchor.

A debt anchor specified as a range will support fiscal sustainability (if the range is within prudent levels), economic stability (by allowing debt to fluctuate over the economic cycle) and could accommodate high-value investments with intergenerational benefits.

We recommend maintaining net debt within a range that is wide enough to allow for a degree of forecast uncertainty and is centred around current levels. For example, the fiscal strategy could specify a range for net debt of 15 to 25 percent of GDP, subject to any significant shocks. There is already significant fiscal headroom in capital allowances for higher capital investment while keeping net debt around 20 percent of GDP over the projection period. Delivering a larger or earlier increase in capital expenditure would be challenging given capacity constraints in the economy over the forecast period.

If in the future a materially greater scale of high-value public investment is identified and capacity constraints ease, there would be a case for increasing the target range up to a maximum of 30 percent of GDP while still remaining at a level that could be considered prudent. We would not recommend increasing the target range up to 30 percent of GDP at the current time because doing so would increase the risk of exacerbating capacity constraints and/or funding low-value investments, which would limit the ability to fund high-value investments in the future.

The fiscal strategy should be set with regard to the wider Crown balance sheet. The current debt anchor uses the net core Crown debt indicator. There are trade-offs between targeting more comprehensive measures (eg, total Crown net worth), which are useful for broader sustainability analysis, and narrower measures (e.g. net core Crown debt), which may provide better guidance to Budget decisions and the Crown's financial resilience to shocks. The Treasury is currently exploring options for the definition of the net debt indicator, including whether the net debt measure should include third party borrowing by Crown entities.

With a more flexible net debt anchor (by moving to a range), we recommend a stronger focus on achieving operating surpluses to guide fiscal management. Operating surpluses contribute to fiscal sustainability by ensuring expenses can be met by current revenues and contribute to intergenerational equity by ensuring future generations are not burdened with paying for initiatives that primarily benefit the current generation.

The operating balance rule should provide clear guidance for fiscal policy, consistent with the fiscal anchor. The current BRR, "the Government will deliver a sustainable operating surplus across an economic cycle" may not provide sufficiently clear guidance for Budget decisions as it requires judgment around what level of surplus is appropriate and around the timing of an economic cycle. The choices around how to specify the operating balance rule depend on what level of OBEGAL surplus is consistent with the debt anchor, the approach to New Zealand Superannuation Fund (NZSF) contributions, and what level of buffer is needed for forecast uncertainty. The rule could also include an escape clause to indicate deficits may be appropriate following negative shocks. We can provide more detailed advice on options for an operating surplus rule if you are interested.

Next steps

Officials are scheduled to meet with you on Wednesday 17 April to discuss this report. We seek your feedback on:

- the approach you would like to take in Budget 2019;
- what further advice is required; and
- how you wish to engage with Budget Ministers and Cabinet.

Recommended Action

We recommend that you:

- a **note** that the 2019 Budget Policy Statement signalled the Government would provide more detail on its post-2021/22 fiscal strategy at Budget 2019.
- b **note** that there are options for how any transition to post-2021/22 Budget Responsibility Rules is managed in Budget 2019.
- c **note** the Treasury recommends the long-term fiscal strategy include a debt anchor (specified as a range) and an operating balance rule.
- d **note** that the Treasury will provide advice on the medium-term fiscal projections following the finalisation of economic and fiscal forecasts.
- e **indicate** your preferred approach to the Budget Responsibility Rules (BRRs) at Budget 2019:
 - a. *Minimal option* – maintain the current BRRs, but provide a broad directional signal to maintain net debt around current levels in the 2019 Fiscal Strategy Report.
Yes / No

OR
 - b. *Indicate new post-2021/22 BRRs*
Yes / No

OR
 - c. *Replace the current BRRs in Budget 2019* – announce that the existing BRRs will be replaced with new rules.
Yes / No
- f **discuss** with officials at 4:30 pm on 17 April to provide feedback on:
 - the approach you would like to take in Budget 2019;
 - what further advice is required; and
 - how you wish to engage with Budget Ministers and Cabinet.

Renee Philip
Manager

Hon Grant Robertson
Minister of Finance

Treasury Report: Options for the fiscal strategy beyond 2021/22

Purpose of Report

1. The 2019 Budget Policy Statement signalled the Government will provide further detail on a post-2021/22 fiscal strategy at Budget 2019. This is consistent with the Public Finance Act 1989, which requires the Fiscal Strategy Report to state the Government's long-term objectives for fiscal policy.
2. This report provides the Treasury's initial views on designing future Budget Responsibility Rules (BRRs) and options for change at Budget 2019.
3. This report is structured as follows:
 - Background – Public Finance Act 1989 (PFA) requirements and the current BRRs
 - Objectives of fiscal rules
 - Strategic context – factors influencing fiscal management going forward
 - Managing the transition to post-2021/22 fiscal rules
 - Options for the debt anchor
 - Options for the operating balance rule
 - Next steps

Background

The PFA requires the fiscal strategy to specify long-term fiscal objectives...

4. The PFA requires the Government to set out long-term objectives ('long-term' defined as a period of no shorter than 10 consecutive financial years) and short-term intentions ('short-term' defined as a period of no shorter than the next two financial years) for debt, operating balance, operating revenues, operating expenses, and net worth.
5. The short-term intentions and long-term objectives must be consistent with the principles of responsible fiscal management in the PFA (Annex 1). These principles include reducing and maintaining debt to prudent levels and running operating surpluses once those levels have been reached, managing fiscal risks, having regard for the impact on present and future generations and ensuring that the Crown's resources are managed effectively and efficiently.
6. The New Zealand approach relies on the commitment of each Government to its own rules, rather than the common international approach of legislated, numerical fiscal rules. This approach is a strength as it generally leads to stronger commitment by allowing fiscal rules to change through time reflecting changing circumstances and preferences.

...and the Government's current fiscal strategy focusses on the BRRs.

7. The Government has five BRRs. This advice focusses on the two BRRs that are currently most binding for fiscal management:

- The Government will reduce the level of net core Crown debt to 20 percent of GDP within five years of taking office, and
 - The Government will deliver a sustainable operating surplus across an economic cycle.
8. The remaining BRRs signal the Government's policy intent with respect to expenditure, investment and the tax system. The Treasury has not reviewed these BRRs.

Objectives of fiscal rules

9. The ultimate objective of fiscal objectives (which we henceforth refer to as "rules") is to improve intergenerational wellbeing for all New Zealanders.
10. Fiscal rules contribute to intergenerational wellbeing by providing anchors for decision making that support the following:¹
- *Sustainability*: Compliance with the rule should ensure long-term debt sustainability (ie, stable debt-to-GDP and balanced revenue and expenses over the long term). Unsustainable debt can lead to severe adverse wellbeing consequences by causing a debt crisis or requiring sharp fiscal consolidation. Fiscal rules can support intergenerational equity by supporting fiscal sustainability without the need for significant policy changes in the future while enabling borrowing for high-value investment that benefits future generations (subject to not exceeding a prudent upper debt limit).
 - *Stabilisation*: Following the rule should not increase (and might even decrease) economic volatility. Fiscal rules promote economic stability when they are flexible enough to allow the budget balance to fluctuate over the economic cycle and let fiscal policy respond to major shocks (eg, spending to support recovery after a natural disaster or during a recession). Fiscal policy has a key role, alongside monetary policy, in supporting financial/physical and human capital by minimising unemployment and lost output during a downturn, natural disaster or other severe shock. This requires sufficient resilience such that debt can increase following a negative shock without jeopardising fiscal sustainability.
 - *Simplicity*: The rule should be easily understood by decision makers and the public.
 - *Operational guidance*: It should be possible to translate the rule into clear guidance in the annual Budget process. Budget aggregates targeted by the rule should be largely under the control of the policymaker.
 - *Credibility*: A rule should be in place for a sustained period to build credibility.
 - *Ease of monitoring*: Compliance with the rule should be easy to verify. The proposed functions of the Independent Fiscal Institution (IFI) include assessing compliance with the government's fiscal strategy, and so ideally any rule will be straightforward for the IFI to monitor.

¹ Fall, F. and J. Fournier (2015), "Macroeconomic uncertainties, prudent debt targets and fiscal rules", OECD Economics Department Working Papers, No. 1230, OECD Publishing, Paris.
 Eyraud, L., X. Debrun, A. Hodge, V. Duarte Lledo, C. A. Pattillo (2018a). "Second-Generation Fiscal Rules; Balancing Simplicity, Flexibility, and Enforceability," IMF Staff Discussion Notes 18/04, International Monetary Fund.

Strategic context

The fiscal outlook creates choices for the long-term fiscal strategy

11. The fiscal outlook, as indicated by the preliminary Budget 2019 forecasts, is stable and broadly consistent with the BRRs. The fiscal outlook shows operating surpluses growing over time, driven by rising revenue and broadly stable expenses as a share of GDP (assuming future expenses are consistent with the assumed operating allowances). Beyond 2021/22, there are greater choices for the fiscal strategy around the size of operating surpluses and the path of debt, as well as the management of revenue, expenses and the wider Crown balance sheet.
12. The revenue outlook is driven by the economic outlook and policy measures. Tax revenue is forecast to rise as a share of GDP in the forecasts owing to fiscal drag and policy measures. The medium-term fiscal projections (beyond the forecast period) currently have a technical assumption that tax revenue will be stable as a percentage of GDP.
13. Over the long term, there will be pressures for higher public spending that will need to be managed to maintain fiscal sustainability. In particular, New Zealand is in the midst of a demographic transition to an older population that will continue over the coming decades. This is expected to contribute to higher New Zealand Superannuation and healthcare expenditure in the absence of policy change.

The Crown balance sheet is strong, although not as strong as before the Global Financial Crisis and earthquakes...

14. The Crown balance sheet is relatively strong, indicated by low levels of public debt compared with other advanced economies and strong sovereign credit ratings.
15. The strength of the Crown balance sheet can also be compared with its position prior to the Global Financial Crisis and earthquakes that tested the Crown's fiscal buffers. Overall, the Crown's balance sheet remains weaker than in 2008. The Crown's net financial assets decreased by 13 percentage points of GDP between 2008 and 2018. This has been driven by higher net debt and the depletion of the Natural Disaster Fund, partially offset by more assets held by the New Zealand Superannuation Fund (NZSF) and ACC. Table 1 provides selected balance sheet indicators.

Table 1. Selected balance sheet indicators, 2008 and 2018 (% of GDP)

	2008	2018	Change
Net core Crown debt (excluding NZSF)	5	20	+15
Crown entity borrowing (third party)	1	1	0
Crown Financial Institutions' net assets			
New Zealand Superannuation Fund	7	13	+6
ACC	-5	-1	+4
Natural Disaster Fund (EQC)	3	0	-3
Government Superannuation Fund (GSF)	-4	-4	0
Total Crown net financial assets	-2	-15	-13
Total Crown non-financial assets	58	60	+2
Total Crown net worth	56	45	-11

Source: The Treasury

...and requires careful management

16. The Crown balance sheet is large and complex. While the current Budget Responsibility Rules focus on net core Crown debt, it is important to ensure that the entire balance sheet is well managed.
17. The Crown balance sheet includes a diverse range of entities with different governance models. The Crown's fiscal indicators are currently segmented into the core Crown, Crown entities and State-owned enterprises. The Budget process has traditionally focussed on the core Crown, as it includes departments that administer appropriations. However, the roles of different parts of the balance sheet are less delineated than they once were. For example, some Crown entities are becoming more involved in market activities and some entities have a mix of commercial and non-commercial mandates.
18. Fiscal management will increasingly need to consider a wider range of entities and financing instruments. For example, while it is appropriate to focus on net debt as an anchor for fiscal management, the net core Crown debt indicator is narrow and creates an incentive for alternative sources of financing. In particular, third-party borrowing by Crown entities is not captured by the core Crown indicator. While net core Crown debt is expected to fall as a percentage of GDP over the forecast period, third party borrowing by Crown entities is forecast to increase from 1 percent of GDP in 2017/18 to 2 percent of GDP by 2022/23. Borrowing by Crown entities through third parties is more expensive than borrowing through the core Crown. In Housing New Zealand's (HNZ) case, the borrowing cost is around 60 basis points higher than through New Zealand Government borrowing. Therefore, the current \$1.3 billion of HNZ's external borrowing from third parties entails an additional cost of around \$8 million per year, or \$80 million over ten years.²
19. To enhance transparency around the wider Crown balance sheet, the Treasury's fiscal reporting will place increased emphasis on developments outside of the core Crown.

Debt can be used to finance high-value, intergenerational investments...

20. In general, it is appropriate that operating revenues and expenses are balanced over the economic cycle. This approach promotes fiscal sustainability by ensuring that recurring expenses are matched by revenues.³ It also generally supports intergenerational equity to the extent that operating spending tends to benefit current generations, whereas capital investment tends to benefit future taxpayers.⁴
21. With a strong Crown balance sheet and historically low interest rates, there is an in-principle case for using debt to fund public investment that has intergenerational benefits. This supports intergenerational equity and enables tax rates to be smoothed over time. However, the Crown is not always the most effective funder or provider of infrastructure compared with the private sector or local government.
22. The capital investment pipeline should depend on the investment opportunities available to the public sector and industry capacity to deliver projects. Over coming decades, there is likely to be significant demand for investment to replace and upgrade infrastructure, support a transition to a low emissions economy and adapt to climate change. A key challenge will be to ensure there is sufficient fiscal space preserved for future high-value investment and that fiscal space is not used up by lower value spending.

² Current market pricing shows the additional cost of borrowing through third parties is somewhere between 40-80 basis points over the New Zealand Government cost of funds, depending on the tenor of issuance.

³ Although balancing the operating balance is not a necessary or sufficient condition for fiscal sustainability, which requires primary cash balances sufficient to keep the debt-to-GDP stable in the long run.

⁴ Although there are some exceptions to this, as some operating spending has very long term benefits.

23. The Crown's currently low cost of borrowing does not automatically justify significantly greater Crown borrowing for investment. First, greater public borrowing would crowd out private investment and increase interest rates. Therefore, it is important that public investment has net benefits (meaning wider wellbeing benefits for society) that exceed the (risk-adjusted) cost of capital. As a rule of thumb, an increase in public debt of 1 percent of GDP is estimated to be associated with an increase in interest rates of around 3 basis points, although there is considerable uncertainty around such estimates. Second, delivery of infrastructure investment depends on the capacity of the economy to mobilise real resources (e.g. construction workers, building materials, etc.) and the capability of the public sector to deliver projects. In recent years, actual Crown capital spending has been below the level of budgeted expenditure, suggesting that capacity and capability constraints have been the main constraint on investment. The Treasury's Budget advice has therefore emphasised building a sequenced pipeline of capital projects.

...which needs to be balanced with ensuring resilience to shocks...

24. There is considerable uncertainty about the economic outlook, and the fiscal outlook is subject to a range of potential shocks. While New Zealand's public debt is low by international standards, experience has shown that public debt can increase rapidly after a shock and take a number of years to stabilise. It is prudent to ensure there are sufficient fiscal buffers to allow fiscal policy to respond to shocks without either a) jeopardising fiscal sustainability or b) prolonging the negative wellbeing effects of the shock (eg, having a longer or deeper recession due to a smaller-than-desirable fiscal response). Annex 2 summarises our analysis of what would be a prudent level of fiscal buffer for potential shocks.
25. The New Zealand economy is exposed to external shocks through trade, financial and commodity price channels. The global economy is fragile and there is limited monetary and fiscal flexibility in major advanced economies to manage major negative shocks. This increases the risk of external shocks affecting New Zealand.
26. Domestically, there are also a range of risks. A key macroeconomic vulnerability relates to high household debt, which exposes the economy to financial shocks (household debt as a percentage of disposable income is 166 percent, higher than its pre-GFC peak).⁵ In addition, there are a range of other potential risks, such as natural disasters or risks to specific industries (such as biosecurity threats) that can have significant impacts on the public finances.

...especially with limited monetary policy space to respond to downside shocks

27. Monetary policy and a floating exchange rate are the primary macroeconomic stabilisation tools to support economic stability (ie, reducing the size of economic booms or recessions). Fiscal policy can also support macroeconomic stabilisation through the "automatic stabilisers" (ie, allowing taxes and some welfare spending to automatically fluctuate over the economic cycle) or discretionary policy stimulus.
28. In general, it is appropriate that the Reserve Bank has the primary responsibility for macroeconomic stabilisation through its inflation and employment mandate. However, monetary flexibility to respond to a future downside shock is limited with the Official Cash Rate at already very low levels. And currency depreciation may not be sufficiently stimulatory in a synchronised global downturn.
29. Therefore, fiscal policy should be prepared to play an active role in stabilisation in a future severe shock [T2018/3106 refers]. The appropriate fiscal policy response to a

⁵ The Treasury (2018), "Household balance sheet developments", Monthly Economic Indicators Special Topic, <https://treasury.govt.nz/publications/research-and-commentary/rangitaki-blog/mei-special-topic-household-balance-sheet-developments>

shock will depend on circumstances. A prudent strategy would be to ensure sufficient fiscal buffers to allow public debt to increase following a future downside shock, including space for discretionary fiscal stimulus if needed, although a period of fiscal consolidation may still be required at some point (particularly if the shock leads to a permanent reduction in output and tax revenue).

Managing the transition to post-2021/22 fiscal rules

There are choices for managing the transition to new fiscal rules...

30. You have signalled that Budget 2019 will provide further clarity on the post-2021/22 fiscal strategy.
31. In the following sections, we set out the Treasury's initial thinking on the direction for the post-2021/22 fiscal rules. There are choices around the timing and nature of any transition to new fiscal rules.
32. There are three possible approaches for Budget 2019:
 - *Minimal option* – maintain the current BRRs, but provide a broad directional signal in the 2019 Fiscal Strategy Report. For example, indicating that the Government's objective is to reduce net debt to 20 percent of GDP within five years of taking office, and then maintain net debt around 20 percent of GDP thereafter. This option preserves space for new Budget Responsibility Rules to be announced in the future.
 - *Indicate post-2021/22 rules in Budget 2019* – the Government could announce new Budget Responsibility Rules in detail that would apply to the post-2021/22 period, while also maintaining the current BRRs.
 - *Replace BRRs in Budget 2019* – the Government could announce that the existing BRRs will be replaced with new rules.
33. Given the limited time to take decisions before Budget, we recommend retaining the current BRRs and limiting the Budget announcement on the post-2021/22 fiscal strategy to broad directional statements. However, if you wish to make a more significant change to the BRRs at Budget 2019, then officials could provide further detailed advice on the specification of new rules.
34. The post-2021/22 fiscal rules will have implications for the fiscal outlook to the extent that it implies changes in future operating or capital allowances to meet the fiscal rules. The Treasury will provide advice on the medium-term fiscal projections following the finalisation of economic and fiscal forecasts.

...requiring clear communication to maintain a credible fiscal anchor

35. It will be important that any change to the fiscal strategy is credible and continues to provide a strong anchor for fiscal management.
36. Communication with stakeholders, including credit rating agencies, should be managed to maintain confidence in the credibility of the fiscal strategy:
 - A clear public explanation of the strategy in the Fiscal Strategy Report, including a narrative that emphasises that there is a continuation of prudent fiscal policy that represents an evolution of the current BRRs.
 - The Treasury would brief credit rating agencies about any changes to the fiscal strategy on Budget day, including on any changes to the BRRs as well as the impact of Budget decisions and other changes to the fiscal outlook. While it is

unlikely that modest changes in the fiscal outlook would lead to any immediate change in the sovereign credit rating, confidence in the direction of the fiscal strategy will be important. In particular, Standard & Poor's (S&P) recently put New Zealand's sovereign credit rating on positive outlook, so changes in the direction of fiscal policy could matter to whether the credit rating is upgraded by S&P in the future.

Options for the debt anchor

37. We recommend the long-term fiscal strategy include a debt anchor and an operating balance rule (the latter is discussed in the next section). The debt anchor should focus on ensuring fiscal sustainability and resilience. The operating balance rule should provide guidance for the short- to medium-term path of fiscal policy, consistent with the debt anchor.

Maintaining net debt around current levels is prudent...

38. There are choices around the future path of net debt. Determining a prudent level of net debt requires an on-balance judgment that strikes a balance between building resilience to shocks (depending on risk preferences) with opportunities for high-value public investment. What is considered prudent can change over time. As well as the level of net debt, it is also important for resilience and sustainability that net debt is on a stable or declining trajectory over the medium term.
39. The current level of net core Crown debt of around 20 percent of GDP is prudent. At this level, there is sufficient buffering capacity to manage one major shock, although this depends on a judgment and risk preferences. Annex 2 outlines the analytical framework and evidence for determining the prudent level of net debt.
40. There is already significant fiscal headroom in capital allowances for higher capital investment while keeping net debt around 20 percent of GDP over the projection period. Delivering a larger or earlier increase in capital expenditure would be challenging given capacity constraints in the economy over the forecast period. If in the future a materially greater scale of high-value public investment is identified and capacity constraints ease, there would be a case for increasing net debt up to a maximum of 30 percent of GDP while still remaining at a level that could be considered prudent. We would not recommend increasing net debt to 30 percent of GDP at the current time because doing so would increase the risk of funding low value investments and/or exacerbating capacity constraints, which would limit the ability to fund high-value investments in the future.

...and specifying the anchor as a range would support economic stability and provide greater fiscal flexibility...

41. We recommend specifying the debt anchor as a range, as point targets can lead to an excessive focus on managing a fiscal indicator to a particular point. Fiscal sustainability is a long-term concept, but point targets with a fixed date can incentivise a short-term focus, particularly as the target date nears. A range target would better support economic stability and a longer-term focus by enabling net debt to fluctuate with the economic cycle and recognising the uncertainty around debt projections. Depending on the range width, it could also allow more flexibility to accommodate high-value investment that benefits intergenerational wellbeing. For example, setting a range for net debt of 15-25 percent of GDP.
42. A range width of 10 percentage points of GDP is wide enough to account for most forecast uncertainty and would enable some space for additional high-value

investment.⁶ Alternatively, a smaller range would provide a greater fiscal constraint and may have some communication advantages, although we would not recommend a range narrower than 5 percentage points as this would have similar disadvantages as a point target. A range larger than 10 percentage points would give greater flexibility for higher debt in the future but may not provide sufficient guidance about future fiscal policy. A 10 percentage point range is a judgment that strikes a balance between these considerations.

43. Ranges can be supplemented by a focus on the mid-point of the range. Mid-points can provide clearer guidance for fiscal policy, but risk the issues involved with point targets. We do not recommend explicitly targeting a mid-point, but it would be prudent to focus on remaining within the range with an appropriate buffer (rather than targeting the outer limit of the range).

...while stating the debt anchor binds in normal times would support accountability

44. A target range should bind in normal times, subject to a significant shock. A binding target range will ensure that there is a constraint across all forecast years, which supports accountability and transparency since its achievement can be monitored each year. It is important to include an escape clause to allow for deviations from the range in the case of a significant shock in order to provide flexibility for fiscal policy to respond to that shock. A significant shock would include events such as a recession, economic crisis or major natural disaster that would warrant a departure from the existing fiscal strategy.

There are options around what indicator to use for the fiscal anchor...

45. There are choices for which fiscal indicator to target. The Government's fiscal strategy currently uses net core Crown debt (excluding the NZSF), although a wider suite of fiscal indicators is used to inform policy and provide transparency. The choice of indicator reflects the multiple roles of the fiscal anchor: communicating the fiscal strategy, providing guidance to the Budget process, and providing information about the strength of the government's finances. One indicator cannot fulfil all roles.
46. There are trade-offs between more comprehensive measures (eg, total Crown net worth), which are useful for broader sustainability analysis, and narrower measures (eg, net core Crown debt), which may provide better guidance to Budget decisions and the Crown's financial resilience to shocks.
47. We consider that net debt remains an appropriate concept for a fiscal anchor. Net debt is a useful measure of fiscal sustainability and can provide clear guidance to the Budget process, as it is largely influenced by movements in revenue and expenditure.

...and the Treasury is looking at options for the net debt indicator.

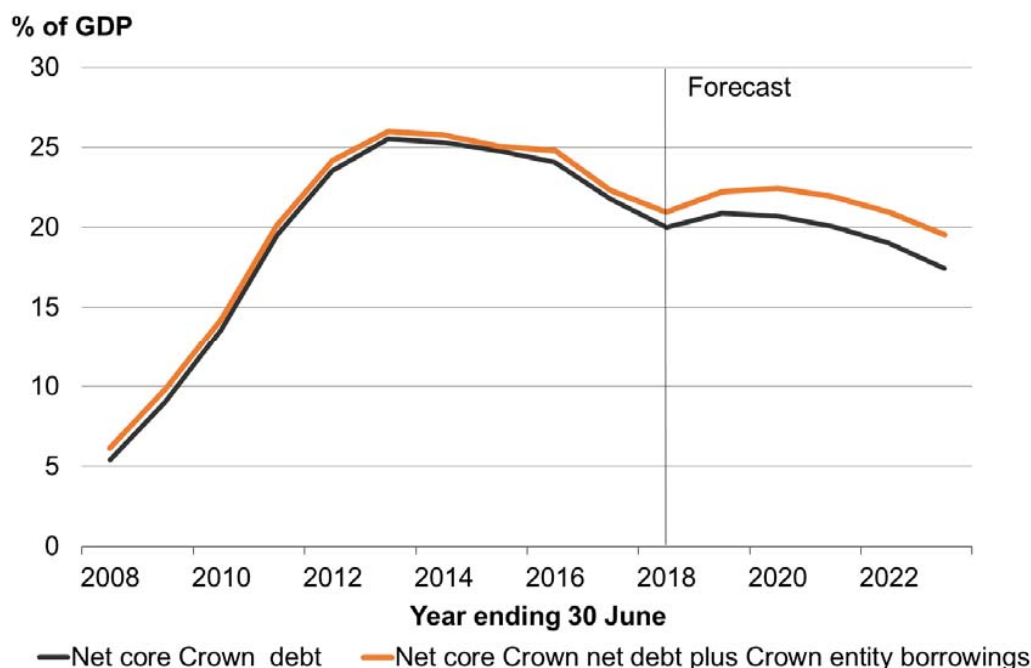
48. The Treasury is exploring options for the definition of the net debt indicator. The existing net core Crown debt indicator is not sufficiently comprehensive and can create perverse incentives for the structure of the Crown balance sheet. However, alternative indicators would have pros and cons that need further consideration. Strong political commitment to the fiscal strategy is the most effective way to ensure compliance with the rules.
49. The current debt anchor is a core Crown measure of net debt (borrowings less liquid financial assets) that excludes the NZSF. Restricting entity coverage to the core Crown limits the influence on Budget decision-making of factors outside of the Government's direct control (eg, allowance settings reacting to asset price volatility and

⁶ An analysis of the Treasury's past forecast variances with actual outturns suggests the 95% prediction interval for forecast net debt is $\pm 3\%$ of GDP for a five-year forecast horizon, although this is based on a small sample.

valuation changes). This indicator was developed when there was limited use of borrowing by Crown entities.

50. Including Crown entity borrowings in the anchor would provide a more comprehensive view of the sustainability of government finances and reduces perverse incentives for borrowing from third parties. Using the new indicator could also ensure decisions funded from Crown entities' borrowings are considered in the Budget process, supporting appropriate trade-offs, Cabinet scrutiny and alignment of capital and operating funding decisions. The impact of extending the current net debt indicator to include third-party borrowing of Crown entities is illustrated in Figure 1.
51. There are also potential downsides of extending the debt anchor to include Crown entity borrowing. There would be communication challenges, as the existing indicator has been used in fiscal reporting for the last ten years. There would need to be changes in the Treasury's fiscal reporting. There would also need to be considerations for how Crown entities' decisions interact with the Budget process and whether it would influence perceptions of creditors and capital markets. The Treasury has not yet reached a view on whether amending the net debt definition is the best way to address the incentives around Crown entity borrowing.
52. An alternative to modifying the definition of the debt anchor would be to consider aiming for a level of net core Crown debt that is lower than otherwise to account for third-party borrowing by Crown entities.

Figure 1. Comparison of current net debt indicator and an alternative measure including Crown entity borrowing (based on HYEUFU 2018 forecasts)



Source: The Treasury

Options for the operating balance rule

The fiscal strategy should put greater focus on the operating balance...

53. We recommend a fiscal strategy that places a stronger focus on the operating balance alongside the debt anchor. Between the debt anchor and the operating balance rule, there should be clear (and non-conflicting) guidance for the Budget process, and some

degree of fiscal constraint to ensure prioritisation towards high value initiatives. The move to a more flexible debt target (by adopting a range) supports the need for an increased focus on a more binding operating balance rule.

...to provide clear guidance for Budget decision-making

54. We recommend adopting an operating balance rule that provides clear guidance for the short- to medium-term path of fiscal policy, consistent with the fiscal anchor. A rule with clear guidance will be more effective (in terms of influencing Budget decisions and therefore supporting fiscal sustainability) and increases transparency and accountability.
55. The current BRR, *“the Government will deliver a sustainable operating surplus across an economic cycle”* may not provide sufficiently clear guidance as it requires judgment around what level of surpluses is appropriate and around the timing of an economic cycle.

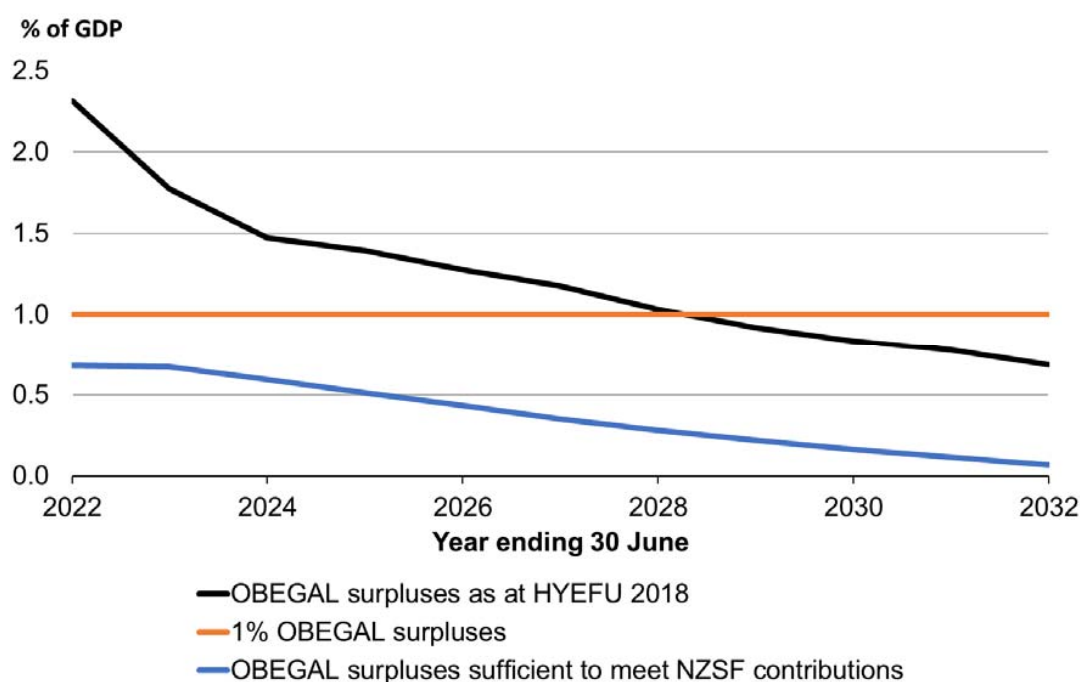
At a minimum, achieve operating surpluses in normal times...

56. The PFA principles of responsible fiscal management require surpluses on average, over a reasonable period of time. Achieving surpluses on average implies the OBEGAL should be in surplus in normal times in order to allow deficits in a downturn (ie, let automatic stabilisers operate). Funding current expenses with current revenues supports fiscal sustainability and ensures future generations are not burdened with paying for initiatives that primarily benefit the current generation.
57. There are choices around what level of surpluses to target, depending on what level of OBEGAL surpluses are consistent with the debt anchor, the approach to NZSF contributions, and what level of buffer is needed for forecast uncertainty. Surpluses can be achieved through managing both expenses and revenue. Higher expenses can be funded through higher revenue without running deficits.
58. One potential approach would be to focus the fiscal strategy on achieving minimum OBEGAL surpluses sufficient to meet NZSF contributions and remain consistent with the debt anchor, absent a significant shock. This is in line with the long-term operating balance objective used in the fiscal strategy over 2002 to 2008.
59. If OBEGAL surpluses are to be sufficient to meet NZSF contributions, surpluses would need to be at least 0.7 percent of GDP in 2022/23 to meet the forecast capital contribution to the NZSF. This approach would be consistent with the original intent of pre-funding future NZS expenses. NZSF contributions are projected to gradually reduce as a percentage of GDP over the 2020s (see Figure 2). If OBEGAL surpluses were only sufficient to meet NZSF contributions, there would be a gradual increase in net debt (of around 6 percentage points of GDP over ten years, see Figure 3).
60. The operating balance rule should be consistent with the debt anchor. While targeting a range of debt allows room for debt to fluctuate, at some point the upper limit will act as a hard constraint. This means debt will ultimately need to be stabilised through running surpluses. The level of surpluses needed to stabilise debt depend on economic conditions (eg, interest rates) and capital allowances. The HYEPU 2018 projections imply OBEGAL surpluses of 1 percent of GDP would be necessary to keep net debt stable at around 20 percent of GDP (this estimate depends on the assumed future capital allowances).
61. The target could be set with a buffer for forecast uncertainty to reduce the likelihood of future deficits. This depends on the level of forecast uncertainty and risk preferences.

Targeting minimum OBEGAL surpluses of around 0.5 to 1 percent of GDP would mean there is low risk of running a deficit in a given year, depending on risk preferences.^{7, 8}

62. There should also be consideration of the economic cycle and avoiding pro-cyclical responses to changes in forecasts. Therefore, it may be appropriate to run larger-than-otherwise surpluses in periods of economic boom. Just as contractionary fiscal policy can exacerbate recessions, overly expansionary fiscal policy can amplify upswings, leading to excessive volatility in interest and exchange rates and crowding out private sector activity. The operating balance rule needs to be flexible enough to allow automatic stabilisers to operate in both upswings and downturns and support macroeconomic stability.

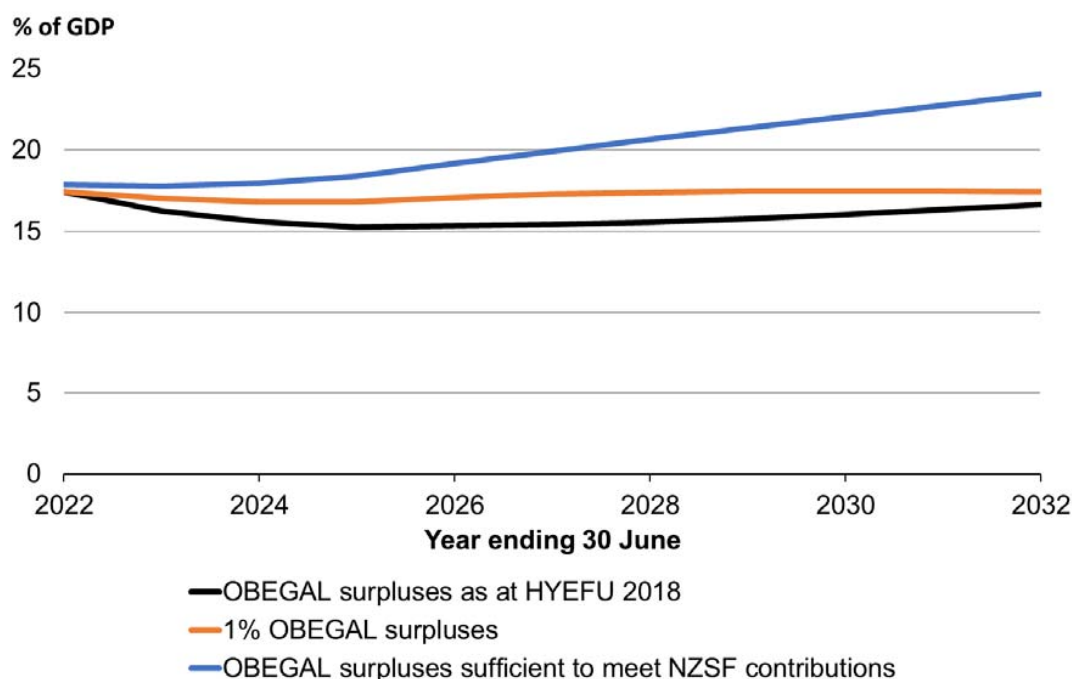
Figure 2. Illustrative graph of different OBEGAL surpluses



Source: The Treasury

⁷ An analysis of the Treasury's past forecast variances with actual outturns suggests the 95% prediction interval for forecast OBEGAL surpluses is $\pm 0.7\%$ of GDP for a one-year forecast horizon.

⁸ Note, the surpluses discussed in this section are not additive. That is, targeting a surplus of 1% of GDP will be sufficient to meet NZSF contributions, stabilise net debt, and provide a sufficient buffer against forecast uncertainty to reduce the risk of running a deficit.

Figure 3. Impact of different OBEGAL surpluses on net debt projections

Source: The Treasury

...as well as choices around how the rule is specified

63. The current operating balance rule specifies sustainable surpluses will be achieved “*across an economic cycle*”. This wording is in line with PFA requirements, but is difficult to translate into practical guidance or to monitor.
64. We recommend the rule should bind in normal times, subject to a significant shock. This specification provides clear operational guidance for fiscal policy. A rule that binds in normal times is less flexible than other types of rules (see below), but this can be mitigated with an escape clause (“subject to a significant shock”) and by not using a point target (eg, target a minimum or range of surpluses rather than a particular level).
65. Alternative approaches include:
 - a Fixed date rules (eg, to be achieved by 2025), which can support accountability for their achievement but also tend to put excessive focus on the short-term, with similar problems as those associated with point targets.
 - b Rolling horizon rules (eg, to be achieved in the final forecast period), which allow greater flexibility to deviate from the rule in the short term but provide less guidance for the annual budget process and are difficult to evaluate ex-post, reducing accountability (as the final forecast year rolls over each year).

Next Steps

66. Officials would like to discuss these issues on the week of 17 April. We seek your feedback on:
 - the approach you would like to take in Budget 2019;
 - what further advice is required; and

- how you wish to engage with Budget Ministers and Cabinet.
67. Changes to the fiscal strategy will need to be reflected in the 2019 Fiscal Strategy Report, which is published on Budget day. The relevant legislative requirement is for the Government to specify long-term fiscal objectives for key fiscal indicators that cover a period of at least ten years.
 68. The Treasury will provide advice on the medium-term fiscal projections following the finalisation of economic and fiscal forecasts.
 69. Significant changes to the fiscal strategy would also need to be approved by Cabinet. We recommend seeking Cabinet approval by early May to allow time to reflect decisions in the 2019 Fiscal Strategy Report.

Annex 1: PFA requirements for fiscal objectives

Section 26 G) of the PFA outlines the following principles:

- (1) The Government must pursue its policy objectives in accordance with the following principles (**the principles of responsible fiscal management**):
 - (a) reducing total debt to prudent levels so as to provide a buffer against factors that may impact adversely on the level of total debt in the future by ensuring that, until those levels have been achieved, total operating expenses in each financial year are less than total operating revenues in the same financial year; and
 - (b) once prudent levels of total debt have been achieved, maintaining those levels by ensuring that, on average, over a reasonable period of time, total operating expenses do not exceed total operating revenues; and
 - (c) achieving and maintaining levels of total net worth that provide a buffer against factors that may impact adversely on total net worth in the future; and
 - (d) managing prudently the fiscal risks facing the Government; and
 - (e) when formulating revenue strategy, having regard to efficiency and fairness, including the predictability and stability of tax rates; and
 - (f) when formulating fiscal strategy, having regard to the interaction between fiscal policy and monetary policy; and
 - (g) when formulating fiscal strategy, having regard to its likely impact on present and future generations; and
 - (h) ensuring that the Crown's resources are managed effectively and efficiently.
- (2) However, the Government may depart from the principles of responsible fiscal management if—
 - (a) the departure from those principles is temporary; and
 - (b) the Minister, in accordance with this Act, states—
 - (i) the reasons for the departure from those principles; and
 - (ii) the approach the Government intends to take to return to those principles; and
 - (iii) the period of time that the Government expects to take to return to those principles.

Section 26 J) of the PFA requires the fiscal strategy report specify **long-term objectives**

- (1) The fiscal strategy report must—
 - (a) state the Government's long-term objectives for fiscal policy and, in particular, for the following variables:
 - (i) total operating expenses:
 - (ii) total operating revenues:
 - (iii) the balance between total operating expenses and total operating revenues:
 - (iv) the level of total debt:
 - (v) the level of total net worth; and

- (b) explain how those long-term objectives accord with the principles of responsible fiscal management; and
- (c) state the period to which those long-term objectives relate (which must be a period of 10 or more consecutive financial years commencing with the financial year to which the fiscal strategy report relates).

Section 26 KA) of the PFA requires the fiscal strategy report specify **management of the Crown's resources**

- (1) The fiscal strategy report must include details of the Government's strategy for managing expenditure, assets, and liabilities in the period of at least 3 financial years commencing with the financial year to which the report relates.
- (2) Details of the Government's strategy for managing expenditure, assets, and liabilities may include—
 - (a) the outcomes sought from new or reallocated expenditure, assets, and liabilities; and
 - (b) any expected change over time in the major components of expenditure, assets, and liabilities.

Annex 2: What is a prudent level of debt?

The Public Finance Act requires the Government to determine a prudent debt level

70. New Zealand Governments have used a debt anchor to guide fiscal management since the early 1990s. This is consistent with the Public Finance Act's requirement to set a long-term objective for public debt (covering at least ten years) consistent with the principles for responsible fiscal management, including maintaining debt at prudent levels. However, the Public Finance Act does not define what a prudent level of debt is. This flexibility in definition is a strength as it allows the level of prudent debt to change through time reflecting changing circumstances. Typically, a prudent level of debt is one which entails a low risk of debt reaching unsustainably high levels. This requires an on-balance judgment that depends on the Government's risk tolerance.
71. Our analysis draws insights from the frameworks used in the international literature, particularly reflecting the current thinking in the International Monetary Fund (IMF) and Organisation for Economic Co-operation and Development (OECD). However, it is also important that the approach is tailored to New Zealand's circumstances and institutions.
72. The approach we have taken is to estimate the upper limit of a prudent range for public debt by taking three steps: 1) identify a maximum level of public debt, 2) estimate a *safety buffer*, then 3) identify a *prudent debt ceiling*.⁹
73. Our analysis suggests that a prudent upper limit for net core Crown debt in New Zealand would be around 30 percent of GDP to provide a buffer against a significant shock. However, this is subject to considerable uncertainty and depends on risks preferences. Our reasoning for this judgment follows.

A maximum level of net debt is estimated to be around 50-60 percent of GDP...

74. The literature suggests different ways to think about a maximum level of public debt:
- The *debt sustainability* approach considers the level of debt above which the government would simply be insolvent. That is because the interest expenses on the debt would be so large that the government's tax revenue could not be sufficient.
 - The *market access perspective* considers the level of debt such that beyond it, creditors are no longer willing to lend on reasonable terms. Market confidence is lost, and governments cannot roll over debt.
 - A third approach to consider the level of public debt beyond which there are likely to be *adverse wellbeing consequences* (ie, welfare reducing).
75. We have followed the third approach that estimates the maximum level for public debt beyond which there are likely to be adverse consequences for wellbeing. It is likely that the level at which public debt would trigger concerns about insolvency or market access would be much higher than these levels.
76. The level of net debt that is likely to have adverse wellbeing consequences is estimated to be at least 50-60 percent of GDP, although there is considerable uncertainty around the estimates.¹⁰ Above this level, debt is estimated to reduce economic growth (which could occur through a range of channels, including crowding

⁹ Eyraud L., Baum, A., Hodge, A., Jarmuzek, M., Elif Ture, H., Mbaye, S., and K. Young. (2018b) "How to calibrate fiscal rules: A primer," IMF Fiscal Affairs Department How-To Notes, International Monetary Fund.

¹⁰ The estimates in the literature generally refer to general government gross debt for international comparability. We have mapped the gross debt estimates to New Zealand's net core Crown debt by subtracting the amount of liquid financial assets included in net core Crown debt.

out private investment and higher risk premia), a heightened risk of a debt distress episode and impeding the effectiveness of fiscal stimulus.¹¹ There is a range of estimates and we have taken a conservative approach given New Zealand is a small, open economy that is vulnerable to natural disasters and external shocks, with high levels of private debt and lower than average GDP-per-capita relative to other advanced countries.

...and a safety buffer for a major shock would be around 20 percent of GDP...

77. The appropriate safety margin is a buffer that would be sufficient to ensure with high probability that a shock would not send net debt above the maximum debt limit. Countries face sudden increases in debt because of negative macroeconomic shocks or other events. Decisions around buffer size depend on risk preferences (how many shocks to buffer against) and views around future risks (their size and frequency).
78. We recommend maintaining a buffer of at least 20 percentage points of GDP against this maximum debt limit to ensure it is not surpassed following a negative shock. We judge this would be sufficient to manage a major macroeconomic shock without an unduly contractionary fiscal policy response.
79. The safety margin judgment has been made with reference the following evidence:
 - *Historical experience with recessions and other shocks.*
 - i New Zealand recessions in the post-war era have been associated with increases in public debt by 10 percentage points of GDP on average.
 - ii Net core Crown debt increased by around 20 percentage points of GDP following the Global Financial Crisis and Canterbury earthquakes (although not all of the change is attributable to these events and the outcome included a policy response).
 - iii Following the Global Financial Crisis, public debt increased by an average of around 20 percentage points of GDP in advanced economies.
 - *Scenario analysis of major shocks.*
 - i Fiscal stress tests published in the Treasury's 2018 *Investment Statement* found that shocks would increase net debt by 5-15 percentage points of GDP after five years in the absence of a fiscal policy response. The shocks considered included a major international economic downturn, foot-and-mouth disease outbreak and major earthquake in Wellington.
 - ii Recent scenario analysis by the Treasury modelled a severe international downturn with an active fiscal policy response. This analysis indicated that a debt buffer of 20 percentage points of GDP would likely be needed (see Figure 1).
 - *Modelling simulations in the international literature.* OECD and IMF economic modelling suggests that a safety margin of around 15 percentage points of GDP would ensure there is a high probability of keeping public debt under a ceiling in the face of macroeconomic uncertainty.

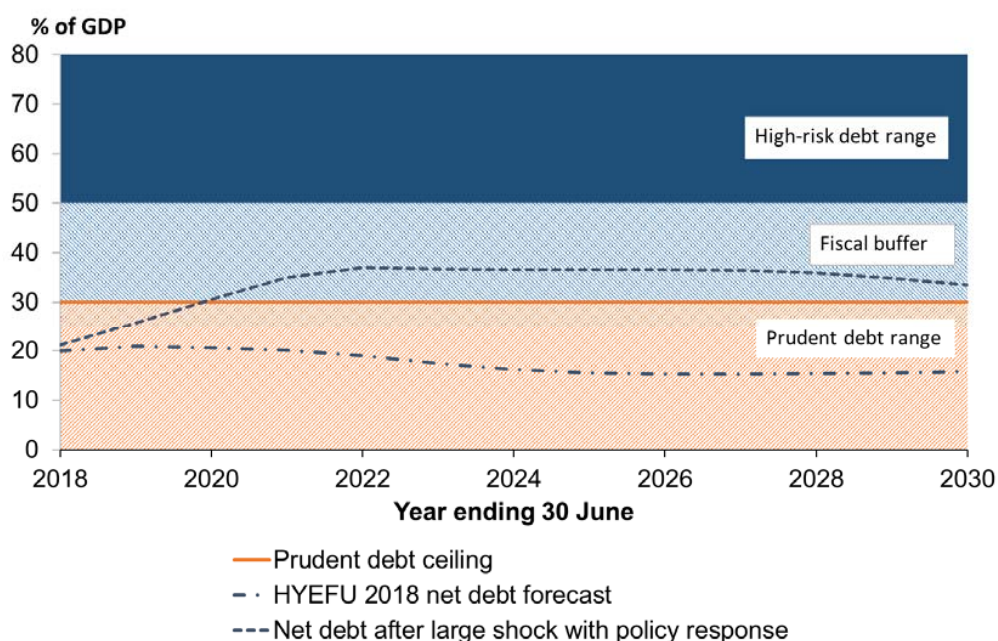
¹¹ This is based on a review of the literature, which includes estimates for OECD countries that include New Zealand in the sample.
 Fall, F., Bloch, D., Fournier, J. & Hoeller, P. (2015). "Prudent Debt Targets and Fiscal Frameworks," *OECD Economic Policy Papers*. No. 15.
 Eyraud et al., 2018b.
 OECD. (2015). Achieving Prudent Debt Targets Using Fiscal Rules. *OECD Economic Department Policy Note*, No. 28.

80. We have made a conservative judgment to use 20 percentage point of GDP buffer, which is at the upper end of estimates for a major shock. The buffer would likely be large enough to absorb two smaller shocks.
81. In addition, the size and frequency of shocks in the future may be different to the past. For example, there is likely to be a higher frequency of extreme weather events than in the past owing to climate change. Judgments around the desired level of fiscal resilience also need to be balanced with providing space for investment that could also enhance the resilience of, for example, physical infrastructure or human capital.

...implying that a prudent limit for net debt would be around 30 percent of GDP

82. A conservative maximum level of debt of 50 percent of GDP, less a buffer of 20 percent of GDP, implies a prudent upper limit for net debt of 30 percent of GDP. A less conservative judgment around the maximum level of debt would increase the prudent upper limit, while a desire to buffer against more than one large shock would decrease the prudent upper limit. We recommend more conservative judgments given there is large uncertainty around what level debt becomes welfare reducing, with significant costs to exceeding this level but relatively low costs in undershooting it.
83. Figure 4 illustrates the estimated prudent debt ceiling, the HYEFU 2018 net debt projection and an illustrative shock scenario. The shock scenario is illustrative and depends on assumptions about the nature of the shock, the fiscal policy response and the behaviour of the economy. This scenario presents the impact of a significant negative shock,¹² followed by a fiscal stimulus and then a gradual period of fiscal consolidation. The scenario indicates how a shock could increase net debt by around 20 percentage of GDP, but be kept below the high-risk level if the initial level of net debt is below the prudent debt ceiling and there is a period of fiscal consolidation.
84. As noted above, the fiscal outlook also faces long-term pressures from an ageing population and other structural trends. We have not reviewed the appropriate level of pre-funding for future expenses via the New Zealand Superannuation Fund.

Figure 4. Different levels of net debt from a fiscal sustainability perspective



Source: The Treasury

¹² The scenario tested is a severe international economic downturn, followed by four years of fiscal stimulus peaking at 3 percent of GDP, after which fiscal consolidation is undertaken with OBEGAL surpluses rising to 3 percent of GDP.



Treasury Report: Strategy and options for allocating the Covid Response and Recovery Fund

Date:	1 May 2020	Report No:	T2020/1271
		File Number:	MS-2-9-8

Action sought

	Action sought	Deadline
Hon Grant Robertson Minister of Finance	Direct the Treasury to prepare recommendations for Budget Ministers next week in line with your response to this report	1 May 2020

Contact for telephone discussion (if required)

Name	Position	Telephone	1st Contact
Udayan Mukherjee	Senior Analyst, COVID Strategy	s9(2)(k)	✓
Geraldine Treacher	Manager, COVID Strategy		

Minister's Office actions (if required)

Return the signed report to Treasury.


Note any feedback on the quality of the report

Enclosure: No

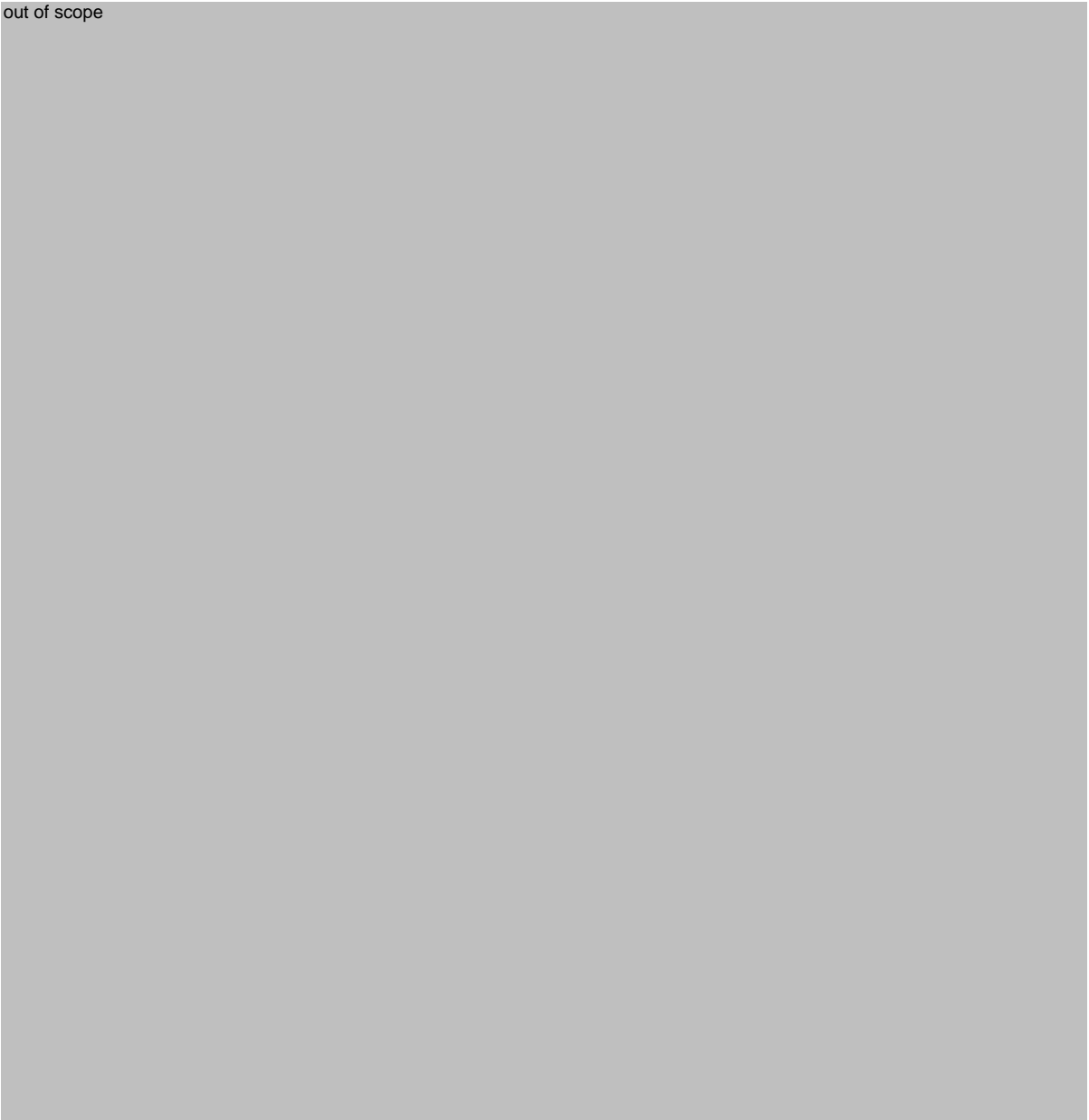
Treasury Report: Strategy and options for allocating the Covid Response and Recovery Fund

Executive Summary

out of scope




out of scope




Together, this package could total around \$15 billion. This would leave around \$25 billion remaining in the CRRF to be allocated in the future. Moreover, the Treasury does not consider that increases in net debt are a major concern in the short term. Additional spending beyond the CRRF can be justified given the scale of the shock. Given low interest rates and the general deterioration in public debt levels across countries we do not consider there will be issues if net debt rises above these levels. Further advice on an upper bound for debt in this economic environment will be provided to you in late-May.

out of scope




out of scope




10. The chances that spending on this scale is unnecessary is small, and if timed with the reduction in alert levels, it will support the redeployment away from industries with long-term challenges, towards new areas of activity. Given the amount of fiscal headroom available, we do not think this will crowd out other government priorities even if support is not precisely targeted.

out of scope




out of scope



35. In the short-term, there is sufficient fiscal headroom to progress substantive Wave 2 spending as recommended in this paper in an effort to kick-start the economy, while still leaving ample fiscal space for economic transformation in Wave 3. Beyond the short-term, iterative decision-making will allow you to make informed trade-offs once more is known about the public health situation, the limits for debt, and the economic situation.

36. The Treasury will provide further advice on a prudent range for net core Crown debt in response to COVID-19 (i.e. how much fiscal headroom there is to increase public debt). We intend to give this advice in late May. Our advice will be based on a range of judgements that are influenced by the factors that have changed since last year and due to COVID-19 – key insights from our analysis to date are set out in Annex 3.

out of scope



Annex Three – Summary of ongoing analysis on fiscal headroom

Last year the Treasury advised that a prudent upper limit for net core Crown debt was around 50 to 60% of GDP. Above this level we judged that the benefits of taking on more debt would be outweighed by the welfare costs. This upper limit was not designed to be the ceiling for debt to guide policy after a once-in-a-century shock, such as COVID-19.

In response to COVID-19 the marginal benefits of expenditure are very high and are likely to outweigh the costs of debt going above 60% of GDP.

- ***A larger fiscal response will likely help limit the extent of unemployment.*** Scenario analysis suggests greater fiscal support would help lower the unemployment rate (possibly from around 12% to 8%). Unemployment is particularly detrimental to people's material and non-material wellbeing, so the benefits of keeping people in employment are likely to be very high.
- ***With conventional monetary policy constrained, fiscal policy will be the main tool to stabilise the economy*** and boost employment. After the GFC the OCR was reduced by 575 basis points, such a reduction now is not possible.
- ***Historically low interest rates mean that further increases in public debt will have relatively small debt-servicing costs.***³ Expansionary monetary policy, both domestically and internationally, is likely to keep interest rates low in the short-term. Structural factors indicate interest rates may be persistently lower long-term. There is a strong likelihood public debt levels higher than 60% of GDP can be serviced, assuming interest rates are moderate relative to the economy's growth rate in the medium term.
- ***Risk assessments by markets and credit rating agencies will largely be relative.*** Therefore New Zealand's higher level of debt will be viewed in the context of higher levels of debt worldwide. The IMF estimates the average level of gross public debt in advanced economies will rise to by 20% to 120% by 2022. Credit rating agencies are acknowledging that well-designed fiscal stimulus can soften the economic impact in the short and longer term, and are therefore likely to accept higher levels of debt before issuing a credit downgrade.
- ***Keeping the economy close to full employment can prevent long-lasting scars,*** such as persistently weak productivity, wages and employment. This can have long-lasting benefits for the public finances (e.g. through higher tax revenue than otherwise) that reduce the net cost of higher public debt.
- ***The intergenerational benefits of higher expenditure are large and likely outweigh the burden of higher debt.*** Improved labour market outcomes will benefit young generations who are more likely to be in the labour force, particularly on the margins. The additional fiscal burden on future generations is reduced by lower interest rates and can be addressed through fiscal consolidation once employment has recovered.
- ***There is a strong case to use buffers that are held over the upper limit of debt in normal time.*** In normal times it is prudent to maintain relatively low levels of public debt to buffer against the vulnerability of high private and external debt. COVID-19 creates a strong case to use this capacity. Structurally lower interest rates support private and external debt sustainability and fiscal stimulus will support incomes that is needed to service the debt. Also, New Zealand's net external debt position as a percentage of GDP is at around its lowest level in 20 years.

³ 10-year New Zealand government bond (NZGB) yields are currently around 0.8% and have fallen from over 2% at the start of 2019 and over 10% since 1990.



Treasury Report: COVID-19 Response: Macroeconomic Strategy

Date:	28 May 2020	Report No:	T2020/1564
		File Number:	MC-1-5-2 (Fiscal strategy)

Action sought

	Action sought	Deadline
Hon Grant Robertson Minister of Finance	Agree to the recommendations in the report and discuss next steps with officials	Before the Fiscal Matters meeting at 8am on Tuesday 2 June

Contact for telephone discussion (if required)

Name	Position	Telephone	1st Contact
Angus Hawkins	Senior Analyst, Macroeconomic and Fiscal Policy	s9(2)(k)	n/a (mob) ✓
James Beard	Deputy Secretary, Macroeconomics and Growth	s9(2)(g)(ii)	

Minister's Office actions (if required)

Return the signed report to Treasury.

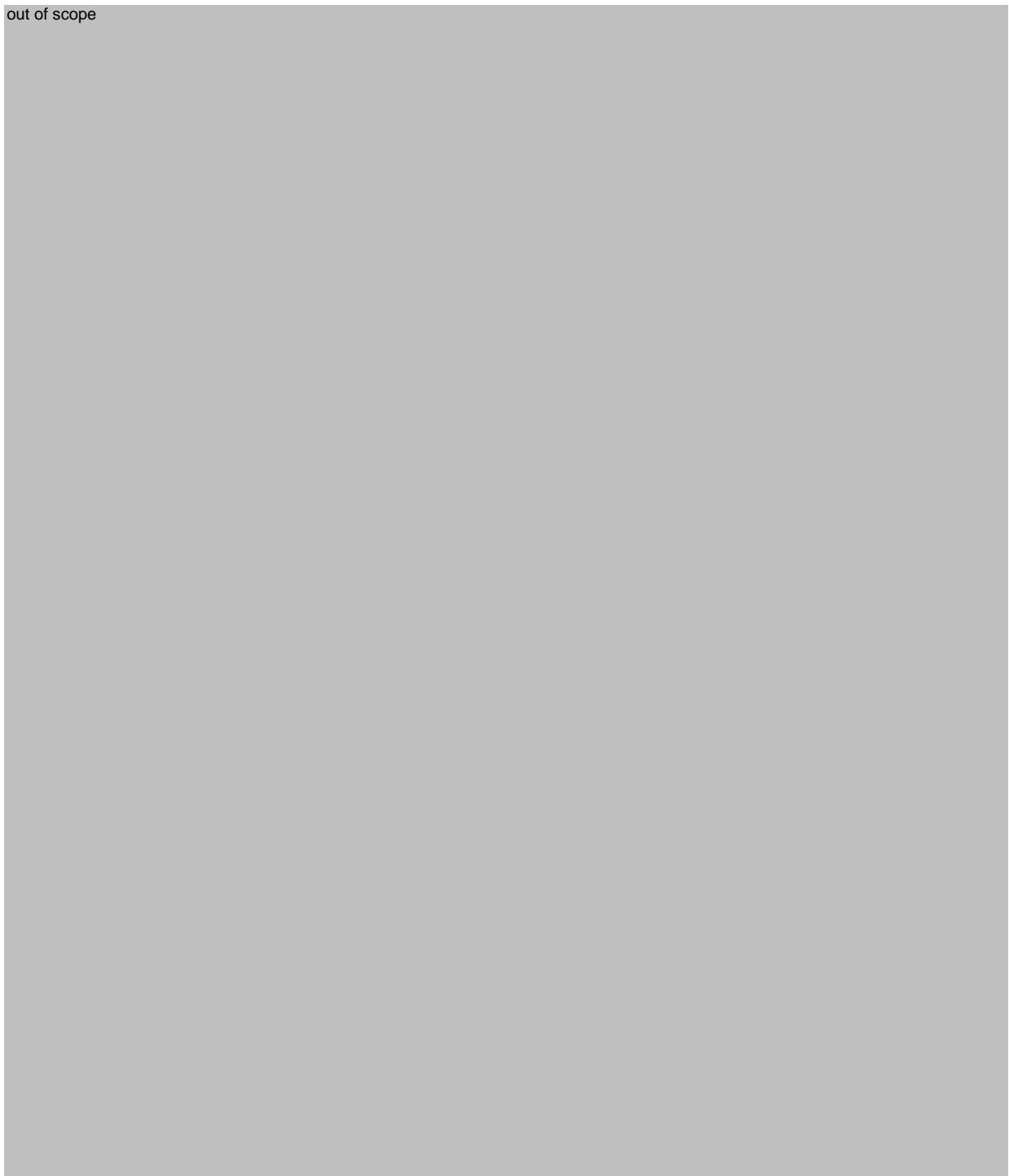
Note any feedback on the quality of the report

Enclosure: No


Treasury Report: COVID-19 Response: Macroeconomic Strategy

Executive Summary

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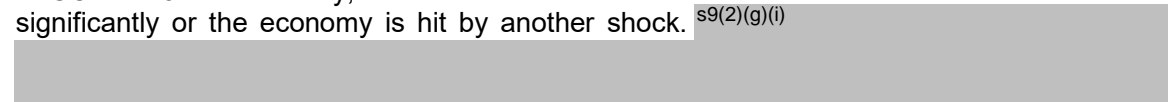


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Given the current economic outlook, net debt should not be increased further

At this stage, maintaining net core Crown debt within the range of 50% to 60% of GDP is prudent. This provides sufficient scope for the necessary fiscal stimulus required. It also allows for significant further measures to be implemented as part of wave 3 of your response to COVID-19. If necessary, net debt could increase further if the economic outlook worsens significantly or the economy is hit by another shock. ^{s9(2)(g)(i)}




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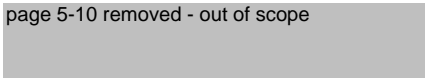


Treasury Report: COVID-19 Response: Macroeconomic Strategy

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Based on what we know now, we advise net debt remaining within the 50 to 60 percent of GDP range but retaining flexibility if the outlook changes

35. Treasury previously recommended this range as a limit for debt not because we thought New Zealand would lose access to debt markets or debt would become unsustainable. Instead, net debt above 50 to 60 percent of GDP would potentially lead to higher interest rates, reduced private investment, reduced effectiveness of fiscal stimulus, and that markets might be more reluctant to lend debt at reasonable interest rates.

36. At present we do not consider that these costs will be outweighed by the benefits of increasing net debt above the approximate level forecast at Budget with discretionary policy. However, if the economy weakened further, for example if there were a second wave of infections in New Zealand, or new non-discretionary expenses emerged, the benefits of increasing net debt above the level forecast in the Budget might exceed the costs.

37. s9(2)(g)(i)

. The analysis supporting this assessment is summarised in Annex 3.

38. Once debt rises above the 50% to 60% of GDP range, the bar for new discretionary spending should be higher (subject to macroeconomic conditions), as the macroeconomic costs of any new spending will begin to rise. Spending will be more clearly justified when responding to a new economic shock, such as an earthquake or further outbreak, or more persistent weakness in aggregate demand, associated with very low inflation and interest rates. Using this fiscal headroom now would reduce our ability to respond to such an event in the near future.

39. This does not mean that debt should necessarily be stabilised in the 50% to 60% of GDP range permanently. The uncertainty around the economic and fiscal outlook means it would be difficult to set a new long-run net debt target at this time, because the appropriate target will need to take into account where debt eventually peaks and other important factors such as interest rates and the level of inflation, which is difficult to determine while the shock is playing out. Instead we recommend setting a new net debt fiscal anchor when the economy gets closer to full employment.

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Annex 3: Assessment of the level of fiscal headroom

Based on a wellbeing approach, last year the Treasury suggested an upper limit for net debt of 50% to 60% of GDP

59. There are broadly three approaches for assessing how high debt can go:
- 1) **A debt sustainability approach:** The level of debt above which the government would risk insolvency, as interest expenses become too large.
 - 2) **A market access approach:** The level of debt beyond which creditors are no longer willing to lend on reasonable terms.
 - 3) **A wellbeing approach:** The level of debt beyond which there are likely to be adverse consequences for living standards and the economy.
60. The wellbeing approach requires weighing up the costs of higher debt against the benefits of new spending, and represents a comprehensive approach to assessing the impact of higher debt. This remains our preferred approach, and informs our advice that debt should, in the current circumstances, remain in around the 50% to 60% of GDP range.
61. The market access and debt sustainability approaches require less subjective judgement, and provide analysis on what level of debt could be sustained, not the full costs and benefits of reaching that level. This is useful in providing a sense of the upper limit for debt in the event of a major shock, but not the level of debt that should be targeted. This annex presents the analysis that supports our estimate of that limit.

s9(2)(g)(i)

62. In light of COVID-19 the Treasury has undertaken an assessment of how high debt could increase before we would risk an unsustainable debt position or lose market access. It is important to note that this assessment is context specific and would need to be revisited if the macroeconomic conditions changed.

63. s9(2)(g)(i)

64. As discussed in the body of the report, there are real costs from increasing debt, and at present we do not consider that the benefits of increasing net debt above the level forecast in the Budget will outweigh the costs. This is because the funds remaining in the CRRF provide enough space for fiscal policy to provide near-term support to the economy and fund other necessary expenditure. However, if the economy weakened further, the benefits of increasing net debt above the level forecast in the Budget might exceed the costs.

65. s9(2)(g)(i)

s9(2)(g)(i)

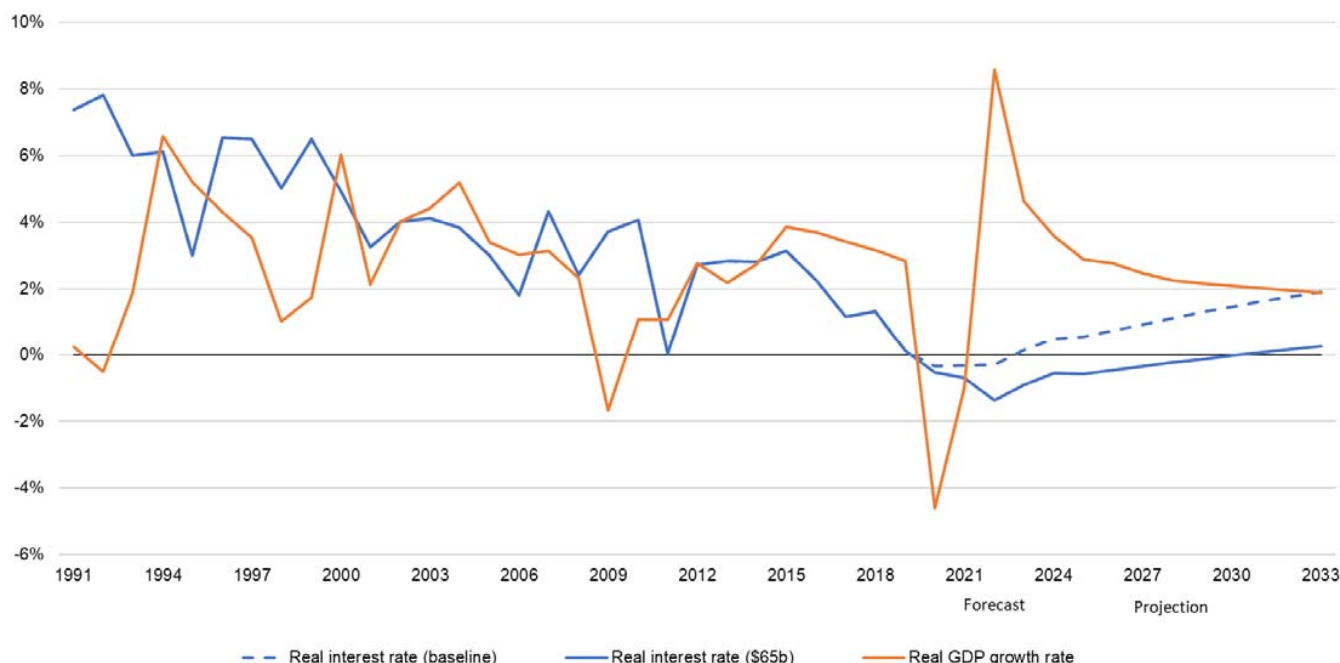
As interest rates on government borrowing are likely to be lower than, or at least equal to, the GDP growth rate for some time, debt can be stabilised at high levels

67. Interest rates on government borrowing are estimated to stay below the growth rate for GDP most of the projection period (2034) – see Figure 3.2 (Figure 3.22 uses a rule of thumb calculation to give a lower bound for interest rates over the forecast period assuming LSAPs of \$65 billion). This implies that the debt to GDP ratio could be stabilised even while running a small deficit.
68. However, even if the interest rate did exceed the growth rate, the debt ratio can be stabilised with a positive primary cash balance²³.

²³ The primary cash balance is the government's receipts less expenditure, excluding interest payments and receipts. It is the part of the budget balance that the government controls directly. It is important to note that the total Crown operating balance (OBEGAL) and the primary cash balance are different indicators. Unlike OBEGAL, the primary cash balance includes capital expenditure but excludes finance costs.

69. The Government's 2020 Fiscal Strategy Report projects the primary cash balance²⁴ to increase from -2% in 2023/24 to around 1% of GDP by 2029/30.

Figure 3.2: 10-year government bond rates and GDP growth rate – real, projection period (%)



In most scenarios, we expect to have continued access to bond markets, at reasonable yields, although there are risks from large increases in the pace of issuance

70. The private sector has a strong appetite for purchasing government bonds at low interest rates, given the economic environment of precautionary saving and weak business investment. The Reserve Bank's Large Scale Asset Programme (LSAPs) is also supporting a rapid pace of bond issuance at current yields. There may be risks from future rapid increases in bond issuance if the LSAP programme ceased (for example, if it were no longer consistent with monetary policy objectives). However, there are other options for managing short-term dysfunction in bond markets, such as a temporary increase to the overdraft limit on the Crown Settlement Account.
71. There is a risk that if inflation begins to rise but growth remains low (consistent with constrained supply) that an expansion of the LSAP programme would be inconsistent with RBNZ objectives. This scenario could lead to higher interest rates and greater fiscal tightening than currently planned, but the adjustment would likely be manageable given the Crown's strong balance sheet. If another economic shock occurred the LSAP programme would likely remain consistent with the objectives of the Monetary Policy Committee.
72. In the current environment where risks are increasing globally as a result of COVID-19, it would likely either take a financial crisis whereby capital markets themselves were dysfunctional or an event specific to New Zealand (such as an earthquake, biosecurity outbreak, banking failure) to lead to significant difficulty in accessing global capital markets or a significant increase in bond yields. s9(2)(g)(i)

²⁴ Core Crown residual cash excluding interest payments and receipts.

Credit ratings take into account a country's relative debt position, which may be less affected in current circumstances

73. It is difficult to know exactly how higher debt levels will impact the credit rating, but all else equal, credit ratings will be less adversely affected because there are sound reasons for the rise in debt (ie, to respond to the pandemic), New Zealand's relative fiscal performance will remain favourable, and the economic and fiscal shock is expected to be temporary. Credit ratings are also typically assessed on a relative basis, although a credit rating downgrade would be likely if debt reached 100% of GDP.

In the current environment it is unlikely that higher government debt levels will exacerbate external or private saving imbalances

74. New Zealand has a relatively high amount of private and external debt compared to other OECD countries. In normal times, this is a reason to maintain relatively low levels of public debt. This is because private and external debt creates a vulnerability to shocks, particularly if sudden capital outflows increase interest rates and reduce credit availability.
75. New Zealand's net international liabilities, relative to GDP, are at their lowest level since 2000 (see Figure 3.3), all of New Zealand's external debt is denominated in domestic currency which reduces exposure to exchange rate depreciation, and most external debt is at longer-term maturities (greater than one year). The proportion of short-term debt has also reduced since the GFC.
76. In the current environment it is unlikely that higher government debt levels will exacerbate external or private saving imbalances. This is because low interest rates will support private and external debt sustainability. Risks from capital flows are well managed through New Zealand's flexible exchange rate and external debt being mostly denominated in New Zealand dollars. Capital outflows would lower the exchange rate, supporting the competitiveness of New Zealand's exporters..

Figure 3.3: Net international investment position (NIIP), % of GDP





Assessing New Zealand's fiscal headroom

Slides for ELT

May 2020

Key points for discussion

s9(2)(g)(i)

What are we going to advise MoF to do with this information? How will this information be framed?

- There is significant value in providing sufficient fiscal stimulus to support aggregate demand and employment, thereby strengthening the economy, the fiscal position and living standards. The costs of increasing debt are low when real interest rates are around zero and aggregate demand is weak.
- There is significant fiscal headroom s9(2)(g)(i) that can be used if needed to respond to shocks, such as: fighting this outbreak; cushioning impact on households and firms; managing a further COVID-19 outbreak (i.e. a return to level 3 or 4); responding to a future unrelated shock (eg. an earthquake).
- Approximately 35% of GDP of headroom has already been used in response to COVID-19. More could be used without immediate negative consequences, but doing so would reduce fiscal resilience for future shocks (COVID-19 and non- COVID-19 shocks) and have long-run costs.
- Therefore, discretionary use of existing fiscal headroom needs to help close the output gap, support growth or have long run benefits (and be targeted and temporary) so that the benefits of higher debt exceed the costs. Automatic stabilisers could also use a large amount of headroom if the economy weakened further.
- Macroeconomic conditions are key in assessing what debt level to target once the economy recovers. While interest rates are at the effective lower bound, and inflationary pressure is low, there would be high output costs from trying to reduce the debt ratio. Even in the long run, there would be high economic costs from reducing the debt ratio (from higher distortionary taxes than otherwise) that need to be weighed up against added resilience. (See slide 18 for more detail).

Questions for discussion:

- Do you agree with this assessment on the level of fiscal headroom?
- Do you agree with this approach to providing this advice to MoF? Any views on how to frame this advice?

Contents

- Context
- Approach to assessing the level of fiscal headroom
- Summary of assessment
- Judgements and assumptions underlying this assessment
- Why not higher?
- Key comments from IFSG
- Summary of analysis:
 - Macroeconomic context
 - Government borrowing costs
 - Maximum feasible primary balance
 - Maximum sustainable debt level
 - Market access and credit ratings
 - Balance sheet and external vulnerabilities
 - Intergenerational considerations and fiscal consolidation
- Appendix of additional analysis

Context

Purpose and scope

- We intend to provide advice at the end of May on fiscal headroom.
- This advice will provide an assessment of how much headroom there is for public debt to increase in light of current circumstances.
- This advice will help the Government in government spending decisions and the fiscal strategy in response to COVID-19.
- This advice does not cover what the prudent level of debt should be, or the speed of fiscal consolidation, once NZ is back to a full employment economy. We intend to provide this advice as part of the Wave 3 strategy.
- This advice will not make recommendations on the use of the available fiscal headroom (ie, whether the government should increase spending or reduce taxes, etc).

Previous advice

- Last year the Treasury recommended an upper limit for net core Crown debt of 50 to 60% of GDP - above this level we considered there would be adverse wellbeing consequences (eg. *greater debt-servicing burden requiring higher taxation and/or lower expenditure than otherwise*) rather than loss of market access. The upper limit informed a prudent limit of 30% of GDP in normal times with a buffer of 1-2 typical shocks (that occur about once in a decade).
- We took a conservative approach to estimating the upper limit given New Zealand is a small, open economy that is vulnerable to natural disasters and external shocks, with high levels of private debt and lower than average GDP-per-capita relative to other advanced countries. The limit of was not designed to be the ceiling for debt to guide policy after the type of economic shock COVID-19 has created (which is much more significant than a 1 in 10 year shock).

Approach to assessing the level of fiscal headroom

There are broadly three approaches for assessing how high debt can go – we considered all three in this assessment:

- 1) **Debt sustainability:** The level of debt above which the government would be insolvent as interest expenses become too large.
- 2) **Market access:** The level of debt beyond which creditors are no longer willing to lend on reasonable terms.
- 3) **Welfare approach:** The level of debt beyond which there are likely to be adverse consequences for living standards and economy.

Some of the key factors that are being considered in this assessment are:

- Debt-servicing capacity through lower interest rates
- Sustainable primary balances
- Market access i.e. the capacity to keep borrowing at reasonable interest rates
- Higher levels of debt may not impact credit ratings like they would before the COVID-19 outbreak
- The marginal benefits of expenditure are temporarily high
- Balance sheet liquidity and contingent risks to the balance sheet
- Intergenerational impacts
- External imbalances

Judgements and assumptions underlying this assessment

This assessment is based on a number of judgements and assumptions that contain a lot of uncertainty

- s9(2)(g)(i)
- **These assumptions are conservative and therefore robust to uncertainty.** History suggests primary balances of 2% of GDP are feasible. Potential real GDP growth is currently estimated to be around 2-2.5%. Long-term government real bond yields are currently around 0% and projected to rise to around 2% only in the very long run.
- **The speed of debt issuance is managed to ensure continued and cost effective market access.** s9(2)(g)(i)
- **All else equal, market access and credit ratings will be less adversely affected because there are sound reasons for the rise in debt** (ie, to respond to the pandemic), **New Zealand's relative fiscal performance will remain favourable, and the economic and fiscal shock is expected to be temporary.** Credit ratings are also typically assessed on a relative basis, although a credit rating downgrade would be likely if debt reached 100% of GDP.
- **Fiscal borrowing will not exacerbate external or private saving imbalances**, as it will occur in context of greater private sector saving, low neutral interest rates, and heightened demand for safe assets. External balances will remain sustainable reflecting low neutral interest rates and flexible exchange rate.
- **The intergenerational benefits** (such as, improved labour market outcomes and a higher GDP growth than otherwise) **of well-targeted, high value expenditure are likely to outweigh the costs** (such, as higher taxation than otherwise) **of higher levels of indebtedness** (particularly given extremely low interest rates).

Why not higher?

s9(2)(g)(i)

Source: Budget 2020 Fiscal Strategy Model

Key FSM projection assumptions:

- Operating allowances assumed \$2.1 billion in B24, growing 2% each Budget
- New annual capital expenditure assumed \$3.0 billion in B24, growing 3% each Budget
- Core Crown tax revenue held constant at 28.3% of GDP
- Core Crown expenses held constant at 30% of GDP
- Fiscal drag is corrected i.e. tax adjustments to prevent bracket creep

How will we manage risks and shocks with higher levels of public debt?

- Even at higher levels of public debt, there will likely be space to manage further negative demand shocks. This is because negative demand shocks are likely to keep interest rates lower for longer.
- If the interest rate-growth differential was to widen by more than we expect, we think it is realistic to run higher primary surpluses than we have assumed.
- When the economy recovers and policy interest rate begins to rise above zero, fiscal consolidation would be appropriate including potentially reducing the debt ratio to increase headroom.

Key comments from IFSG

Comment from IFSG	How this has been addressed
Make it clearer that this analysis is not providing advice on the VFM of additional spending, and that the main worry is not fiscal headroom, it is the quality of the spend.	<ul style="list-style-type: none"> Explaining in the scope that this advice does not cover how to use the available fiscal headroom. Emphasising that using fiscal headroom needs to be growth enhancing and have long run benefits (and be targeted, temporary and time-limited).
Scepticism that COVID-19 is a 'once-in-a-century' shock ie. Pandemics will likely become more common and that this shock won't be as significant as a 'once-in-a-century' shock.	<ul style="list-style-type: none"> Removing the reference to a 'once-in-a-century' shock. Explaining that the economic shock that COVID-19 has created is much more significant than a typical 1 in 10 year shock - which formed the basis of previous advice.
Need to be clear about how MoF can use this information.	<ul style="list-style-type: none"> See middle section of slide 2. In short: fiscal headroom is not the main constraint in responding to COVID-19, it's VFM expenditure. Using fiscal headroom has long-run costs, therefore using fiscal headroom needs to be growth enhancing and have long run benefits.
Has our assessment of the buffers we need changed?	<ul style="list-style-type: none"> No. However, the assessment is largely based on work from last year - therefore further work on this is probably worthwhile.

s9(2)(g)(i)

Summary of analysis (optional reading)

Macroeconomic context

- The particular features of the COVID-19 crisis are:
 - There are **multiple demand and supply shocks**, domestic and global, affecting the New Zealand economy;
 - New Zealand has entered a **liquidity trap** with the policy interest rate near the effective lower bound;
 - There is a **public health objective** to reduce social contact to the extent necessary to eliminate COVID-19 and mobilise resources to fight the virus; and
 - There is a **synchronised global** recession and public health emergency.
- **A key judgment is that the aggregate demand shortfall will dominate aggregate supply constraints.** Expectations of weak aggregate demand are found in financial market pricing indicating low expected inflation and interest rates. In addition to the effects on demand from containment measures and social distancing, New Zealand's aggregate demand will be reduced by weaker export demand for both goods and services. In this context, deflationary risks exceed the risks of high inflation.
- **Aggregate demand weakness reflects the private sector's greater desire to save and lower investment demand.** Factors that are expected to increase desired private saving include the income shock and greater precautionary saving by households and businesses in the face of heightened uncertainty. Investment demand is expected to be weaker in presence of weak demand, business cashflow pressures, greater uncertainty and weaker productivity.
- **Weak aggregate demand cannot be addressed by lower nominal interest rates in the presence of an effective lower bound.** The key implication is that there is an 'excess' of desired private saving over investment demand and that a fiscal expansion should not increase the risk-free interest rate by much until the economy is closer to full employment (especially as most estimates of the neutral real interest rate are very low).
- **In the current environment, fiscal expansion is not expected to have much impact on interest rates until full employment is reached.** It would be desirable, and a measure of success, if interest rates do rise somewhat in the future to more 'normal' levels. This would indicate that the economy is close to full employment and inflation expectations are anchored.

Fiscal and monetary policy coordination

- Fiscal and monetary policy should both play complementary roles in responding to the shock:
 - Monetary easing stimulates aggregate demand and eases credit conditions for firms and households, and supports fiscal headroom by reducing interest rates and helps improve financial market conditions.
 - *Temporary, timely and targeted* fiscal policies can address specific distortions and distributional effects, as well as supporting broader aggregate demand.
- **Reserve Bank purchases of government bonds do not create a 'free lunch' or reduce public debt.** Central bank purchases of long-term government bonds effectively change the maturity structure of public debt from long-term to short-term. This is intended to reduce long-term interest rates and stimulate investors to hold alternative assets.
- **In an environment of large spare capacity and policy interest rate at its lower bound, fiscal expansion does not create the usual trade offs with monetary policy.** Fiscal expansion is unlikely to materially crowd out investment and tradable activity, and should increase (expected) inflation, which reduces real interest rates.

Government borrowing costs

Government borrowing costs

- 10-year New Zealand nominal government bond (NZGB) yields are currently around 0.8% and have fallen from over 2% at the start of 2019 and over 10% since 1990. By the end of the forecast period bond yields are currently forecast to fall further and then gradually increase to 2.4% (Figure 2).
- Expansionary monetary policy, both domestically and internationally, is likely to keep interest rates at historically low levels. Internationally, the US has moved to an unlimited level of LSAPs and Australia to yield curve control.
- Structural factors, such as a downward trend in the neutral interest rate, will also keep interest rates low. Markets are not expecting this trend to reverse. COVID-19 will add to this trend – increasing private saving and reduced investment demand.
- **Hence it is likely borrowing costs will be below the projected baseline rate in the short run (Figure 2).** Figure 2 uses a rough rule of thumb calculation to give a lower bound for interest rates over the forecast period assuming LSAPs of \$65 billion.
- There is more uncertainty over the medium term (5-10 years). Forecasts having inflation reaching 2% by 2024, which could lead to more substantive rises in the OCR from that point. In a 'raise OCR quickly' scenario, the RBNZ have the OCR increasing to 3.25% by 2027 (3.5% is the highest OCR level in past 10 years).
- Interest rates will likely rise as the debt to GDP ratio increases, via an increase to the risk premium. Estimates for vary, but a rule of thumb is that rates rise by about three bps for each ppt increase in the debt-to-GDP ratio.

Long-run interest rate (over the next 40 years)

- By the end of the projection period (2033/34) nominal bond yields are currently assumed to continue to gradually increase to 3.95% by 2033. It takes a quarter-of-a-century to reach the assumed long-run rate of 5%.
- Our working assumption is that in the long-run, the real interest will exceed the real growth rate and that NZ's real interest rate would display a premium over a foreign benchmark such as the US bond rate. However, the transition path and the size of the wedge warrants further analysis.
- Various measures of NZ's neutral interest rate indicate that it has been on a downward trend for over two decades, and markets are not expecting a reversal in the trend seen to date.

Figure 2: 10-year bond rates – nominal, projection period (%)

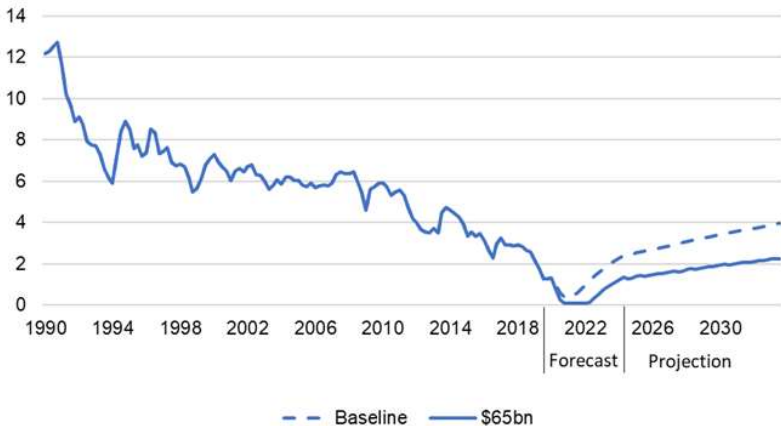
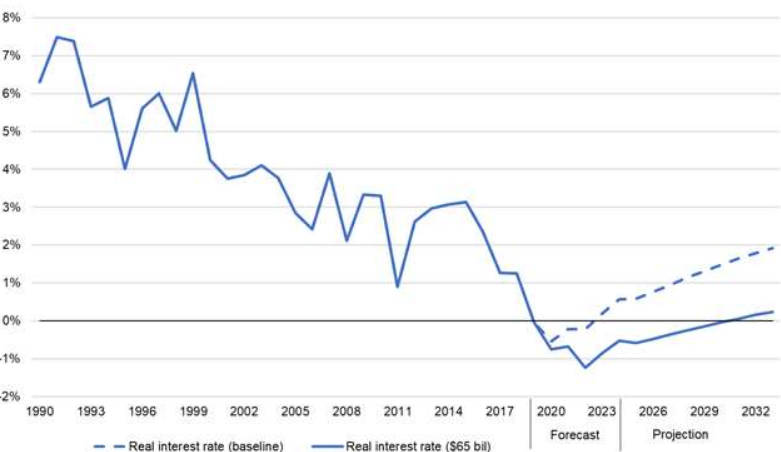


Figure 3: 10-year bond rates – real, projection period (%)



Maximum feasible primary balance

- One approach to estimating how high debt can go is to look at debt-servicing capacity and what the maximum sustainable debt level is.
- This requires coming up with assumptions for interest rates, growth rates and maximum feasible primary balances.
- In theory, the government can run very large primary balances. Since 1972, the average has been around 2.5% of GDP (Figure 4).
- However, sustaining large primary surpluses could be challenging for the following reasons:
 - **Fiscal fatigue:** International experience suggests difficulty in sustaining large primary balances for a long period.
 - **Need for macro stabilisation.** The primary balance plays a key role in macroeconomic stabilisation, particularly with monetary policy near the ELB, which will reduce the surpluses that can be credibly committed to in order to stabilise debt.
 - **Long-term fiscal sustainability challenges** will make reducing expenditure growth challenging, in particular New Zealand Superannuation (NZS) and Health (Figure 5):
 - Those aged 65 years and over are projected to account for 27% of the population in 2060, compared to 16% in 2020. The most significant fiscal impact of demographic change is on New Zealand Superannuation (NZS) expenses. **Gross NZS costs are projected to increase from 5.3% of GDP to 7.7% of GDP in 2060** (net NZS increase is from 4.5% to 6.5%).
 - **Health expenditure is projected to increase from 7.4% to 10.5% of GDP.** Increasing demand for healthcare services, rising prices for those services and wage growth make up the majority of the projected increase. Demographic change is assumed to account for around 25% of the increase.

Figure 4: Primary balance since 1972

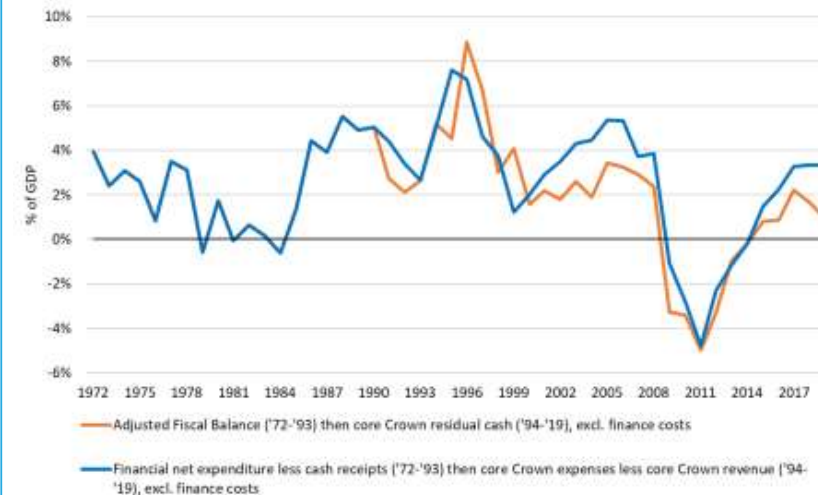
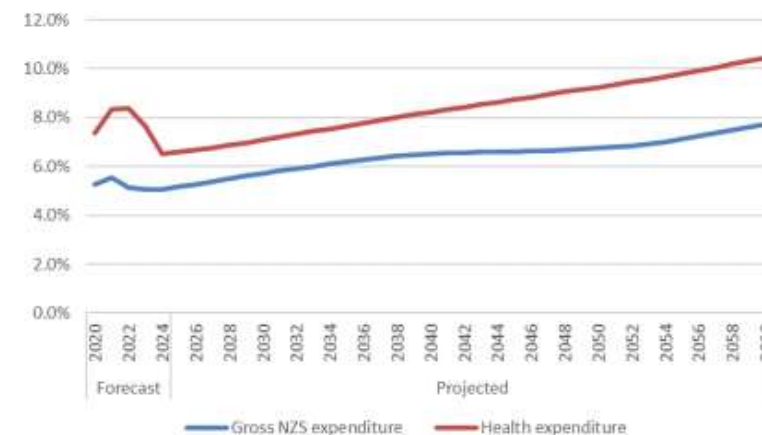


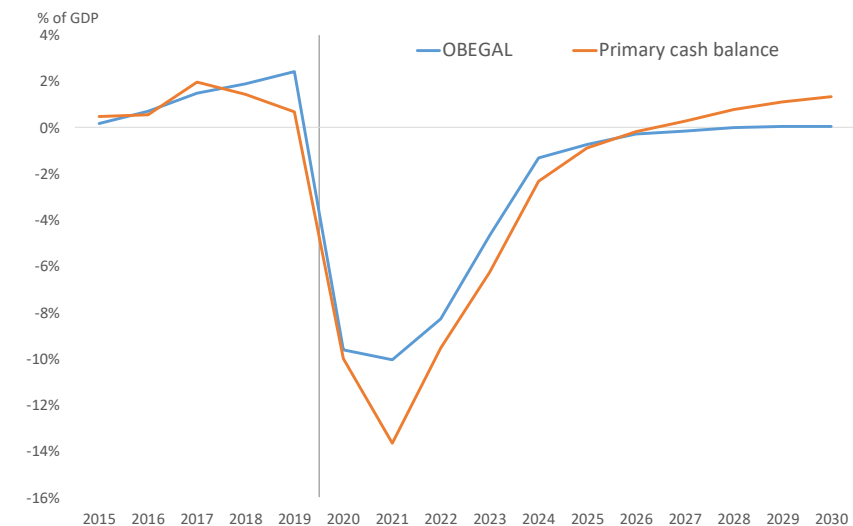
Figure 5: Forecast and projected gross NZS and health expenditure



Maximum feasible primary balance cont'd

- The Government's 2020 Fiscal Strategy Report projects the primary cash balance to increase from -2% in 2023/24 to around 1% of GDP by 2029/30 (see Figure 6).
- Key projection assumptions: operating allowances of \$2.1 billion (growing 2% each Budget) and capital allowances of \$3 billion (growing 3% each Budget); government expenditure is held constant at 30% of GDP, and tax revenue at 30% of GDP.
- Projected NZS expenditure increases and other bottom-up pressures (such as health expenditure) will put pressure on these allowances. On the other hand, fiscal drag could provide additional revenue from what is projected.
- **Assuming a 1% primary balance is consistent with the long-term primary balance in the Budget 2020 projections.**
- Note that the Total Crown operating balance (OBEGAL) and primary balance are different indicators. Unlike OBEGAL, the primary balance includes capital expenditure but excludes finance costs.
- At high levels of public debt, stabilising of the debt-to-GDP ratio may not require OBEGAL to be in surplus (as interest costs will be large). However, this may conflict with the PFA principle to balance total revenues and expenses over time. Therefore, there may be a need to re-consider whether the PFA operating balance principle would be appropriate in a high public debt environment.

Figure 6: Budget 2020 projected OBEGAL and primary cash balance



Note: Primary cash balance is core Crown residual cash excluding interest receipts and payments.

Maximum sustainable debt level

- As already noted, one approach for estimating how high debt can go is to look at debt-servicing capacity and what the maximum sustainable debt level is.
- This requires assumptions for future interest rates, GDP growth rates, and the maximum feasible primary balances that could be run for a sustained period.
- A limitation to this approach is the lack of feedback loops i.e. as debt increases the interest rate stays the same.
- Here is the calculation for the maximum sustainable debt level, where g = real growth rate, r = real interest rate and pb = the primary balance: $d = \frac{(1+g)}{(r-g)} pb$

s9(2)(g)(i)

- Figure 8 illustrates that it is expected that the growth rate will be higher than the interest rate over the projection period. If this was the case, primary deficits could be run and the level of debt as a % of GDP remains stable or on a downward trajectory.

Figure 7: Maximum sustainable debt levels, for different 'r-g' and primary balances

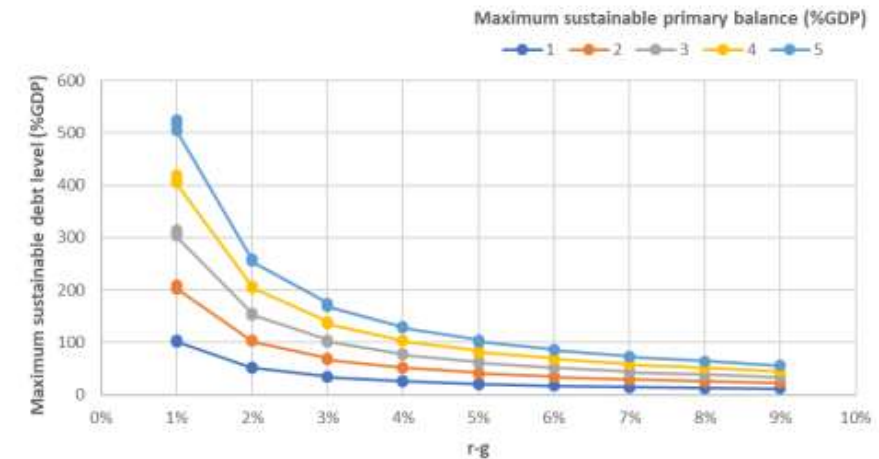
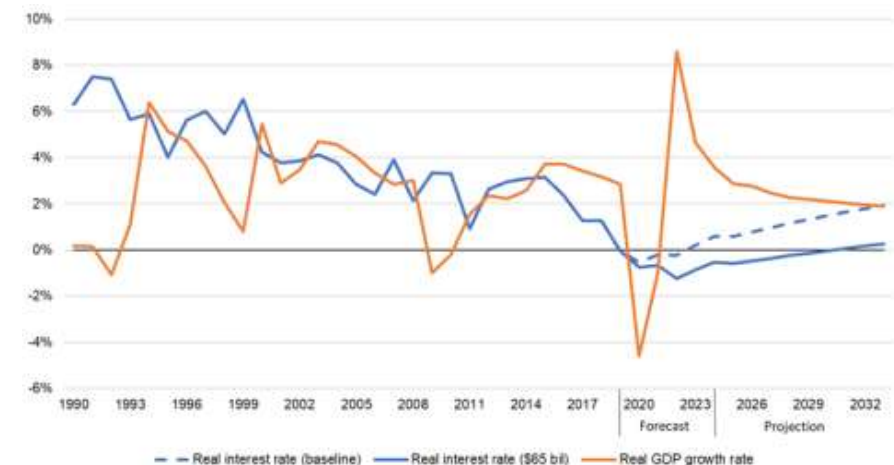


Figure 8: Maximum sustainable debt levels, for different 'r-g' and primary balances



Market access and credit ratings

What are the triggers that could lead to loss of access to global capital markets or a significant increase in bond yields?

- In the current environment where risks are increasing globally as a result of COVID-19, it would either take a financial crisis whereby capital markets themselves were dysfunctional or an event specific to New Zealand (NZ) (such as an earthquake, biosecurity outbreak, banking failure) to lead to significant difficulty in accessing global capital markets. Alternatively, significantly higher yields could result from a short-term imbalance between supply and demand for New Zealand government bonds (NZGBs).

What level and speed of debt issuance could the market absorb?

- It is impossible to state with certainty. The speed will be somewhat limited by the issuer's willingness to accept higher yields, along with investor demand and capacity to take NZ country risk. There will also be some practical limitations, such as the time required to pull together consecutive operations such as syndications. Current NZGB issuance is already at a record high, with \$6.7 billion of NZGBs issued in April. This pace of NZGB issuance would not be possible, at current yields, without the LSAP programme.
- The MPC aims to stabilise prices over the medium term and support maximum sustainable employment. There is a risk that if inflation begins to rise but growth remains low (consistent with constrained supply) that an expansion of the LSAP programme would be inconsistent with RBNZ objectives. However, the RBNZ takes a balanced approach to setting monetary policy, which means they will let inflation overshoot the target mid-point for a time when employment is projected to be below its long-run sustainable level.

s9(2)(g)(i)

For example, since the LSAP programme began, there have been a very small number of instances where the amount the RBNZ has offered to purchase in the market is larger than the total offers to sell. However, there could be a number of reasons that could be causing it (e.g. banks may not hold many of the bonds, or it has an associated interest rate hedge etc.). The RBNZ has been responding by actively managing the bonds tendered in the LSAP programme according to market demand.

What is the impact of the current environment on credit ratings? (see slides 21 & 22 for more analysis)

- Rating agencies typically apply credit ratings on a relative basis, to ensure the full range of ratings are utilised. NZ's relative risk would increase if the impacts of COVID-19 were materially higher relative to peers. While higher debt levels will impact NZ's indicative credit rating, the downgrade to the final credit rating may be less severe (or non-existent).
- It is difficult to predict with certainty the impact of higher debt levels on NZ's credit rating. NZ's credit rating would likely be downgraded by at least one notch if debt rose to 50% of GDP, and at least three notches (to a single A, from AA) if net debt rose to 100% of GDP. However, these estimates are based on current methodologies which, over time, are likely to be calibrated to a new 'weaker credit world'. See Slide 22 & 23 for more analysis.

Balance sheet & External vulnerabilities

Balance sheet (see slides 25 - 26 for more detail)

- Net core Crown debt is only a subset of the Crown's balance sheet. In assessing fiscal headroom, it is appropriate to also consider: The Crown's liquid financial assets that could potentially be used to meet debt servicing costs in the future; non-debt liabilities; and contingent liabilities that could require financing in the future.
- **Assets:**
 - The Crown has a significant portfolio of financial assets in the Crown Financial Institutions (CFIs). The CFIs with the largest asset portfolios are the NZSF and ACC. Combined NZSF and ACC hold financial assets of around \$80 billion (26% of GDP).
 - The CFIs assets are held for a specific policy purpose, not for paying down debt. There would need to be legislative change to access any funds to meet debt servicing costs. There would be opportunity costs and risks of accessing CFI funds for the purpose of meeting debt servicing obligations.
- **Liabilities:**
 - The Government's response to COVID-19 and deterioration in the economic outlook has led to a significant increase in Contingent Liabilities (CLs) to provide economic support and financial stability. CLs typically consist of guarantees, indemnities and uncalled capital.
 - Contingent liabilities: The maximum possible amount in Vote Finance that the Treasury could be liable for (excluding the Deposit Guarantee scheme, as the likelihood is low) is around \$23.4 billion (7.7% of GDP), up from \$13.8 billion (4.5% of GDP) at February 2020. The expected cost these contingent liabilities is around 1% of GDP over the next 18 months.

External vulnerabilities (see slide 27 for more detail)

- New Zealand has a relatively high amount of private and external debt compared to other OECD countries. In normal times, this is a reason to maintain relatively low levels of public debt. This is because private and external debt creates a vulnerability to shocks that it is prudent for the Crown balance sheet to buffer. However, there is a strong case to now use this buffer.
- NZ's external debt creates a degree of vulnerability to capital outflows. However, this vulnerability is limited due to the characteristics of NZ's external liabilities:
 - New Zealand's net international liabilities, relative to GDP, are at their lowest level in over thirty years.
 - Almost all of New Zealand's external debt is denominated in domestic currency. New Zealand's floating exchange rate regime and capital account liberalisation allows the cushioning of external shocks, with New Zealand's financial markets being well developed to manage risk.
 - While short-term external debt funding likely poses the greatest vulnerability, most external debt is at longer-term maturities (greater than one year) and the proportion of short-term debt has reduced since the GFC.
- Structurally lower interest rates supports private and external debt sustainability. Fiscal expansion can support the recovery of incomes that are needed to service debt.

Intergenerational considerations and fiscal consolidation

Intergenerational considerations

- To support intergenerational wellbeing and equity, a balance needs to be struck between supporting the economy and managing the debt burden placed on future generations.
- Future generations are going to inherit high levels of government debt and higher debt-servicing costs as a result of the response to COVID-19. However, this will be partially offset by low debt-servicing costs.
- **There will be intergenerational benefits from well targeted expenditure in response to COVID-19 that closes the output gap and brings the economy back to full employment - therefore it will be equitable that the some of the costs of debt financing are spread across generations.** The intergenerational benefits include:
 - Improved labour market outcomes: Young generations are more likely to be in the labour force, particularly on the margins (eg. casual workers, students entering the labour force). Therefore they will benefit greatly from improved labour market outcomes that a larger fiscal response is intended to help with.
 - Recessions can leave long-lasting scars on the economy – persistently weak productivity, wages and employment. An appropriate fiscal response, will lead to higher levels of economic growth than otherwise which will have positive intergenerational impacts.
 - Mitigation and rebuilding of the negative impacts on human and social capital that recessions can have.

Fiscal consolidation

- **At one extreme, the Government can treat the shock to debt as permanent and act to only stabilise debt.** The government could stabilise or even reduce debt while running a primary deficit, though interest rates are expected to rise. Debt reduction could require increasing distortionary taxes and lowering productive government spending, stabilising debt could represent the best cost-benefit trade-off.
- **At another extreme, the Government can act rapidly to reduce debt, by increasing taxes and reducing spending. However, quickly cutting government spending has economic costs and can be deflationary, particularly at the effective lower bound (ELB).**
 - *Economic impact:* Quickly cutting government spending has economic costs. If multipliers are large, a reduction in government spending can lead to a negative loop in which negative GDP growth lowers tax revenue leading to further fiscal policy adjustments.
 - *Monetary policy:* Recent literature has emphasised that the govt spending multiplier on output is larger when the nominal interest rate is constrained at the ELB. As a reduction in government spending is deflationary, monetary policy would typically respond with a cut in interest rates. This is not possible at the ELB and hence the neg. output effect is larger.
- **On balance, a slow return to a prudent level of debt contingent on macroeconomic conditions may be optimal - running a primary surplus once employment has recovered or interest rates begin to normalise.** We intend to provide further advice to ministers on these considerations as part of the Wave 3 strategy.

Appendix of additional analysis

Economic and Fiscal Outlook

- **New Zealand and the world's economies are experiencing large contractions in activity.** Large declines in activity are expected in the June quarter and by the end of the forecast period output remains around 7% below HYEFU 2019 forecast.
- **Global risks are skewed to the downside** and may create lasting changes in supply chains and weakness in aggregate demand.
- **Recovery in New Zealand will require ongoing policy support.** Fiscal policy will have a significant role to support the return to a full employment economy. Monetary policy will have a smaller role than what would be ideal, given the OCR is at 0.25. Weaker demand is likely to mean low levels of inflation.
- **Net core Crown debt is forecast to rise to over 50%** by the end of the forecast period. The main forecasts include approximately \$35 billion of fiscal support and the CRRF includes spending up to \$50 billion.

Figure 9.1 – Real GDP

\$billion (09/10 prices)

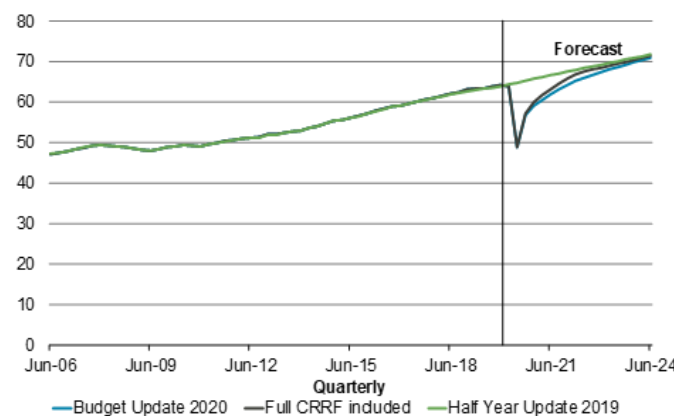


Figure 9.3 – Unemployment Rate

% of labour force

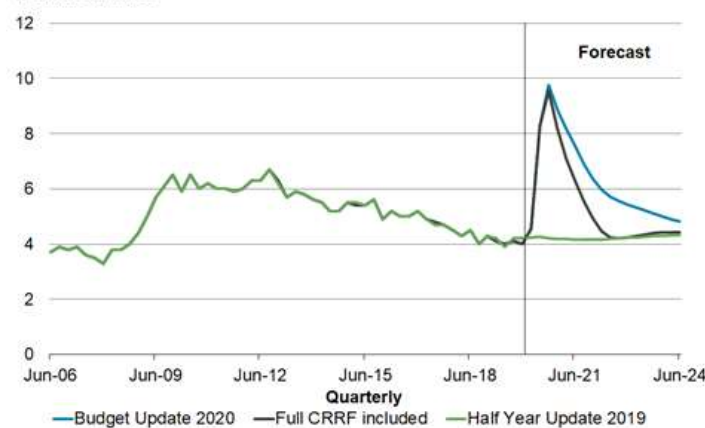


Figure 9.2 – Global growth

Annual average % change

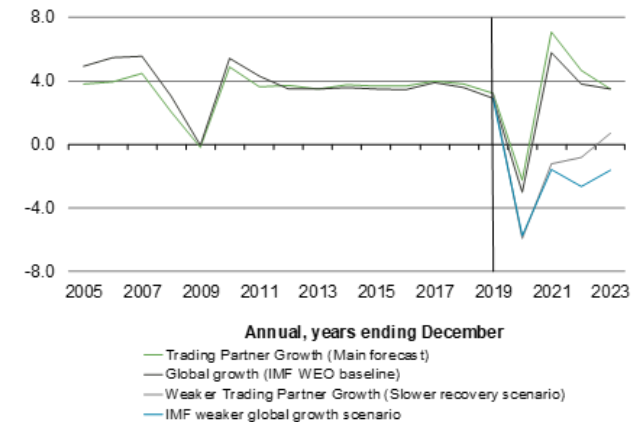
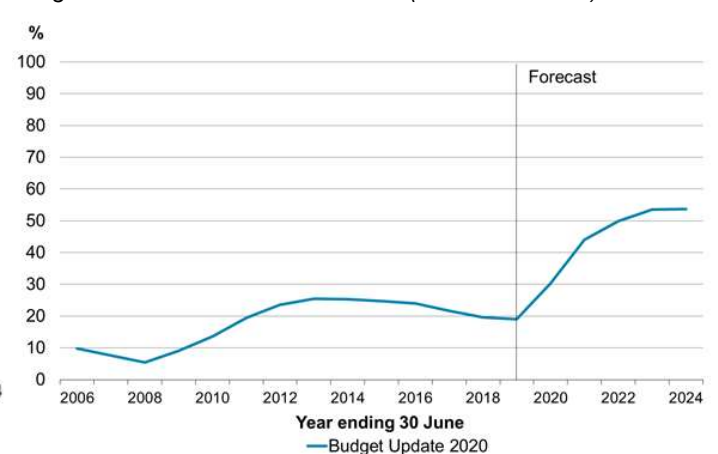


Figure 9.4 – Net Core Crown Debt (% nominal GDP)



Global capital markets – credit rating

What is the impact of the current environment on credit ratings?

- Rating agencies typically apply credit ratings to sovereigns on a relative basis, to ensure the full range of ratings are utilised. New Zealand's relative risk would increase if the impacts of COVID-19 were materially higher relative to peers. While higher debt levels will impact New Zealand's indicative credit rating, the downgrade to the final credit rating may be less severe (or non existent).
- To-date, most credit rating actions globally have been negative. However, in New Zealand's case, both Moody's and S&P have recently reaffirmed the long-term sovereign credit ratings.

How do higher levels of debt feed into the credit rating?

- Government debt as a factor accounts for about a quarter of a sovereign ratings, while institutional strength, economic strength and external debt account for the remainder. All are fed into the quantitative model to get an indicative rating. Subsequently, the rating agency performs a qualitative overlay.
- As rating agencies publish their indicative credit rating methodology, estimating impacts on indicative ratings is possible. However, we are unable to determine, with any degree of certainty any qualitative overlays a rating agency will then apply.
- Rating agencies do not like to move credit ratings regularly and tend to wait for a sustained or significant change in outlook before changing a credit rating. A rating agency would be unlikely to change a credit rating if they saw the deterioration (or improvement) as temporary (i.e. a few years before reverting back to trend). While it is very likely that a significant permanent increase in net debt would lead to a credit rating downgrade, the extent may be dampened by the increase relative to other sovereigns.
- Rating agencies are less likely to be concerned with an increase in New Zealand's net debt levels, than some other countries, due to the low starting point and track record of fiscal sustainability. Recent papers by the rating agencies support this view.

Global capital markets – credit rating cont'd

What is the impact on the indicative rating of debt rising to 50% and 100%?

- An increase of New Zealand's net debt to 50% of GDP is estimated to lower the indicative credit rating by one to three notches (from AA to AA- or A). While an increase in net debt to 100% of GDP is estimated to lower it by three to five notches.
- It is highly unusual for a rating agency to have their final credit rating more than two notches away from the indicative rating.
- Therefore, New Zealand's credit rating would likely be downgraded by at least one notch if debt rose to 50% of GDP, and at least three notches (to a single A, from AA) if net debt rose to 100% of GDP. However, these estimates are based on current methodologies which, over time, are likely to be calibrated to a new 'weaker credit world'.

Three other points are worth noting:

- 1) New Zealand's relatively strong public debt position helps to offset New Zealand's high external debt position, which is one of the worst in the OECD, despite steadily improving (see slide 22). Having a low external debt position (or being a reserve currency), is why other countries can maintain a high credit rating with much higher levels of public debt.
- 2) A downgrade may have impacts for investors in government debt, which could impact market liquidity i.e. if government debt becomes riskier this may mean that investors may have to hold less based on their portfolio risk tolerance.
- 3) The sovereign credit rating underpins the credit rating for New Zealand institutions such as banks, LGFA, etc.. Therefore a sovereign credit downgrade could lead to a downgrade for these issuers.

Key judgement

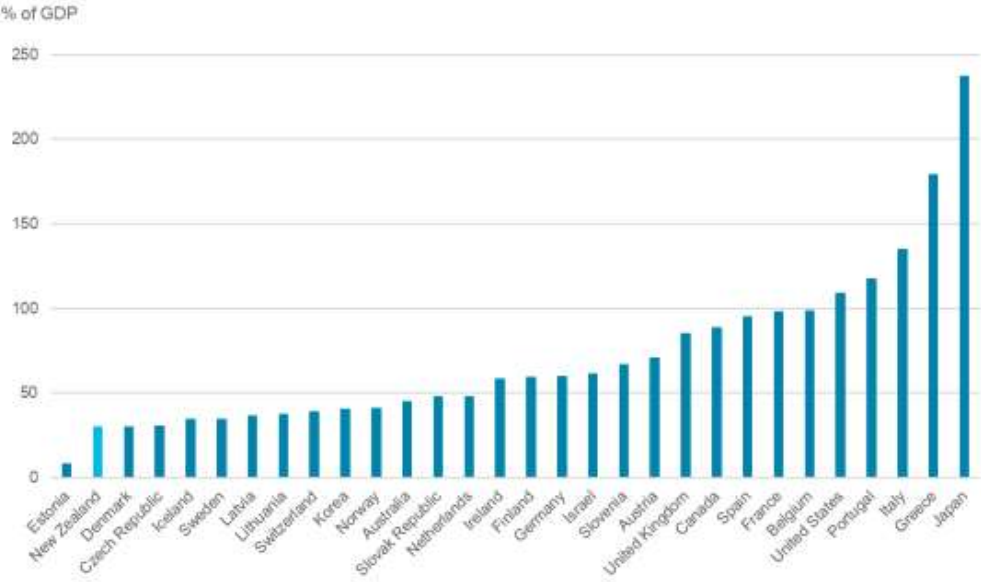
It is difficult to predict with certainty the impact of higher debt levels on New Zealand's credit rating. If net debt rose to 100% of GDP, the indicative rating is estimated to be 3 to 5 notches lower. New Zealand's credit rating would not necessarily be downgraded by 3 to 5 notches; a new 'weaker credit world' may lead to a recalibration of credit rating methodologies, lessening the deterioration in the indicative rating; and a credible plan to return net debt to a downward trajectory is likely to dampen the extent of the downgrade to the final credit rating, relative to the indicative credit rating. However, given the extent of the estimated impact, net debt at 100% is very likely to lead to a credit rating downgrade.

Gross public debt in advanced countries; Finance costs

Gross public debt in advanced countries

- The IMF estimates the average level of gross public debt in advanced economies was 100% of GDP in 2019. The IMF forecasts this average to rise to 120% by 2022, and there are risks it will be greater. On this measure, New Zealand's gross debt was around 30% of GDP in 2019 (around 10% higher than net debt).

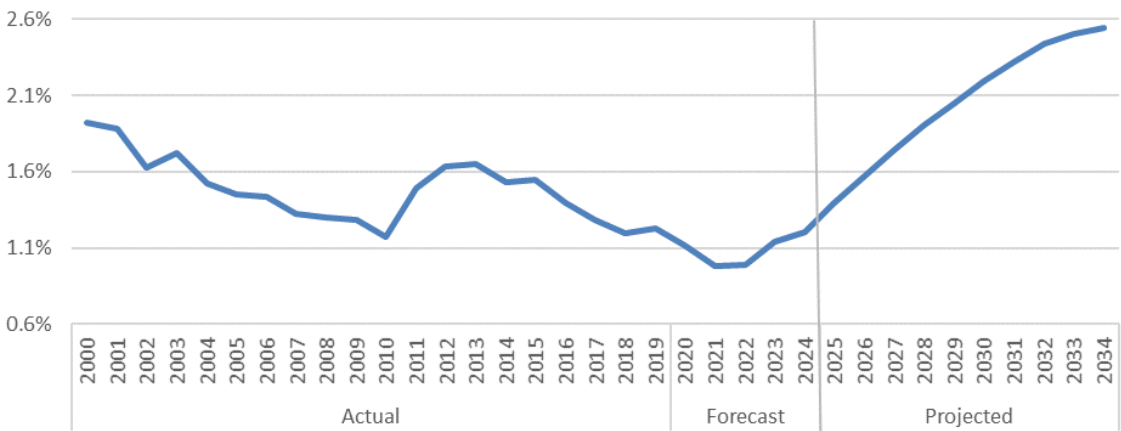
Figure 10: Gross public debt in advanced countries, 2019



Finance costs

- Figure 11 shows that finance costs of 1.11% of GDP are currently around its lowest level since 2000, and are forecast to fall further before a gradual increase over the projection period. However, finance costs could be lower due to the factors discussed in Slide 12.

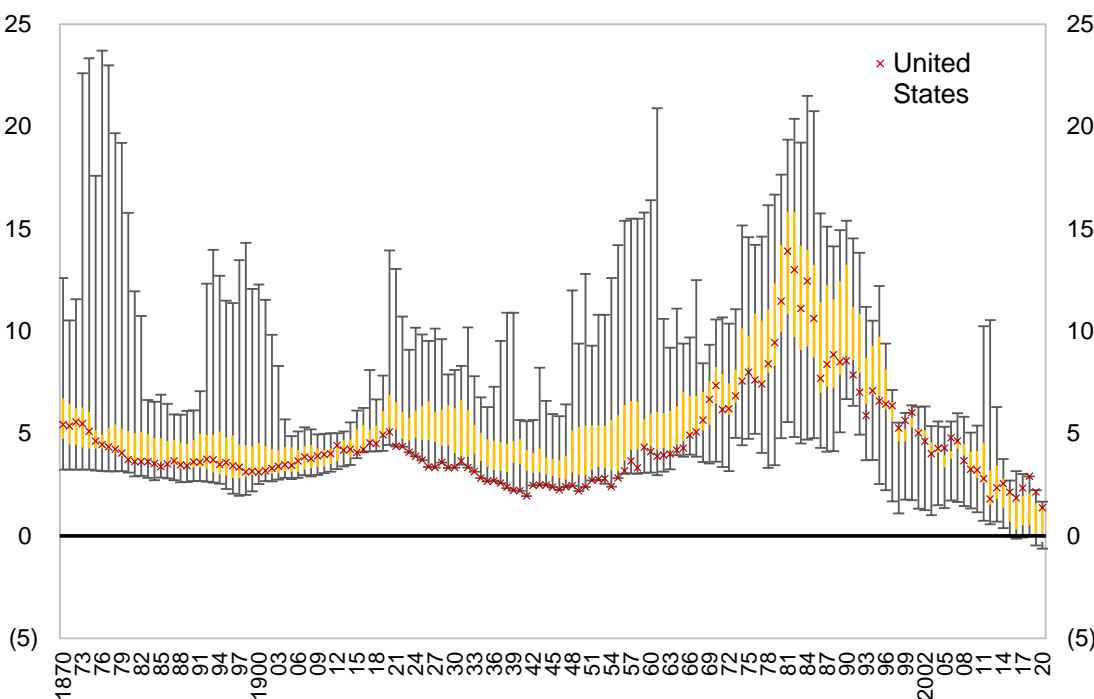
Figure 11: Finance costs from the baseline nominal interest rate, % of GDP



Global interest rates

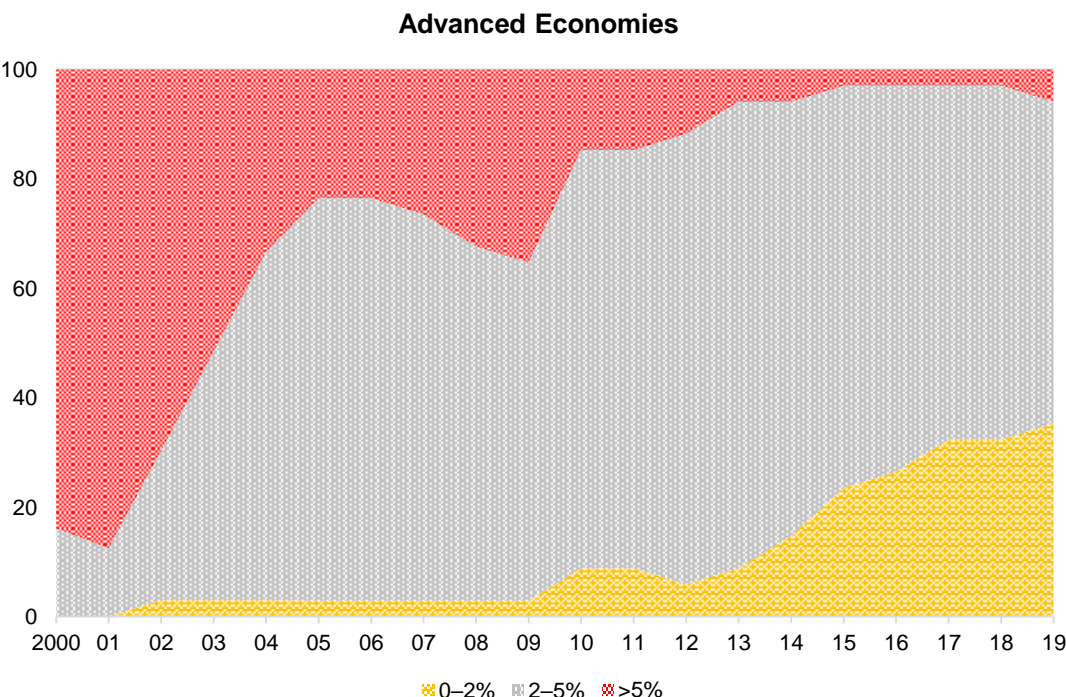
- Globally, government bond yields have been falling in the last two decades.
- The average interest cost is currently below 2 percent in one-third of advanced economies.

Figure 11: Major advanced economies: 10-year government bond yields (percent)



Sources: Jordà-Schularick-Taylor Macroeconomy database (Jordà and others 2019); and IMF Fiscal Monitor, April 2020.
Note: The sample includes Australia, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The figure shows the interquartile range (yellow bars) and the 10th and 90th percentiles (whiskers). Red markers signify the United States. Data for 2020 are through the end of March.

Figure 12: Distribution of nominal effective interest rates, 2000-19 (percent of total countries for each group)



Source: IMF Fiscal Monitor, April 2020.
Note: The effective nominal interest rates is the average interest paid on existing public debt.

Crown assets and liabilities

- The use of a net core Crown debt indicator includes the cash and marketable securities held by the Treasury's Debt Management. These liquid financial assets are therefore already factored into our analysis.
- The Crown has a range of other assets on its balance sheet. Many of these assets are illiquid. This includes the commercial portfolio, including State-owned enterprises, land and property, infrastructure and student loans. While these assets support the Crown's financial strength by providing streams of economic benefits, they are unlikely to be liquidated to meet debt servicing requirements.
- The Crown has a significant portfolio of financial assets in the Crown Financial Institutions. These institutions support a range of public policy objectives and underpin broader Crown financial strength by offsetting other explicit or implicit liabilities. The CFIs with the largest asset portfolios are the NZSF and ACC. **Combined NZSF and ACC hold financial assets of around \$80 billion (26% of GDP).**
 - The CFIs assets are held for a specific policy purpose, not for paying down debt. There would need to be legislative change to access any funds to meet debt servicing costs. There would be opportunity costs and risks of accessing CFI funds for the purpose of meeting debt servicing obligations. Moreover, there would be no gain in Crown net worth from liquidating CFI assets, which would essentially entail a change in balance sheet composition by swapping risky assets (eg, equities) for risk-free assets. Liquidating assets when in debt distress would likely mean asset values would be low (eg, if the timing coincides with an economic crisis) and liquidation could further depress domestic asset values (from price impacts when selling large volumes of domestic securities).
 - **In the case of ACC, there is no likely prospect that its funds could support fiscal headroom.** The assets reflect levies paid into the insurance scheme and it would be undesirable and politically difficult to unwind the ACC scheme. ACC's portfolio holds a high proportion of government bonds (around 60%) for which there is no fiscal benefit from liquidating.
 - NZSF holds primarily liquid financial assets (around 90% of its portfolio). **These assets are held to partially pre-fund future NZ Super expenses, but may also be considered as supporting the Crown's liquidity.** The asset portfolio totals \$39 billion or 13% of GDP. Conceptually, this could be considered in the analysis as providing an additional buffer that could provide cash to service the interest on the Crown's debt for a temporary period, although this would likely only be contemplated as a last resort in an extreme crisis and the value available would be correlated to global economic impacts. This buffer could be useful in a period of market dysfunction to ensure the Crown had time to put in place fiscal consolidation plans, if necessary.
- The Crown also has non-debt liabilities. The most significant is ACC's insurance liability, which is largely matched by ACC's asset portfolio. Some Crown entities have also engaged in borrowing, which presents a risk for the core Crown, but is currently at a relatively limited scale (less than 5% of GDP).

Key judgement:

- The net core Crown debt indicator remains the most relevant indicator of the Crown's debt and liquid financial assets. However, NZSF's financial assets provide additional strength to the Crown balance sheet that supports the Crown's borrowing capacity

Contingent liabilities

- The Governments response to COVID-19 and deterioration in the economic outlook has led to a **significant increase in Contingent Liabilities (CLs) to provide economic support and financial stability**. CLs typically consist of guarantees, indemnities and uncalled capital.
- CLs are possible costs where the final amount of the liability, or when it will eventuate, will not be confirmed until a particular trigger occurs. If CLs are realised, this can lead to an increase in government debt. As a result they need to be factored into the fiscal headroom assessment.
- The maximum possible amount in Vote Finance that the Treasury could be liable for (excluding the Deposit Guarantee scheme, as the likelihood is low) is around \$24.9 billion (7.7% of GDP), up from \$13.8 billion (4.5% of GDP) at February 2020.
- As it is unlikely that the full obligation for each CL will need to be met, expected losses have been modelled (based on a range of assumptions) to provide an indication of how much the CLs could impact debt levels. **The expected cost of Vote Finance contingent liabilities is up to 1% of GDP (\$3.28 billion) over the next 18 months.**
- The three mains CLs that make up this calculation are:
 - 1) Business Finance Guarantee (new): ~\$525 million
 - 2) RBNZ indemnity for LSAP programme (new): ~\$0 - \$2.3 billion
 - 3) IMF uncalled capital (existing): ~\$127m - \$411m
- Over the next couple of weeks, the Treasury is working on developing a broader understanding of CLs that extend beyond Vote Finance.
- In addition, there may be 'implicit' contingent liabilities for a range of risks from natural disasters to banking crises. These are not quantified on the Crown balance sheet. This is why our advice on prudent debt includes a buffer for future shocks and risks. Previous Treasury advice has advised a debt buffer of 20% of GDP for a range of 'once per decade' shocks, such as natural disasters and typical recessions (see slide 28).

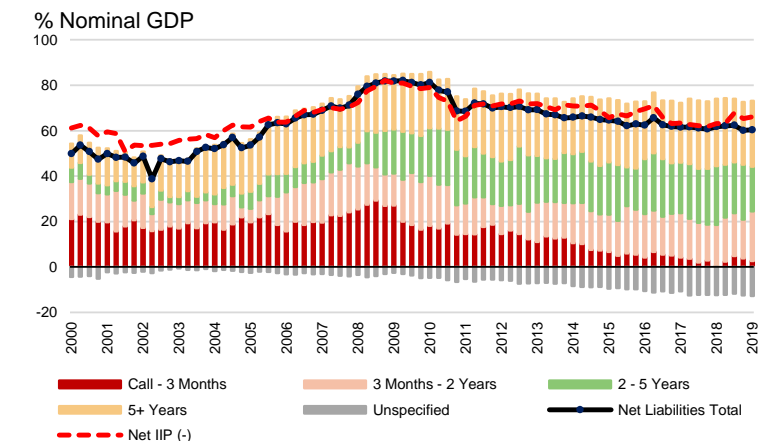
External vulnerabilities

- **New Zealand has a relatively high amount of private and external debt compared to other OECD countries.** In normal times, this is a reason to maintain relatively low levels of public debt. This is because private and external debt creates a vulnerability to shocks that it is prudent for the Crown balance sheet to buffer.
- **COVID-19 is an extreme shock that creates a strong case to use this buffering capacity to the extent necessary. Additionally, an assessment of private and external debt-servicing capacity depends on interest rates and incomes.**
 - Structurally lower interest rates will support private and external debt sustainability; and
 - Fiscal expansion can support the recovery of nominal incomes that are needed to service the debt.
- **Over recent decades, policymakers have shifted their focus towards the structure of external imbalances** – features of financing from abroad may give rise to systemic vulnerabilities in balance sheets. Of particular attention is the presence of currency mismatch and rollover risk. The latter occurs if institutions rely too heavily on short-term debt – this was elevated during the GFC.
- **New Zealand's external debt creates a degree of vulnerability to capital outflows. However, this vulnerability is limited due to the characteristics of New Zealand's external liabilities.**
 - New Zealand's net international liabilities, relative to GDP, are at their lowest level in over thirty years.
 - Almost all of New Zealand's external debt is denominated in domestic currency. New Zealand's floating exchange rate regime and capital account liberalisation allows the cushioning of external shocks, with New Zealand's financial markets being well developed to manage risk.
 - While short-term external debt funding likely poses the greatest vulnerability, most external debt is at longer-term maturities (greater than one year) and the proportion of short-term debt has reduced since the GFC.
- Investment outflows, should global investors reduce their appetite for New Zealand assets, would lower the New Zealand exchange rate, which would provide positive support to domestic demand.
- Capital outflows would be expected to increase risk premia on interest rates. However, the overall effect on domestic interest rates would depend on the response of the Reserve Bank. The Reserve Bank could extend liquidity support to offset tightening financial conditions, as it did recently when bond yields starting rising.

Figure 13: Net international investment position (NIIP), % of GDP



Figure 14: Maturity structure of New Zealand's net non-equity liabilities



Private saving and investment balances

- New Zealand's persistent current account deficit is the counterpart of a low saving rate relative to domestic investment, which implies a dependence on inflows of foreign capital. This has led to a build-up of external debt.
- **The level and risks associated with external debt have reduced since the GFC.** NZ has moved to issuing longer-maturity debt, reducing the vulnerability imposed by this. Significant factors associated with historical sudden stops currently do not apply for NZ: NZ has debt dominated in local currency, a floating exchange rate to cushion external shocks and a strong economic position pre-COVID-19. **Although government borrowing could exacerbate this if the government has to borrow from abroad to fund spending.**
- COVID-19 could help to reduce the imbalances between saving and investment
 - **Private saving rates are expected to increase**, driven by the following factors: *Rising unemployment and job uncertainty leading to greater precautionary savings; health restrictions that prevent consumption at normal levels.*
 - **Investment demand is expected to decrease**, driven by the following factors: *Weaker overall demand; Supply constraints; overall uncertainty; business cash flow pressures.*
 - This will put further downward pressure on interest rates. However, **lower interest rates will support private and external debt sustainability.**
 - This will lead to an increase in demand for safe assets, and put further downward pressure on interest rates. **Lower interest rates will support private and external debt sustainability i.e. external balances will remain sustainable.**
- **Fiscal stimulus is expected to boost the economy, which will increase tax revenues** and further support the public finances. Recessions can leave long-lasting scars on the economy – persistently weak productivity, wages and employment. If fiscal policy dampening the shock and reduces these scars, there will be long-lasting benefits for the public finances.

Net debt buffer

- Fiscal headroom is not the same as the prudent level of debt in normal times. This is because of the need for a fiscal buffer to respond to negative shocks, such as an earthquake, biosecurity incident, recession or a pandemic. A debt buffer enables debt to rise following a shock to support living standards.
- Appropriately the level of debt is increasing as the government responds to COVID-19. However, the upper limit for debt in response to COVID-19 should factor in the fact that the higher debt goes the lower the fiscal buffer there is for the negative shocks that New Zealand is still exposed to i.e. do the benefits of the additional expenditure may outweigh the reduced resilience.
- Last year the Treasury advised a fiscal buffer of around 20ppts of GDP. This was judged to be enough to manage one large shock (a 'once in a decade' shock), or two smaller ones. This was based on Investment Statement modelling of an earthquake, foot & mouth outbreak, international economic downturn, observed impacts of post-war recessions and other modelling.
- Constrained monetary policy also should be factored into the fiscal buffer consideration. As the OCR is 0.25% and AMP is already being deployed, fiscal policy will need to do the heavy lifting in response to a future negative economic shock.
- This analysis does not suggest that in response to COVID-19 net debt should not rise above a certain level in order to maintain a fiscal buffer for future shocks. Instead this analysis suggests that reduced resilience (i.e. the reduced fiscal buffer) should be a factor that needs to be weighed up as debt continues to rise – but at the moment the benefits of the expenditure that closes the output gap likely outweighs the reduced resilience/fiscal buffer.
- s9(2)(g)(i)
- If the interest rate-growth differential was to widen by more than we expect, we think it is realistic to run higher primary surpluses than we have assumed.

Key judgement:

- A buffer of 10-20 percentage points below the upper limit for net debt is desirable, however; the benefits of increased expenditure in response to COVID-19 may outweigh the benefits of a smaller fiscal buffer s9(2)(g)(i)

Costs and risks of higher public debt

Table 1: Costs and risks of higher public debt

Risk	Explanation
<i>Fiscal stimulus less effective</i>	Evidence suggests fiscal stimulus may be increasingly less effective as debt levels increase. This finding is driven by 1) crowding out of private activity as higher debt drives higher interest rates (less of a risk in the current context), and 2) a 'Ricardian equivalence' situation where households increase savings as debt increases, in anticipation of the higher taxes need to pay down debt in future i.e. in anticipation of fiscal consolidation – though evidence for this impact is mixed and can be mitigated through clear communication around future debt levels and tax rates, and by prioritising time-limited initiatives to limit the long-term impact of higher current spending.
<i>Reduced fiscal resilience for future shocks</i>	The room for debt to increase in response to another unforeseen negative shock, such as an earthquake (the risk of which has not decreased) or a biosecurity incident, is lower at a higher debt level. This may reflect political preferences and constraints rather than economic constraints. Not being able to adequately respond to another negative shock could have significant wellbeing implications. As conventional monetary policy is currently constrained, fiscal policy would be the main tool in the response to another unforeseen negative shock which means retaining a fiscal buffer is more important.
<i>Economic costs of higher taxation</i>	Higher levels of debt will lead to higher debt-servicing costs, requiring more tax revenues than otherwise. Tax revenues have economic costs from their distortions. Debt-servicing costs are financed through tax revenue. Debt-servicing costs are projected to increase from 1.1% of GDP (\$3.3 billion) in 2019/20 to 2.54% of GDP (\$14.5 billion) in 2033/34 (see slide 11 for graph of finance costs as a % of GDP).
<i>Credit rating downgrade</i>	It is difficult to predict how credit rating agencies will evaluate higher levels of debt. Credit ratings are relative and all countries will face fiscal costs from COVID-19. Analysis of existing rating methodologies suggests that if net debt rose to 100% of GDP, this would reduce the indicative rating by 3-5 notches. This would not necessarily result in a 4 notch credit rating downgrade as this could be somewhat offset by a credible plan for debt to return to a downward trajectory, however; it is likely debt at this level would result in some type of credit rating downgrade.
<i>Crowding out private sector investment</i>	Higher debt may crowd out private sector investment in the long run. This can happen through two channels: (1) higher interest rates than otherwise increases the 'hurdle rate' for private investment (2) the spending associated with higher levels of debt can create capacity constraint issues, such as in construction, which leaves less resources for private sector projects. However, when there is spare capacity in the economy and low interest rates (like there is currently) an expansionary stance is less likely to lead to crowding out of private sector investment.
<i>Risk of reduced market access</i>	s9(2)(g)(i) For example, since the LSAP programme began, there have been a very small number of instances where the amount the RBNZ has offered to purchase in the market is larger than the total offers to sell. However, there could be a number of reasons that could be causing it (e.g. banks may not hold many of the bonds, or it has an associated interest rate hedge etc.). The RBNZ has been responding by actively managing the bonds tendered in the LSAP programme according to market demand.
<i>Required future fiscal consolidation will have costs</i>	If interest rates are higher than growth rates, larger primary balances are needed to stabilise debt. Primary balances of around 2.5% are feasible (post-COVID 19), however this will be challenging, particularly given the long-term fiscal sustainability challenges that demographic will create through NZ Superannuation and health expenditure.