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Commentary on
*He Tirohanga
Mokopuna 2021*



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Commentary on
He Tirohanga
Mokopuna 2021

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Auditor-General's overview

E ngā mana, e ngā reo, e ngā karangarangatanga maha o te motu, tēnā koutou.

Recent events have reinforced the challenges of anticipating and planning for the future. Yet long-term planning has never been more important.

The Government has spent an unprecedented amount of money responding to Covid-19. Net debt has risen substantially, and further increases are projected.

The scale of infrastructure investment needed to adapt to climate change and enable the country to transition to a net zero carbon economy is significant. Intergenerational cycles of poverty and social inequality continue to challenge policy makers. The population continues to grow, age, and become more diverse.

These are significant challenges, but they also present opportunities.

The Treasury is the government's lead economic and financial adviser. It plays a critical role in assisting the government, Parliament, and the public to understand the challenges and opportunities that lie ahead, the long-term financial and economic implications of those challenges, and the options available for responding to them.

The long-term fiscal statement and the new long-term insights briefing are an important part of this.

The long-term fiscal statement sets out trends and pressures that could affect long-term financial sustainability. The long-term insights briefing is intended to provide information about medium- and long-term trends, risks, and opportunities. It also sets out policy options for responding to these matters.

Along with the investment statement and the well-being report, these documents are part of a suite of reporting obligations that the Treasury has. They are designed to provide independent advice on the government's current and projected financial position, the country's economic outlook, and the well-being of New Zealanders.

Together, these documents should stimulate public discourse and inform government decision-making.

There are difficult choices to make. It is too easy for governments to avoid those choices by focusing on short-term issues instead of those that have profound consequences for generations of New Zealanders to come. Decisions can become more difficult and costly the longer they are delayed.

My Office has commented on these reports because we see them as an integral part of responsible financial management and stewardship of New Zealand's public finance system.

Late last year, the Treasury released *He Tirohanga Mokopuna 2021*. The document combines the Treasury's latest long-term fiscal statement and its first long-term insights briefing into one. In the introduction, the Secretary to the Treasury highlighted that this was an "opportunity to analyse key trends and their potential long-term financial impacts directly alongside a range of policy options available to address them".

I decided to review *He Tirohanga Mokopuna 2021* to look at how well the Treasury had identified long-term insights about these challenges and opportunities and integrated them into a view of the Government's long-term financial position. I wanted to understand whether *He Tirohanga Mokopuna 2021* would be useful to assist the Government to make good financial decisions and increase the quality and depth of public information.

Our commentary on previous long-term fiscal statements has focused on the Treasury's long-term financial model and the reasonableness of the associated projections.

I acknowledge the considerable work that the Treasury has done to prepare a second economic-based projection model that allows a wider analysis of the long-term financial implications of potential natural disasters, economic shocks, and certain challenges arising from climate change.

However, in my view, some of the models' underlying assumptions and the limited number of scenarios that they incorporate still constrain the usefulness of the projections.

The Treasury's decision to combine the long-term fiscal statement and the long-term insights briefing reduced the time it had available to prepare the latter. The Treasury also developed *He Tirohanga Mokopuna 2021* while it, like other public organisations, was still grappling with the pressures arising from Covid-19.

These factors may have affected the ability of the Treasury to fully realise the benefits of combining these two documents. Although it made efforts to consult widely, many of the issues raised in consultation could not be fully explored.

As a result, the future events that the Treasury considered, their financial implications, and the resulting policy choices that it discusses remain narrowly focused and similar to those in previous long-term fiscal statements.

I accept that expanding the scope may not have been practical within the time constraints. However, in future documents, I would like to see the Treasury explore a wider range of issues in more depth.

I encourage the Treasury to consider other improvements for the next long-term fiscal statement. These are:

- providing a more integrated set of scenarios and explore policy choices over different time horizons within the 40-year period to strengthen their relevance;
- exploring the financial impacts of scenarios on the well-being of New Zealanders in more depth to strengthen the connection to the Living Standards Framework and the well-being report due to be published in 2022 and taking a broader approach to financial sustainability;¹ and
- testing the reasonableness of the assumptions underlying the financial projections further.

For future long-term insights briefings, I would like to see the Treasury make the most of the public engagement processes that it is required to carry out. There is also more thinking to be done about how the Treasury's long-term insights briefing should inform and interact with those of other government departments.

In my view, the Treasury's work needs to set out the economic and financial parameters that the long-term insights briefings of other departments should reflect. Done well, these documents could eventually collectively paint a coherent picture of the range of choices that the government has and the futures those choices may lead to.

However, to realise this potential, these documents need to have enough in them to stimulate debate, assist the government in prioritising important short-term decisions that have long-term implications, and support Parliament and the public to hold the government to account. Anything less risks being irrelevant.

I recommend that the Treasury reflect on the form and content of both the long-term fiscal statement and the long-term insights briefing to strengthen their purpose and place in the public finance system.

These documents are important for the long-term future of New Zealand, and they should matter.

1 The Treasury's Living Standards Framework is one attempt to describe many of the things that matter for New Zealanders' well-being, now and into the future. It describes well-being in three levels – individual and collective well-being, institutions and governance, and the wealth of Aotearoa New Zealand. In each level there are various domains that relate to, for example, New Zealander's health, safety, family, and the natural environment.

I thank the Treasury for assisting my team with this review. I also thank Professor Norman Gemmell, Chair in Public Finance at Te Herenga Waka – Victoria University of Wellington, for his expert advice and assistance.

A handwritten signature in black ink, appearing to read 'JMR Ryan', with a stylized flourish at the end.

John Ryan
Controller and Auditor-General

14 March 2022

Our recommendations

We encourage the Treasury to consider the overall purpose and place of the long-term fiscal statement and long-term insights briefing within the public financial management system.

We recommend that the Treasury:

1. review its current process for preparing long-term fiscal statements and long-term insights briefings to identify future improvements, including:
 - whether to continue to integrate the two documents;
 - how it can more effectively incorporate public feedback into their preparation; and
 - how these documents will support and connect to the long-term insights briefings of other departments;
2. continue to develop its modelling approaches and projections:
 - to test their sensitivity and reliability, and ensure that the two models' assumptions and projections align with other elements of the public financial management system; and
 - better reflect the impact of the New Zealand Superannuation Fund assets in the calculation of net debt;
3. consider a wider and more integrated range of scenarios that could take place in different time periods within the 40-year horizon to provide more realism and relevance; and
4. broaden the measurement and analysis of financial sustainability and consider in more depth how it relates to other dimensions of well-being.

1

Introduction

- 1.1 In September 2021 the Treasury published its most recent long-term fiscal statement, *He Tirohanga Mokopuna 2021*.² Under the Public Finance Act 1989, the Treasury is required to prepare a long-term fiscal statement at least once every four years.
- 1.2 Including *He Tirohanga Mokopuna 2021*, the Treasury has published five long-term fiscal statements since 2006.³ We have previously commented on the Treasury's 2013 and 2016 statements.
- 1.3 Under the Public Service Act 2020, the Treasury is also required to prepare a long-term insights briefing at least once every three years.
- 1.4 The Treasury chose to include the information needed for its first long-term insights briefing in *He Tirohanga Mokopuna 2021*. We refer to this integrated document as “the 2021 Statement”.
- 1.5 In introducing the 2021 Statement, the Secretary to the Treasury said that integrating the long-term insights briefing and the long-term fiscal statement provided an “opportunity to analyse key trends and their potential long-term financial impacts directly alongside a range of policy options available to address them”.⁴

What we looked at

- 1.6 In this commentary, we set out to understand how well the Treasury identified and summarised long-term insights about the challenges and opportunities facing the Government, and how well it integrated those insights into an outlook of the Government's long-term financial position. We also considered how well the 2021 Statement assists the Government in making good financial decisions and increases the quality and depth of public information.
- 1.7 We have not sought to provide assurance over the information in the 2021 Statement. Our comments are based on our review of the 2021 Statement, background papers, and other relevant literature. We also talked with Treasury staff involved in preparing the 2021 Statement, obtained expert advice, and used the guidance from the Department of the Prime Minister and Cabinet (the DPMC) on long-term insights briefings.

2 The Treasury (2021), *He Tirohanga Mokopuna 2021*. The Treasury also published background papers alongside *He Tirohanga Mokopuna*, and we refer to these where relevant.

3 See www.treasury.govt.nz.

4 The Treasury (2021), *He Tirohanga Mokopuna 2021*, page 4.

- 1.8 The expert advice was provided by Professor Norman Gemmell, Chair in Public Finance at Te Herenga Waka – Victoria University of Wellington. His advice focused on the financial projections in the 2021 Statement and the underlying models and assumptions.
- 1.9 The Auditor-General does not comment on government policy except when reviewing how well particular policies are implemented (for example, their effectiveness and efficiency). Where we refer to policy choices in this commentary it is only to assess the extent to which they are adequately identified and discussed in *He Tirohanga Mokopuna 2021*. We do not discuss the merits of any policy option.
- 1.10 Various terms can be used when talking about financial projections. For clarity, we use:
- “financial” instead of “fiscal”, except when referring to the Treasury’s long-term fiscal statements or the fiscal strategy, or when quoting other people’s work; and
 - “projection” instead of “forecast” or “prediction”.
- 1.11 In this Part, we:
- consider the importance of developing long-term projections;
 - outline the legislative requirements for the Treasury to prepare a long-term fiscal statement and a long-term insights briefing;
 - discuss the purpose of these documents and their place in the public financial management system;
 - summarise what previous long-term fiscal statements have told us;
 - outline the key messages from the 2021 Statement; and
 - outline what we cover in the rest of this report.

The importance of long-term projections

- 1.12 Boston, Bagnall, and Barry recently observed that “New Zealand faces formidable long-term challenges – economic, social, environmental and technological”. They also said that “[h]ow well these are tackled by current and future governments will have profound implications for the wellbeing of the nation’s citizens”.⁵
- 1.13 Short-, medium-, and long-term projections inform decision-making about how to respond to those challenges and opportunities. It is what “distinguishes reasoned planning from blind action”.⁶

5 Boston, J, Bagnall, D, and Barry, A (2019), *Foresight, insight and oversight: Enhancing long-term governance through better parliamentary scrutiny*, Institute for Governance and Policy Studies, Victoria University of Wellington, page 186.

6 Aaron, H J (2000), “Presidential address – Seeing through the fog: Policymaking with uncertain forecasts”, *Journal of Policy Analysis and Management*, Vol 19, No 2, pages 193-206.

- 1.14 Despite the uncertainty inherent in these types of projections, they can provide meaningful information about the likely scope and scale of possible future scenarios (such as combinations of earthquakes, population ageing, and floods) and the likely social, environmental, and financial implications that may need to be managed.
- 1.15 This allows for better-informed policy choices about what actions to take in response and when that action is required.
- 1.16 Projections are useful for understanding and planning for the long-term resilience and financial sustainability of government. As Gluckman and Bardsley observe, “[b]ad things will happen”, and a systematic and transparent approach is needed to identify and manage these risks.⁷
- 1.17 However, developing projections can be challenging at a whole-of-government level, particularly with the current difficulties arising from Covid-19. Our comments should be read with this in mind.

The legislative requirements for long-term fiscal statements and insights briefings

- 1.18 The Public Finance Act 1989 sets out the requirements for long-term fiscal statements. The Public Service Act 2020 sets out the requirements for the long-term insights briefing. We summarise the requirements for each of these documents below.

The long-term fiscal statement

- 1.19 One of the main objectives of the Public Finance Act 1989 is to help improve public sector performance by promoting “responsible fiscal management” through increased transparency and greater accountability.⁸
- 1.20 Part 2 of the Public Finance Act 1989 encourages responsible fiscal management by requiring the government to adhere to certain financial management principles. It also requires regular and periodic financial reporting from the Treasury and the Minister of Finance.⁹
- 1.21 This reporting allows current priorities and spending intentions to be compared with what has happened in the past and considered against what may happen in the future. It helps the government to answer questions such as what is prudent,

7 Gluckman, P and Bardsley, A (2021), *Uncertain but inevitable: The expert-policy-political nexus and high-impact risks*, Kōi Tū: The Centre for Informed Futures, The University of Auckland, pages 3 and 21.

8 Part 1A(2)(c) of the Public Finance Act 1989. The Act also covers lines of accountability, parliamentary scrutiny, and reporting obligations.

9 The Treasury (2019), *A guide to the Public Finance Act*, page 33.

what is stable, what is predictable, and what is sustainable.¹⁰ These are all important for responsible financial management.

- 1.22 Section 26N of the Public Finance Act 1989 requires the Treasury to prepare a statement on the long-term fiscal position of the government as part of this periodic reporting.
- 1.23 The Secretary to the Treasury is responsible for preparing these statements at least once every four years. The Public Finance Act 1989 does not specify the statement's content or how it should be prepared. It requires only:
- a statement of responsibility asserting that the Treasury has used its best professional judgements about the risks and the outlook; and
 - disclosure of significant assumptions underlying any projections.
- 1.24 The Treasury's *Guide to the Public Finance Act* says that the long-term fiscal statement:
- ...is intended to lead to more comprehensive reporting of the issues that could adversely impact on fiscal sustainability and in this way to assist the Government in making decisions that are consistent with the principles of responsible fiscal management.*¹¹
- 1.25 According to the Treasury, the purpose of the long-term fiscal statement is to:
- ... increase the quality and depth of public information and understanding about the long-term consequences of policy decisions and to assist governments in making fiscally-sound decisions.*¹²

The long-term insights briefing

- 1.26 The 2021 Statement is also the first long-term insights briefing to be prepared under the Public Service Act 2020.
- 1.27 Stewardship is one of the main principles of the Public Service Act 2020. The public service is expected to look ahead and provide advice to the government on future challenges and opportunities. Preparing long-term insights briefings is an important part of the public service's stewardship role.
- 1.28 According to the DPMC, the value of the briefings is "the opportunity to identify and explore the issues that matter for the future wellbeing of the people of New Zealand".¹³

¹⁰ In terms of responsible financial management, stability can refer to the stability of tax rates.

¹¹ The Treasury (2019), *A guide to the Public Finance Act*, page 42.

¹² See "New Zealand's long-term fiscal position" at treasury.govt.nz.

¹³ See "Long-term insights briefings" at dPMC.govt.nz.

- 1.29 Clauses 8 and 9 of Schedule 6 of the Public Service Act 2020 require departmental chief executives to publish a long-term insights briefing at least once every three years.
- 1.30 There are three main requirements for long-term insights briefings. In summary, these are:
- They must be independent of ministers.
 - They must make available in the public domain:
 - information about medium- and long-term trends, risks, and opportunities that affect or may affect New Zealand and New Zealand society; and
 - impartial information and analysis about those matters, including policy options for responding to them.
 - Each chief executive must consult with the public on the subject matter to be considered and the draft briefing. They must then take that feedback into account when finalising the briefing.
- 1.31 Although the Public Service Act 2020 refers to the medium and long term, it does not define these in years.

The purpose and place of *He Tirohanga Mokopuna 2021*

- 1.32 The Public Finance Act 1989 provides a set of principles, accountability requirements, and mechanisms designed to improve transparency and accountability and place greater focus on the longer term.
- 1.33 In a background paper to the 2013 long-term fiscal statement, the Treasury discussed the reasons for the fiscal responsibility provisions in the Public Finance Act 1989. The paper noted that the main motivation for the focus on responsible financial management was:
- ... a response to shocks (such as Britain going into the Common Market and the 1970s' oil price shocks), unaffordable policies (such as Think Big, or supplementary minimum prices for sheep meat) and the inevitable consequence: huge external indebtedness and lower living standards. These fiscal provisions reflected a resolve never to be so exposed and vulnerable again.¹⁴*
- 1.34 Without an effective longer-term lens, the strategic priorities and objectives of the government could become short-term and narrowly focused.
- 1.35 As Boston, Bagnall, and Barry note, there are:
- ... incentives in democratic systems for policy-makers to prioritise short-term interests over those of future generations ... governments need to understand*

¹⁴ The Treasury (2013), *Long-term fiscal projections: Reassessing assumptions, testing new perspectives*, Wellington, page 32.

*the long-term challenges and risks they face, ascertain how best to respond, and implement the required policies.*¹⁵

1.36 The purpose of the long-term fiscal statement and of the long-term insights briefing are closely aligned. Together with other reports such as the investment statement and the well-being report, they form part of the suite of stewardship reports designed to improve the quality and depth of public information, and inform the government’s strategic priorities and fiscal strategy.

1.37 We discuss these two ambitions below.

Informing the government’s strategic decision-making

1.38 The main ways for governments to give effect to the resolve to “never to be so exposed and vulnerable again” are through policies, strategies and the decisions they make as part of annual Budget processes.

1.39 According to the Treasury, the Budget process can be divided into five distinct phases. The first two are the strategic phase and the decision phase.¹⁶

1.40 The strategic phase allows the government to consider and balance many competing priorities, all with a finite set of resources in mind. The results of this phase are reflected in the government’s Budget Policy Statement.

1.41 The decision phase allows the Treasury to assess the priorities and initiatives that the government puts forward and also provide recommendations on them.¹⁷

1.42 The result of these two phases is a set of broad strategic priorities, policy goals, long-term well-being objectives, and financial projections that describe the government’s financial plans over the short, medium, and long term. These are set out annually in the Budget Policy Statement and the Budget.

1.43 These phases rely on bringing together sources of information about:

- the government’s progress and past performance;
- current spending intentions and priorities; and
- what issues and priorities could be important in the future.

15 Boston, J, Bagnall, D, and Barry, A (2019), *Foresight, insight and oversight: Enhancing long-term governance through better parliamentary scrutiny*, Institute for Governance and Policy Studies, Victoria University of Wellington, pages 34 and 36.

16 See “Guide to the Budget process” at treasury.govt.nz.

17 The third, fourth, and fifth phases of the Budget process include preparing the documents needed for the Budget in May, obtaining Parliamentary support for the Budget, and any subsequent amendments to the Budget, where additional appropriations are needed during the year.

- 1.44 Sources of information that relate to government progress and past performance include:
- the Public Service Commission’s three-yearly report on the state of the public service;
 - the annual audited financial statements of the Government;
 - the Treasury’s four-yearly investment statement; and
 - the Treasury’s four-yearly well-being report.

- 1.45 Sources of information that relate to current spending intentions and priorities include:
- Parliamentary scrutiny processes (such as the annual Budget authorisation process);
 - the Treasury’s twice-yearly economic and fiscal updates (which provide a projection for the next five years); and
 - wider government strategies and policies and current issues (such as Covid-19).

- 1.46 Sources of information that relate to what the future may hold include:¹⁸
- departments’ three-yearly long-term insights briefings; and
 - the Treasury’s four-yearly long-term fiscal statement.

- 1.47 The choices made during the Budget process about public spending, tax, and borrowing, and the balance between them, will affect New Zealand’s economic, social, and environmental outcomes and the government’s long-term financial resilience and sustainability.

Improving the quality and depth of public information and engagement

- 1.48 The long-term fiscal statement and the long-term insights briefing are also intended to improve the quality and depth of public information and understanding about the government’s long-term opportunities, challenges, and policy choices.
- 1.49 The Treasury has wide discretion about the content and form of the long-term fiscal statement. However, the DPMC provides comprehensive guidance about the focus and the preparation of long-term insights briefings.

¹⁸ There is also other public reporting about future opportunities and challenges in the public sector. For example, the DPMC maintains a register of National Security Intelligence Priorities.

- 1.50 Long-term insights briefings are intended to be public facing, consultative, and focused on the matters that are important for New Zealanders' intergenerational well-being. An important requirement for preparing long-term insights briefings is the public's opportunity to contribute to which topics each briefing will cover and to the draft briefing after it has been prepared.
- 1.51 The Treasury told us that it saw the long-term insights briefing and associated consultation as potentially useful for informing long-term analysis of the government's financial position.
- 1.52 We agree. We expected that integrating the two reports could provide more relevant and accessible information to better inform the Government, Parliament, and the public about the long-term issues that matter to New Zealanders.

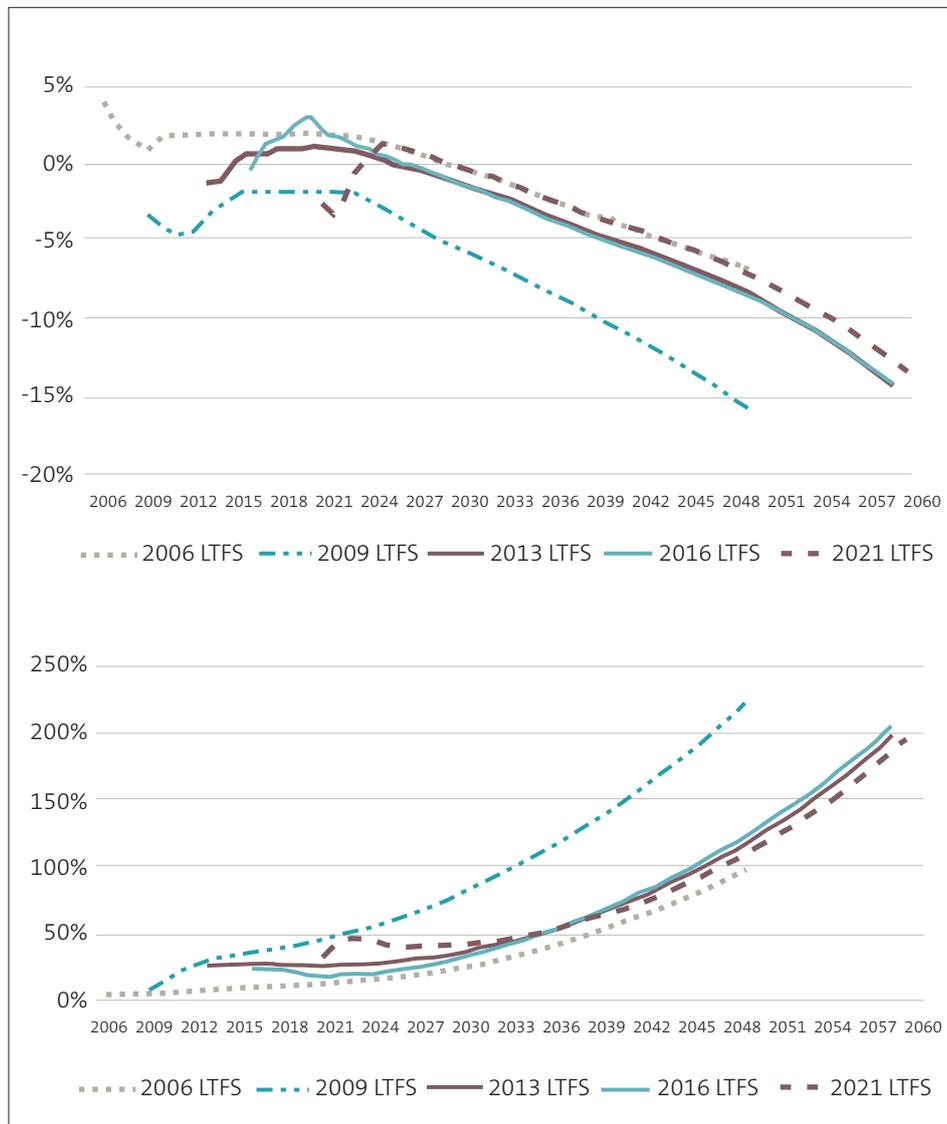
Insights from previous long-term fiscal statements

- 1.53 This is the fifth long-term fiscal statement that the Treasury has published since 2006. It prepared all of them in different economic conditions – including times of challenge and recovery (for example, after the global financial crisis and the Canterbury earthquakes).
- 1.54 All four statements raised “red flags” about the effects that an ageing population could have on the government's long-term levels of net debt. The 2016 long-term fiscal statement also considered the relationship between long-term public finances and intergenerational well-being, noting that “sustainable government finances are a precondition to improving long-term living standards”.¹⁹
- 1.55 Figure 1 shows the projections of the core Crown's operating balance and core Crown net debt from each of the previous four statements.²⁰ We have also added the 2021 projections for comparison purposes. Net debt shown here excludes the New Zealand Superannuation Fund assets. If they were included, the projections of net debt would be lower.

19 The Treasury (2016), *He Tirohanga Moko-puna – 2016 Statement on the Long-Term Fiscal Position*, page 6.

20 The operating balance is the difference between total revenue and total expenses – plus gains or losses in the market values of government assets and liabilities.

Figure 1
The core Crown operating balance and projections of net debt from the Treasury's long-term fiscal statements



Source: The Treasury's long-term fiscal models for 2006, 2009, 2013, 2016, and 2021.

1.56 The past projections show that, regardless of the financial position that the government starts from, an unsustainable level of operating deficit and net debt will occur over each statement's 40-year projection. For each long-term fiscal statement, this is because of the effects of an ageing population on the costs of superannuation and healthcare.

- 1.57 However, this unsustainable situation only arises if future governments:
- do nothing about these increasing costs, other government spending, the level of tax revenue, or the operating deficits arising from the above; and
 - do nothing but borrow to fund those operating deficits (and the increasing interest costs).
- 1.58 The assumptions underlying these projections point to various financial options to address the problem of rising debt. Previous long-term fiscal statements presented most of these options. For example, governments could:
- lower the cost of superannuation by increasing the age of entitlement;
 - reduce spending on other activities;
 - increase the tax rate; or
 - fund a greater share of spending on superannuation through the New Zealand Superannuation Fund.
- 1.59 From a financial perspective, these options are clear. However, more analysis is needed to fully understand the effect of these options on wider aspects of well-being.
- 1.60 A conference held as part of the public consultation for the 2013 long-term fiscal statement discussed how the long-term fiscal statement process could support policy reform. In his opening address to the conference, Professor Buckle observed that, although there is clear evidence of a long-term demographic challenge, achieving enduring policy reform is difficult. One of his proposals was to use the Treasury's Living Standards Framework, with its (then) four well-being capitals, as criteria to evaluate policy options against.²¹
- 1.61 The 2016 long-term fiscal statement made some attempt to do this. However, in comparison, the 2021 Statement provides relatively little analysis.

The main messages in *He Tirohanga Mokopuna 2021*

- 1.62 The Treasury published the last long-term fiscal statement in 2016. It planned to publish the next statement in March 2020 and had already completed a significant amount of work at the end of 2019.
- 1.63 However, the emergence of Covid-19, and the likelihood that it would have a significant economic and financial impact, meant that the Treasury sought and received an extension to the required four-year time frame.

21 Buckle, B (2012), "Policy development and the role of the Long-Term Fiscal External Panel: Opening remarks to the Affording Our Future Conference", 10-11 December 2012, Victoria University of Wellington, pages 5 and 6.

- 1.64 This extension gave the Treasury until the end of September 2021 to publish the 2021 Statement. It also provided an opportunity to integrate the processes and information needed for the Treasury’s first long-term insights briefing.
- 1.65 Bringing together and commenting on the implications of long-term projections that summarise and combine the many different activities and policy choices of governments is a challenge. However, what these projections tell us about the future profile and capacity of the Government’s financial resources is fundamental to responsible public financial management.
- 1.66 Central to the 2021 Statement is an understanding of the Government’s financial sustainability. This is defined in *He Tirohanga Mokopuna 2021* as:
*... the ability for the government to continue to fund the services and transfers it provides on an ongoing basis into the future without requiring major adjustments in expenditure or revenue settings.*²²
- 1.67 Governments should not incur unsustainable levels of debt. This is because doing so:
- “... would impose costs on the wellbeing of future generations that could reduce the quality of the public services they receive, or increase the taxes they pay”;²³ and
 - not allow shocks and natural disasters to be managed “as effectively as possible, imposing additional costs on them at what would already be a challenging time”.²⁴
- 1.68 The following are the 2021 Statement’s main messages:
- The financial implications of the Government’s response to Covid-19 are largely temporary and will not have a material impact on the Government’s long-term financial position.²⁵
 - As a result of population ageing (and the effect that this has on health and superannuation spending), the government’s net debt will become unsustainable over the long term if nothing is done. As shown in Figure 2, the final net debt projection in 2061 is 196.9% of GDP. Alternatively, if net debt is held constant at about 48% of GDP, core Crown revenue (mainly taxes) will have to rise from 29.1% of GDP in 2021 to 38.9% of GDP by 2061 (see Figure 3).²⁶

22 The Treasury (2021), *He Tirohanga Mokopuna 2021*, page 44.

23 The Treasury (2021), *He Tirohanga Mokopuna 2021*, page 44.

24 The Treasury (2021), *He Tirohanga Mokopuna 2021*, page 44.

25 The Treasury (2021), *He Tirohanga Mokopuna 2021*, pages 5 and 9.

26 The Treasury (2021), *He Tirohanga Mokopuna 2021*, pages 19 and 21.

- Other shocks, such as recessions, earthquakes, and further pandemics, are also likely in the future. The Government's financial position is relatively resilient to these shocks.²⁷
- Climate change will have significant economic and financial impacts. However, the scale of those impacts is uncertain, partly because some policy decisions are still to be made.²⁸
- The Government has choices about the level of debt to target in the future – policy options considered to achieve those targets include managing healthcare spending, increasing taxes, and/or responding to demographic change.²⁹
- These policy options could provide a more sustainable level of debt. However, although improving financial sustainability helps maintain and improve intergenerational well-being, it may be detrimental to population groups who already face challenges accessing health services or an adequate income in retirement.³⁰

Structure of this commentary

- 1.69 In Part 2, we consider the usefulness of the long-term insights briefing and the benefits of integrating it into the 2021 Statement.
- 1.70 In Part 3, we discuss the benefits and usefulness of the long-term financial projections and what they tell us.
- 1.71 In Part 4, we summarise our findings and consider the overall value of the 2021 Statement in informing the strategic objectives and decisions of the Government, and in improving the quality and depth of public information and engagement

27 The Treasury (2021), *He Tirohanga Mokopuna 2021*, pages 30 and 34.

28 The Treasury (2021), *He Tirohanga Mokopuna 2021*, page 5.

29 The Treasury (2021), *He Tirohanga Mokopuna 2021*, page 2 (Contents).

30 The Treasury (2021), *He Tirohanga Mokopuna 2021*, pages 7, 13, 35, 43, 54, and 59.

2

The value of the long-term insights briefing

- 2.1 In this Part, we consider how well the Treasury prepared the long-term insights briefing part of the 2021 Statement. We look at:
- the DPMC’s guidance on long-term insights briefings and their preparation;
 - the Treasury’s rationale for combining the 2021 Briefing into the 2021 Statement;
 - the Treasury’s processes for preparing the 2021 Briefing; and
 - what insights and added value the Treasury has generated from this approach.

Guidance on long-term insights briefings and their preparation

- 2.2 The DPMC has prepared comprehensive guidance about what is needed to prepare a long-term insights briefing. This guidance supports chief executives and their departments in understanding good practice.
- 2.3 The guidance sets out practical actions that can be taken to develop and deliver a high-quality long-term insights briefing. Government departments are expected to tailor their approaches to meet their specific requirements and context. The guidance is not mandatory.
- 2.4 To help departments plan, the DPMC’s guidance includes an indicative time frame of two years to prepare and publish a long-term insights briefing. The guidance notes that the exact time frame for each step will vary depending on the department’s approach. Legislation requires the first round of long-term insights briefings to be published by August 2023.
- 2.5 According to the DPMC’s guidance:
- ... the value of the Briefings is the opportunity to identify and explore the issues that matter for the future wellbeing of the people of New Zealand.³¹*
- 2.6 The long-term insights briefings also provide an opportunity for Māori, business, academia, not-for-profit organisations, and the wider public to join in a debate on long-term issues and contribute to decision-making.
- 2.7 The guidance sets out the principles underpinning long-term insights briefings. These include that the briefings should promote public debate, contribute to public value, and respect Māori and te Tiriti o Waitangi interests. They should also be:
- open and transparent;
 - independent and impartial; and
 - achievable and sustainable.
- 2.8 The principle of independence comes from clause 8(1) of Schedule 6 of the Public Service Act 2020. According to the DPMC’s guidance, this means that neither

the subject matter nor the contents of the long-term insights briefing should be influenced by the relevant Minister.

- 2.9 The DPMC's guidance sets out the following eight-step process to support the preparation of long-term insights briefings:
1. gather intelligence about the future;
 2. consider the subject matter and potential for joint briefings;
 3. carry out public consultation on the proposed subject matter;
 4. develop the content of the long-term insights briefing;
 5. carry out public consultation on the draft long-term insights briefing;
 6. provide a final long-term insights briefing to the appropriate Minister(s);
 7. present the briefing to the relevant select committee for examination; and
 8. review what worked well and what could be improved.
- 2.10 The DPMC's guidance was not finalised when the Treasury started to prepare the 2021 Statement, but it was available in draft. The Treasury told us that, as a result, it worked with the DPMC to align its work with the DPMC's general expectations for the process.

The rationale for an integrated approach to *He Tirohanga Moko* 2021

- 2.11 The DPMC's guidance allows for the long-term insights briefing to be integrated into another document an organisation may be required to produce.³²
- 2.12 The Treasury told us that it made a considered and deliberate decision to combine the long-term fiscal statement and long-term insights briefing this year. It had three main reasons for this:
- The requirements for the long-term insights briefing are similar to those of the long-term fiscal statement.
 - The insights obtained from long-term insights briefings and the associated consultation could usefully inform long-term analysis of the Government's financial position.
 - The Treasury had resourcing constraints and competing priorities, which arose in part from Covid-19.
- 2.13 In our view, there are benefits to integrating the 2021 Briefing into the 2021 Statement. These include having more:
- public understanding and engagement (through the 2021 Briefing's consultation processes) about what is important for the Government's long-term financial sustainability;

32 The Policy Project (2021), *Long-term Insights Briefing: High-level overview*, dpmc.govt.nz.

- wide-ranging analysis of the long-term trends, risks, and opportunities that matter to the well-being of New Zealanders and the financial consequences that might arise;
- thought and discussion about the different policy options that may be available for responding to those trends, risks, and opportunities;
- relevant and comprehensive information for other public organisations thinking about their longer-term stewardship responsibilities; and
- useful information to support and inform the Government’s strategic decision-making.

2.14 There are also potential drawbacks to integrating the two documents.

2.15 One of these is the possible tension between the more prescribed requirements and guidance of the long-term insights briefing and the broad discretion the Treasury has over the form and content of the long-term fiscal statement. For example, the Treasury is required to publicly consult on the proposed content of the long-term insights briefing as well as the draft briefing once it has been prepared. The issues identified through this consultation could conflict with the long-term financial or economic issues that the Treasury considers important for the long-term fiscal statement.

The Treasury’s process for preparing the 2021 long-term insights briefing

2.16 This is the first long-term insights briefing to be prepared under the Public Service Act 2020. We have used the eight steps that the DPMC’s guidance provides (see paragraph 2.9) to review how well the Treasury prepared the 2021 Briefing.

2.17 The Treasury’s decision to integrate the long-term insights briefing with the long-term fiscal statement and publish the 2021 Statement before the end of September 2021 meant that it had only about nine months for the first six steps of the eight-step process. The DPMC’s indicative time frame allocates 16 months for these six steps.

Step 1 – Gathering intelligence

2.18 The DPMC’s guidance for Step 1 recommends a wide exploration of information and assumptions to ensure that departments consider issues beyond the immediate when selecting the subject matter for the long-term insights briefing.

2.19 In December 2020, the Treasury announced its intention to incorporate the requirements of the 2021 Briefing into the 2021 Statement. The Treasury considered that it could draw on the work it had done in preparation for the 2020

long-term fiscal statement (which was postponed because of Covid-19), as well as additional policy work it had done since then.

2.20 This work included interviews that the Treasury carried out with five Māori and Pasifika leaders, researchers, and experts. These interviews discussed such topics as climate change, intergenerational well-being, issues and opportunities for Pacific communities, and current and future population dynamics.³³

2.21 As a result, the Treasury did not believe that it needed a separate and wider exploration process for selecting the 2021 Briefing's subject matter.

Step 2 – Considering potential subject matter and the potential for joint briefings

2.22 The DPMC's guidance provides criteria to assist public organisations in selecting the subject matter for a briefing. These include:

- The subject matter had not received adequate consideration in the past.
- The subject matter would be likely to have significant implications for the long-term well-being of people in New Zealand.
- The subject matter can be sufficiently distanced from current government policy when consulting the public.
- The scope of the subject matter is manageable.
- The subject matter is "particularly relevant" to the department's functions.

2.23 Because of the short time frame, the Treasury decided to focus on the matters that it had considered as part of the postponed 2020 long-term fiscal statement. The 2021 Statement also considered the implications of Covid-19 and included work that had not featured in previous statements, particularly about climate change.

2.24 Given the short time frame the Treasury decided not to prepare a joint briefing with another organisation. However, it acknowledged that there could be opportunities to do so in the future. The Treasury did work closely with the Ministry for the Environment on the climate change content.

Step 3 – Consulting the public on the proposed subject matter

2.25 The DPMC guidance recommends that, when consulting on the proposed subject matter, chief executives consider whether to focus on specific population groups or stakeholder groups.

2.26 This includes considering whether engagement with any groups or the public should extend beyond the minimum consultation requirements of the Public Service Act 2020 or at more points in the process than the Act requires.

³³ The Treasury interviews are available at treasury.govt.nz.

- 2.27 The Treasury launched its public consultation on the scope of the draft 2021 Statement through a media statement on the Treasury website, through social media, and the Public Service Commission’s website. The Treasury published its proposed topics for consultation in March 2021 and invited submissions over a four-week period, closing on 26 March 2021.
- 2.28 The proposed topics were:
- New Zealand’s current financial position and the ongoing effects of Covid-19;
 - why a strong financial position supports living standards;
 - New Zealand’s long-term financial position;
 - demographic trends and the economic impacts of an ageing population;
 - the impact of unanticipated shocks on the financial position; and
 - other factors that will affect the financial position (such as climate change).
- 2.29 The Treasury received five written submissions and carried out eight interviews with subject experts and commentators, including think-tanks, academics, economists, government officials, and business leaders.
- 2.30 Not all submitters commented directly on the suitability of the topics, but those who did considered that they were appropriate areas to focus on. There was considerable feedback on the topics and possible directions that the Government could take. This feedback included the need to consider the overall purpose of the tax system, and what an appropriate role for the government is relative to individuals. Submitters also commented on housing, productivity, and global uncertainty.
- 2.31 In the Treasury’s view, some of the feedback was outside of the scope of what it could consider.
- 2.32 The Treasury told us that it decided to focus on superannuation and health spending because these are important areas that policy had not yet adequately addressed. The Treasury also expected that these would remain an important source of cost pressures in the future.

Step 4 – Developing the content of the long-term insights briefing

- 2.33 The DPMC’s guidance recommends that departments thoroughly explore the subject matter selected for the long-term insights briefing. It notes that different groups are likely to have different world-views and perspectives on the strengths and weaknesses of different policy options.
- 2.34 The DPMC’s guidance also says that long-term insights briefings offer an opportunity to reveal potential inequities or disparity of outcomes. It recommends

that departments identify which policy options are more likely to improve or worsen outcomes for different groups over time.

- 2.35 In developing the 2021 Statement, the Treasury identified inequities for Māori, Pasifika, women, and young people. It considered where policy options may negatively affect some groups. For example, it noted that raising the age of eligibility for New Zealand Superannuation was likely to negatively affect Māori and Pasifika, whose life expectancy is lower than other population groups.
- 2.36 The 2021 Statement also refers to Māori concepts such as manaakitanga, kotahitanga, and tino rangatiratanga in the context of describing existing systems and their impact on Māori.³⁴ However, it is not clear how the Treasury used these concepts in the 2021 Statement to analyse the policy options presented.
- 2.37 As part of its work on the postponed 2020 long-term fiscal statement, the Treasury conducted a series of “Conversations about our future” with Māori and Pasifika leaders and experts. The Treasury published articles based on those interviews on its website. In our view, these interviews provide insights that the Treasury could have developed further in *He Tirohanga Mokopuna 2021*. For example, interviewees spoke about housing challenges, infrastructure concerns, and the implications of te Tiriti o Waitangi settlements over the next 40 years.

Step 5 – Consulting the public on the draft 2021 long-term insights briefing

- 2.38 The DPMC’s guidance recommends that departments design and carry out public consultation in a way that is “inclusive of Māori, population groups and other stakeholder groups who may be potentially affected or have an interest in the subject matter”.
- 2.39 The Treasury published a draft of *He Tirohanga Mokopuna* on its website in early July 2021 and invited submissions over a four-week period. To support the consultation process, the Treasury also established an external reference group comprising five independent experts with different backgrounds and perspectives.
- 2.40 The Treasury told us that the short time frame limited the consultation process for the draft 2021 Briefing. However, the Treasury took advice from the DPMC on its process and considered that it met the general expectations of consulting with a range of stakeholders.
- 2.41 The Treasury told us that it consulted its existing networks and stakeholders, particularly Māori and Pasifika representatives, on the draft statement’s content.

³⁴ Simply put, these three concepts could be understood as caring for people, togetherness, and self-determination. However, they may also be defined differently in different contexts.

- 2.42 During this phase, the Treasury also engaged with Business New Zealand, economists, the Chief Science Advisor, and the Retirement Commissioner. The Treasury also spoke with others it identified as having an interest in, or unique perspective on, the analysis and perspectives outlined, including experts in superannuation, climate change, and te ao Māori.
- 2.43 We were told that the DPMC encouraged the Treasury to engage with young people. The Treasury worked with third-year university students to seek their perspective on relevant policy issues. The Treasury did not engage specifically with Māori youth, but it told us that it is looking at options to do so over time.
- 2.44 The Treasury received 21 submissions on the draft. The Treasury summarised the feedback and published it online. The Treasury told us that it found the consultation process helpful and that it received a rich and diverse range of feedback that it was able to use to enhance the quality and depth of the draft 2021 Statement. We did see some additional discussion about wealth distribution, and inequality in the 2021 Statement that was not in the draft consultation version.
- 2.45 The Treasury said that it used the feedback to highlight some of the uncertainties and shocks the country could face. It also said that the feedback helped frame its internal thinking, deepened its analysis in some areas, and led to it presenting information in a more accessible format.
- 2.46 The Treasury also said that it would not have achieved this if it had not integrated the 2021 Briefing into the 2021 Statement.
- 2.47 As with its consultation in Step 3, the Treasury considered some of the feedback out of the scope of what it expected or what it could reasonably achieve within the time frame.
- 2.48 We expected the Treasury to have considered the feedback that was within scope in more depth. When we compared the consultation draft with the published 2021 Statement, we identified few changes to the content. Where there were changes, these did not appear to flow into the financial analysis, which remained largely the same. For example, during this stage the Treasury received several submissions on the implications of the current housing shortage. Although the Treasury discusses housing in the 2021 Statement, there is little analysis about housing shortages.
- 2.49 We accept that this could be included in insight briefings of other departments, but we consider the Treasury uniquely positioned to consider the implications of these types of issues on the Government's long-term financial position.

- 2.50 The Treasury told us that, because of the feedback's breadth, it was unable to reflect it all in the final document. However, the Treasury also said that the feedback would be useful in informing future policy advice and in developing other stewardship products such as the future well-being report.
- 2.51 We strongly encourage this and look forward to seeing how the feedback influences the well-being report when we review that in 2023.

Steps 6 and 7 – Providing a final long-term insights briefing to the appropriate Minister(s) and presenting the briefing to the select committee for examination

- 2.52 The Treasury published the final 2021 Statement online on 29 September 2021. This is the last step in the DPMC's guidance for Step 6.
- 2.53 In accordance with Step 7, the final 2021 Statement was presented to the Finance and Expenditure Committee on 17 November 2021.

Step 8 – Reviewing the process

- 2.54 The Treasury told us that it conducted an internal review of the 2021 Statement to determine what lessons it could learn and what processes it could improve when preparing the next long-term fiscal statement or long-term insights briefing. The Treasury's Leadership Team is considering the results of that review.
- 2.55 The Treasury has recently met with the DPMC to share its insights on how the 2021 Briefing went. The Treasury told us that, in due course, it will consider whether to continue to combine the long-term insights briefing with future long-term fiscal statements and what the most appropriate approach will be.

Our comments on the 2021 long-term insights briefing

- 2.56 Overall, we consider that the 2021 Statement broadly meets the requirements for long-term insights briefings under the Public Service Act 2020. However, the short time frame in which it was prepared is likely to have affected the 2021 Briefing's value.
- 2.57 The 2021 Statement is similar in process and content to previous long-term fiscal statements. In our view, the 2021 Statement has not realised many of the potential benefits of integrating the 2021 Briefing that we listed in paragraph 2.13.
- 2.58 Long-term insights briefings are intended to consider subject matter that has not received adequate consideration in the past and that is likely to significantly affect the long-term well-being of New Zealanders.

- 2.59 The Treasury engaged widely, and the 2021 Briefing touches on a range of issues, and the social and economic impacts of demographic trends. However, the Treasury told us that much of the feedback that it received was out of scope or difficult to address in the available time.
- 2.60 The Treasury acknowledges that it needs to be clearer about the boundaries of what it intends to consult on in future. We support that, but we also encourage the Treasury to think carefully about the parameters it sets for future long-term fiscal statements or long-term insights briefings to ensure that it has enough scope to explore the issues that matter to the public and Parliament.
- 2.61 We acknowledge the challenging circumstances that the Treasury completed the 2021 Briefing in. We consider that building more time into its process in future would allow it to explore issues in more depth and more thoroughly consider the feedback it receives.
- 2.62 The Treasury has not yet decided whether to continue to combine the long-term insights briefing and long-term fiscal statements. We strongly recommend that the Treasury use its review of the 2021 Statement to help inform decisions about future long-term fiscal statements and long-term insights briefings.
- 2.63 In our view, more needs to be done if future integrated statements are to improve the quality and depth of public information and provide more support to the government's strategic priorities and fiscal strategy.
- 2.64 We consider this in more detail in Part 4.

The value of the long-term financial projections

- 3.1 During the next 40 years, New Zealanders will face a wide range of complex challenges and opportunities. Understanding what challenges and opportunities could significantly affect the government’s long-term financial sustainability is critical to supporting and informing the government’s strategic decisions in the Budget. It is also important for improving the quality and depth of public information and engagement.
- 3.2 Long-term projections are never precise, because the uncertainties and risks involved are greater the further into the future we look. To be helpful in understanding the implications of future challenges and opportunities, long-term projections need to provide realistic information that can be understood and potentially acted on.
- 3.3 As the International Monetary Fund stated in 2016:
- Comprehensive analysis and management of fiscal risks can help ensure sound fiscal public finances and macroeconomic stability ... and [c]ountries need a more complete understanding of these potential threats to their fiscal position.³⁵*
- 3.4 In this Part, we:
- summarise and review the two different models that the Treasury used for its 2021 projections;
 - consider how well those models capture the long-term challenges, risks, and opportunities for the Government; and
 - discuss the models’ value in supporting the 2021 Statement.

The Treasury’s two long-term projection models

- 3.5 For the first time, the 2021 Statement used two financial models to project the Government’s long-term financial position and explore issues that may affect the Government’s financial sustainability. These were:
- the established Long-term Fiscal Model (LTFM), updated to 2021; and
 - a new Neoclassical Growth Model (NCGM).
- 3.6 The LTFM is the model that the Treasury used in its previous statements. The LTFM provides a reasonable approach to identifying a “benchmark” future financial path that possible changes in circumstances can be compared against.

3.7 However, the LTFM's modelling has the following two main limitations:

- It has a lack of feedback effects – for example, large projected increases in net debt levels should have substantive effects on interest rates that the government can borrow at.
- The model cannot project regular short- to medium-term shocks that might knock the economy and government budget off their long-term tracks.

3.8 The Treasury developed the NCGM to address these weaknesses. The NCGM is a completely different and more economic-based projection model. This approach allows for numerous feedback effects and includes the ability to model short- to medium-term shocks, such as major recessions and natural disasters.

3.9 Using different models for different reasons is a well-recognised principle of economic modelling. This is because no single approach can answer all financial sustainability questions. Relying solely on the new and relatively untested NCGM for the 2021 Statement's modelling would not have been prudent.

3.10 The Appendix provides a graphical summary of the two models.

The Long-term Fiscal Model's assumptions and projections

3.11 The LTFM is an accounting-based model that projects the Government's financial statements into the future. The first five years of the LTFM's projections are the same as the Treasury's shorter-term economic and fiscal update projections.

3.12 The projections assume that most spending and all tax revenue grows at the same rate as GDP over the long term. As in previous statements, the two exceptions that lead to a projected increase in the operating deficit and net debt relative to GDP are:

- increasing healthcare costs per person arising from population ageing, which raises health spending from 6.9% of GDP in 2021 to 10.6% of GDP in 2061; and
- growing superannuation entitlements arising from population ageing, which raises New Zealand Superannuation expenses from 5% of GDP in 2021 to 7.7% of GDP in 2061.

3.13 This additional spending is assumed to be entirely funded through debt, with government borrowing rising each year so that net debt increases from 34.0% of GDP in 2021 to 196.9% by 2061. Of all expense categories, debt financing costs show the biggest increase, rising by almost 8 percentage points over the 40-year period.

3.14 Figure 2 summarises the projections arising from the LTFM.

Figure 2
Projections from the Long-term Fiscal Management historical trends scenario
(% of GDP)

	2021	2030	2045	2061
Healthcare	6.9	6.8	8.6	10.6
NZ Superannuation	5.0	5.6	6.6	7.7
Education*	4.7	5.0	5.4	6.4
Debt-financing costs	0.6	1.6	3.7	8.4
Other expenses	15.9	12.1	12.1	11.9
Total expenses	33.1	31.1	36.4	45.0
Total revenue	29.3	29.5	29.5	29.6
Operating balance**	-2.6	-0.3	-5.1	-13.3
Net debt	34.0	42.9	84.2	196.9
Net worth	11.7	7.7	-30.3	-137.1

* The Treasury's 2021 LTFM background paper explains that spending on education per child has tended to increase over time and that this is assumed to continue over the projection period. See the Treasury (2021), *Demographic, economic and fiscal assumptions and logic in the 2021 Long-term Fiscal Model – Background paper for the 2021 Statement on the Long-term Fiscal Position*, pages 40-42.

** The operating balance is the difference between total revenues and total expenses, plus gains or losses in the market values of government assets and liabilities.

Source: The Treasury (2021), *He Tirohanga Mokopuna 2021*, page 19.

- 3.15 The 196.9% net debt projection in 2061 is slightly lower than the equivalent value in the 2016 long-term fiscal statement (206% in 2060). This difference is mainly from the following changes in the assumptions since 2016:
- Updated Statistics New Zealand population projections now expect net immigration of 25,000 per year (previously 12,000). This raises GDP, reducing the debt to GDP ratio.
 - Productivity growth is lower at 1% per year instead of 1.5%. This reduces wage growth in the health sector (as elsewhere), reducing future healthcare costs.
 - The long-run interest rate on government bonds is down from 5.3% per year to 4.3% (and even lower during the next one to two decades). This reduces government debt service (interest) payments.
- 3.16 These changed assumptions may be reasonable to make currently. However, when looking ahead 40 years, financial projections that are sensitive to these adjustments raise questions about the reliability of the policy choices in each long-term fiscal statement.

- 3.17 For example, a change in the projected productivity growth rate will have a significant effect on projected education and health spending. So, should New Zealand's slower average productivity growth in the 10 years since the global financial crisis be treated as permanent (as it is in the LTFM projections) or temporary over the projection period?

The Neoclassical Growth Model's assumptions and projections

- 3.18 The NCGM uses a framework to capture the economic decisions of individuals – as consumers, workers, investors, and taxpayers. Like the LTFM, the NCGM allows for trend growth in productivity and population ageing, which affects the growth of New Zealand Superannuation and healthcare expenditures.
- 3.19 This type of economic model remains controversial among economic forecasters.³⁶ However, compared to the LTFM, it offers greater capacity to investigate the effects of future economic and demographic trends and economic shocks on New Zealand's financial sustainability.
- 3.20 Several assumptions distinguish the NCGM from the LTFM.
- 3.21 The NCGM incorporates many economic decisions by individual New Zealanders, such as decisions about how much to consume or to invest. These are affected by wage levels and interest rates, which are themselves affected by debt or tax levels set by the government. On the other hand, the LTFM simply projects each of its main economic variables forward, based on observed historical trends.
- 3.22 The NCGM assumes that rising superannuation and healthcare costs from population ageing are paid for by tax rate increases. This means that no new borrowing is needed and net debt remains the same, at around 48% of GDP over the projection period. Three different tax rates are increased (labour, capital income, and consumption). These increases slow GDP growth, as taxpayers react by reducing spending, investing, and working.
- 3.23 The NCGM's starting value for net debt to GDP in 2021 is set at 48% of GDP,³⁷ and this is relatively constant over the projection period. The LTFM adopts the current net debt value for 2021 of 34% of GDP, and this increases over the projection period.³⁸

36 This is largely because the NCGM seeks to measure how individuals respond to different economic incentives, which needs different assumptions. Many of these assumptions have little supporting evidence. For more details about the use of these types of models, see Blanchard, O (2017), "Do DSGE models have a future?" in Gürkaynak, R S and Tille, C (eds), *DSGE models in the conduct of policy: Use as intended*, CEPR Press, London. See also Romer, D (2016), "The Trouble with Macroeconomics", Commons Memorial Lecture of the Omicron Delta Epsilon Society, Stern School of Business, New York University.

37 This is the peak projected debt level taken from the Treasury's latest Budget economic and fiscal update.

38 This is the current level taken from the Treasury's latest Budget economic and fiscal update.

- 3.24 The Treasury acknowledges that the starting point of 48% in the NCGM is an arbitrary choice and that holding it constant over the projection period is an important but debatable assumption underlying the NCGM. The 2021 Statement shows that, if this 48% is reduced to 20%, the additional needed rise in the tax rate could be as much as 8% of GDP. This is because the lower borrowing means that additional funding through higher taxes is needed.
- 3.25 The NCGM scenarios include economic responses to unanticipated events, including global recessions, earthquakes, and severe droughts or floods. We discuss some of these in the next section.
- 3.26 Figure 3 summarises the projections arising from the NCGM.

Figure 3
Projections from the Neoclassical Growth Model increased tax rates scenario
(% of GDP)

	2021	2030	2045	2061
Healthcare	6.0	6.8	8.6	10.6
NZ Superannuation	5.0	6.2	7.2	8.3
Debt-financing costs	1.6	1.5	1.5	1.4
Other expenses (incl. education)	17.6	18.0	18.4	19.3
Total expenses	30.1	32.5	35.7	39.7
Total revenue	29.1	31.6	35.2	38.9
Operating balance	-1.0	-0.9	-0.5	-0.7
Net debt	48.0	48.3	47.4	46.7

Source: Adapted from the Treasury (2021), *He Tirohanga Mokopuna 2021*, page 21.

- 3.27 The projected expenses for the NCGM differ from the LTFM because the NCGM models a long-run equilibrium projection from 2021 onwards. Despite the Government's current response to Covid-19, the NCGM treats 2021 as if we were on a long-term trend (for example, projected welfare payments will be lower in the NCGM than they are currently).
- 3.28 The NCGM's relatively constant 48% net debt to GDP assumption particularly affects 2021 debt interest payments and some other expenses.
- 3.29 The NCGM cannot project net worth because the model's design does not include annual values for government assets and liabilities. This also means that the financial assets "netted" off in the relatively constant 48% net debt assumption are not separately projected.

Our observations about the models and their projections

- 3.30 We did not carry out an audit or line-by-line review of the LTFM or the NCGM. Previous versions of the LTFM have been reviewed in detail, and the NCGM consists of a complex set of inter-related equations that would take more time and specialist expertise to review in detail.
- 3.31 When we compare the projections from the two models, we usually start at 2030. This is because, as we mentioned earlier, the NCGM assumes a long-run equilibrium perspective. This means that its early projections from 2021 do not always reflect current conditions.
- 3.32 From 2030 on, both models reflect approximately the same conditions and treat the economy as fully recovered from the effects of Covid-19.
- 3.33 We set out the main findings from our review below.

The 2021 models and projections represent a significant change

- 3.34 In 2016, we questioned the rationale and various assumptions that the previous model and projections relied on. The Treasury has done considerable work to improve the modelling and projections for the 2021 Statement. There is evidence that the models' developers worked together to align the models.
- 3.35 The NCGM is a major departure from the previous approach and provides a comparison to the established LTFM.
- 3.36 Figure 4 summarises our 2016 suggestions and the changes that the Treasury made for the 2021 Statement.

Figure 4
Modelling changes made in response to the Auditor-General's 2016 commentary

Suggestions in our 2016 commentary	2021 Statement response
Prepare a set of plausible scenarios in support of its financial projections.	The new Neoclassical Growth Model (NCGM) assesses demographic changes as well as different scenarios – for example, earthquakes, some climate change events, and economic shocks.
Establish a clear rationale and uniform approach to projecting these scenarios.	For both models, there is a clearer rationale and a more uniform approach to the projections.
Reassess the consistency and reasonableness of the key projection assumptions.	Difficult to assess because there is still a lack of clarity and little discussion about some of the main assumptions – for example, how taxes are assumed to respond in the NCGM and how these responses impact on well-being and financial sustainability.

Suggestions in our 2016 commentary	2021 Statement response
Reconsider the rationale for excluding New Zealand Superannuation Fund assets from the primary financial sustainability indicator of net debt.	Not addressed – in our view, excluding New Zealand Superannuation Fund assets from the calculation of net debt should be reconsidered. According to a background paper on the 2021 Statement, excluding New Zealand Superannuation Fund assets reduces net debt in 2060/61 by about 38%.*
Explore different approaches to measuring financial sustainability.	Not addressed – the NCGM shows how much taxes could rise. However, this is not linked back to financial sustainability, and the NCGM cannot project net worth.
Obtain expert financial modelling advice.	The Treasury obtained additional expert modelling advice to build and operate the NCGM.

* The Treasury (2021), *Demographic, economic and fiscal assumptions and logic in the 2021 Long-term Fiscal Model – Background paper for the 2021 Statement on the Long-term Fiscal Position*, page 56.

- 3.37 Compared to the 2016 long-term fiscal statement, the Treasury has made progress in modelling shocks and scenarios, sensitivity analysis, and incorporating feedback effects.
- 3.38 However, it needs to do more work on developing a wider view of financial sustainability and on some of the model's assumptions, such as the rationale for excluding New Zealand Superannuation Fund assets from the primary financial sustainability indicator of net debt.
- 3.39 To more clearly show the benefit of having the New Zealand Superannuation Fund, we suggest describing the net debt indicator with and without the value of the New Zealand Superannuation Fund assets in the main document. As we discussed in previous commentaries, we remain unconvinced that New Zealand Superannuation Fund assets should be excluded from the calculation of net debt.

Projections show consistent revenue and spending paths

- 3.40 The two models are constructed in different ways, and their projections assume different things. A key difference is that the LTFM projections hold tax revenue constant, with any deficit funded through increasing debt. The NCGM's projections hold debt (roughly) constant, with any deficit funded through increasing tax revenue.

- 3.41 Despite these differences, reviewing the two models' projections from 2030 to 2061 in Figures 2 and 3 shows the following:
- In both models, total government expenditure (excluding debt interest) increases by about the same amount from 2030 to 2061.³⁹
 - If tax revenue were allowed to rise in the LTFM instead of net debt, the projected rise in tax revenue would be only slightly lower than the rise in tax projected through the NCGM.⁴⁰
- 3.42 The models are constructed differently, use different assumptions, and provide different insights about the future financial profile and capacity of the government. However, from 2030 they have similar underlying revenue and expenditure projections. In our view, this indicates that there is a good underlying consistency to both models.

The two models tend to amplify the rise in debt or taxes

- 3.43 Both models rely on assumptions that, in our view, represent a pessimistic view of the government's future financial management. Over the long term, this produces a particularly strong upward tendency for net debt (in the LTFM) or tax rates (in the NCGM).
- 3.44 For example, the LTFM assumes that all future operating deficits are only funded by borrowing money and that any interest on that borrowed money is also funded in the same way. The compounding effect of this assumption over 40 years means that, by 2061, debt financing costs will be the second-highest cost for the government – behind healthcare but above spending on superannuation and education.
- 3.45 As referred to in Figure 4, the assumption that New Zealand Superannuation Fund assets are excluded from the calculation of net debt reflects a view that these financial assets could not be used to avoid increasing debt to unsustainable levels.
- 3.46 The Treasury states in a background paper that the 2061 net debt to GDP value of 197% could be reduced to 159% if New Zealand Superannuation Fund assets were recognised and included in the calculation of net debt.⁴¹ In our view, it would be helpful if this were also included in the main document.

39 The LTFM projects an increase of 7.1 percentage points, and the NCGM projects an increase of 7.2 percentage points.

40 If tax revenue were allowed to rise in the LTFM instead of debt, then the projected increase in debt interest of 6.8% from 2030 to 2061 in Figure 2 would not occur – because taxes would rise by 6.8% instead. Adding the 0.1% tax revenue increase projected by the LTFM in Figure 2 gives a total tax revenue increase of 6.9%. The projected rise in tax from the NCGM from 2030 to 2061 is only slightly higher at 7.3 percentage points.

41 The Treasury (2021), *Demographic, economic and fiscal assumptions and logic in the 2021 Long-term Fiscal Model – Background paper for the 2021 Statement on the Long-term Fiscal Position*, page 56.

- 3.47 Whether and by how much projected interest rates on government debt exceed the growth rate of GDP is also critical for the size of operating deficits or surpluses that the government can afford. Although the models use different interest rate assumptions, projected interest rates for both models are above GDP growth projections in most (LTFM) or all (NCGM) years.
- 3.48 The 2021 Statement discusses the reasons for the level of projected interest rates in both models. The Treasury recognises that the gap between interest rates and GDP growth is important for long-term debt sustainability. It notes that “the interest rate has an impact on the level of debt but does not fundamentally change its trajectory during the next 40 years”.⁴²
- 3.49 When projected interest rates remain above projected GDP growth, debt servicing (interest) costs grow more quickly, allowing less public spending to be funded through revenue. This means that more public spending must be funded by increasing debt or taxes. It also means that governments cannot “grow themselves out of debt” because the debt and interest costs increase faster than GDP and taxes.
- 3.50 In our view, the assumption that interest rates will always exceed the growth rate of GDP is an important, but debatable, assumption for a 40-year projection.⁴³ For many governments, the reverse took place after World War 2 and the global financial crisis in 2008. Interest rates have been especially low since the global financial crisis.

He Tirohanga Mokopuna 2021’s focus is primarily on net debt

- 3.51 Long-term projections of government net debt to GDP are a useful indicator of governments’ future financial health. However, by itself, the measure does not cover the full extent of other projected changes that could influence the government’s financial sustainability over time.
- 3.52 The Public Finance Act 1989 provides a list of other factors that should be considered as part of responsible financial management. These include having predictable and stable tax rates, managing the Crown’s resources effectively and efficiently, thinking about the likely impact on present and future generations, and achieving and maintaining levels of net worth that can act as a buffer against adverse events.
- 3.53 Taken together, both models’ projections show what tax rates, net worth, and spending on other well-being domains could do during the next 40 years. Greater

42 The Treasury (2021), *He Tirohanga Mokopuna 2021*, page 23.

43 For example, see Kirdan Lees’ presentation to the RBNZ-Treasury Workshop, “Fiscal and monetary policy in the wake of Covid”, Wellington, 22 June 2021.

focus on these other indicators, alongside net debt to GDP, would provide a more comprehensive assessment of, and way to address, financial sustainability.

- 3.54 For example, tax revenue is fundamental to the government's financial sustainability. The principles of responsible financial management (under the Public Finance Act 1989) suggest that large, unexpected fluctuations could be detrimental to taxpayers' willingness and ability to pay.
- 3.55 The NCGM's projections of a 7.3 percentage point increase in tax revenue from 2030 implies average corporate taxes rising from 30% to 40%,⁴⁴ average personal tax rates rising to 26% (they are currently about 19%),⁴⁵ and GST rising to 20%. The 2021 Statement may benefit from some discussion about what tax rates are likely to be financially responsible and sustainable.
- 3.56 Another example is the LTFM's large projected deterioration in net worth from +11.7% of GDP at the start of the projection to -137.1% of GDP in 2061. Net worth is an important long-term measure of the strength of the government's balance sheet and the stewardship of its assets and liabilities. A net worth that is -137.1% of GDP means a weak balance sheet where the government owes substantially more than it owns.
- 3.57 This projected deterioration in net worth is because the modelling for the LTFM assumes that core Crown assets increase at a far smaller rate (8% in total to 2061) than core Crown liabilities (278% in total to 2061). The larger increase in liabilities is a result of the modelling assumption that all operating deficits are funded through additional debt.
- 3.58 A large negative net worth indicator suggests that, in the future, the government's balance sheet will provide little support for New Zealanders in times of need. It also raises questions about the effective and efficient management of the Crown's resources (particularly its asset base). Both the above considerations are fundamental to responsible financial management and the Government's long-term financial sustainability.
- 3.59 The Treasury told us that it is thinking about the role of the long-term fiscal statement and long-term insights briefing in the wider suite of stewardship reporting it is responsible for. There may be opportunities to think more broadly about other indicators and influences on long-term financial sustainability in other reporting, such as the upcoming well-being report or the investment statement.

44 The 2021 Statement uses the term "taxes on capital". Taxes on capital are similar to corporate taxes but do not include the taxation of interest and dividends in individual hands.

45 The 2021 Statement uses the term "labour taxes". Average labour taxes are similar to personal taxes. They include the taxation of wages and salaries but do not include any taxation of interest, dividends, or property rental income received by individuals.

Good transparency but the Neoclassical Growth Model is difficult to understand

- 3.60 The models and their projections are important for understanding the logic and evidence behind the many issues and policy options that the 2021 Statement raises.
- 3.61 The Treasury has always published the LTFM in full alongside the corresponding long-term fiscal statement. In 2021, the Treasury also published a background paper that set out the underlying equations for the NCGM.
- 3.62 Although this transparency is positive, because of the overall complexity of the NCGM, many of the assumptions and internal logic that sit behind the model are difficult to understand. For example, the internal equations that the NCGM uses to describe underlying economic relationships rely on more than 30 input assumptions, with limited testing of their reliability. Additional scenario analysis could help clarify these uncertainties.

Including new and different scenarios is positive but raises questions about wider financial sustainability

- 3.63 For the first time, the 2021 Statement includes an analysis of the financial effects of various possible events, such as economic shocks, earthquakes, droughts, and floods. We consider that this is a positive step.
- 3.64 According to the NCGM, the impact of these separate events on long-term financial sustainability is low. The 2021 Statement states that the Government's financial position is "relatively resilient" to natural disasters and that the "uncertainty about the future does not change our analysis of the long-term financial trends that governments will need to manage".⁴⁶
- 3.65 However, this conclusion does not consider the possibility of these events occurring together and relies on the government increasing taxes after each crisis to pay for the cost of the shocks.⁴⁷
- 3.66 Figure 5 shows how each scenario is funded, according to the 2021 Statement.

⁴⁶ The Treasury (2021), *He Tirohanga Mokopuna 2021*, pages 30 and 34.

⁴⁷ The modelling assumes increasing operating deficits and/or debt in response to the event. This is paid for afterwards by increasing taxes.

Figure 5
Scenario funding assumptions in the 2021 Statement

Scenario	Funding assumptions
Economic shock/ recession	The government increases tax revenue after each recession to bring debt back down to its pre-recession levels.
Earthquakes	The government increases tax revenue after the disaster to bring debt back down to its pre-earthquake levels. For example, the government gradually increases tax after the earthquake, and, after 10 years, the tax-to-GDP ratio is about 2% higher than the level expected if the earthquake had not happened.
Climate change: droughts and floods	Nothing is noted in the 2021 Statement, but a background paper [*] states that taxes will increase after any floods or droughts to bring debt back down.

** The Treasury (2021), Shocks and scenarios analysis using a Stochastic Neoclassical Growth Model – Background paper for the 2021 Statement on the Long-term Fiscal Position, page 53.*

- 3.67 Figure 5 shows that, for each event, significant adjustments in expenditure and revenue settings may be needed.
- 3.68 Despite this, the 2021 Statement has little recognition or discussion of the wider financial sustainability implications of these possible tax changes for the government or the public, separately or combined.

Our comments on the value of the financial projections

- 3.69 Using two projection models is a change from the single model that the Treasury used in previous statements. Both models show consistent revenue and spending paths over the projection period.
- 3.70 However, each model is built differently, and each measures the financial implications of a range of scenarios in a different way. For example, the original LTFM holds taxes constant and shows how net debt could increase over time, and the new NCGM holds net debt constant and shows how taxes could increase over time.
- 3.71 Although these projections are an improvement, we consider that the different measures, combined with some untested assumptions, result in:
- a lack of clarity and confidence about whether a problem could exist with the Government's long-term financial sustainability; and
 - a limited view of the costs and benefits needed to decide whether policy action is advisable or when choices between tax rises, increased debt, and/or spending restraints might be needed.

- 3.72 Although useful, the measures of uncertainty presented in the NCGM's projections also do not allow for the model's inherent (un)reliability. In our view, the insights from the projections are probably best interpreted as a start to estimating long-term financial impacts and with large margins of error.
- 3.73 In terms of possible policy actions, the Treasury acknowledges that:
*While we do not know exactly how large a policy adjustment will be necessary ... the scale of the long-term fiscal challenges will make a significant adjustment necessary.*⁴⁸
- 3.74 In our view, of the possible conclusions that the financial projections could support, this potentially overstates the magnitude of the adjustment. Particularly so, given that the various modelling assumptions result in an upward tendency for net debt or tax rates over the long term (including the New Zealand Superannuation Fund assets not being part of the calculation of net debt).
- 3.75 The findings of Furman and Summers also suggest that there should be caution about making important policy changes too early, particularly in times of significant uncertainty, because this makes assessing the policy costs and benefits of policy adjustment difficult.⁴⁹
- 3.76 One way of mitigating this uncertainty might be to present different scenarios over different time horizons within the 40-year projection. For example, shorter-term challenges and opportunities could be modelled as one scenario and matched with a range of shorter-term policy choices.
- 3.77 The 2021 Statement's projections offer new insights into the financial implications of some challenges and risks. However, in our view, the Treasury needs to do more work to provide a comprehensive view and to highlight the relevant financial implications and available choices in a realistic and meaningful way.
- 3.78 In our view, without this information, it will remain difficult for future long-term fiscal statements to inform and influence the government's strategic policy decisions.

48 The Treasury (2021), *He Tirohanga Mokoopuna 2021*, page 44.

49 Furman J and Summers L (2021), *A reconsideration of fiscal policy in the era of low interest rates – Discussion draft*, Harvard University, page 31.

4

The value of *He Tirohanga Mokopuna 2021*

- 4.1 Comprehensive and realistic information about the future is fundamental to good financial management and decision-making.
- 4.2 The building blocks of the 2021 Statement are a step forward from previous statements. They could support more meaningful insights about the future and the Government's long-term financial position.
- 4.3 In particular, a new set of projections using the NCGM and integrating the long-term insights briefing into the long-term fiscal statement provide the potential for a more wide-ranging analysis and discussion of the long-term risks, opportunities, and policy options that matter to the well-being of New Zealanders.
- 4.4 However, we do not consider that the 2021 Statement achieves its potential as a key foundational resource that informs the Government, Parliament, and the public about the financial implications of future trends, risks, and challenges.
- 4.5 In this Part, we summarise how the Treasury's long-term fiscal statement has developed so far. We also consider what the Treasury may need to do to improve the ability of a combined long-term insights briefing and long-term fiscal statement to:
 - enhance the quality and depth of public information about the government's long-term opportunities, challenges and policy choices; and
 - support and inform the Government's strategic priorities and fiscal strategy.

The evolution of the long-term fiscal statement

- 4.6 Governments can create impact beyond their terms through, for example, the strategic and decision-making phases of the Budget process. However, to do so in an informed way, they need knowledge about past performance, current priorities and spending intentions, and future challenges and opportunities.
- 4.7 Since 2006, long-term fiscal statements have been the main way for governments to receive information about the financial implications of future challenges and opportunities. In our view, neither successive governments nor the public have given these statements enough attention.
- 4.8 The Treasury has tried different ideas to improve the long-term fiscal statement's value and impact, including an extensive public consultation process in 2013 and an increased focus on well-being in 2016.
- 4.9 The 2021 Statement introduces several different initiatives. These include integrating the processes and information needed for the Treasury's first long-term insights briefing and developing the NCGM to project the long-term financial position and consider other shocks and crises.

- 4.10 The messages about population ageing remain largely the same as in previous long-term fiscal statements. There are new insights about the long-term financial implications of the Government's response to Covid-19 and the scale of tax increases that might be needed to pay for the effects of population ageing and some other shocks and crises.
- 4.11 The changes made in developing the 2021 Statement are a step in the right direction. We support continued improvement in the financial projections and work to explore the links between the long-term insights briefing and the long-term fiscal statement.
- 4.12 These innovations should assist the Treasury, as the government's lead economic and financial advisor, to facilitate public discussion about the challenges and opportunities facing New Zealand and inform government decision-making.
- 4.13 The Treasury has also told us that it is looking to further develop its analytical programme before it prepares the next long-term fiscal statement. We support this initiative. In our view, the Treasury should consider how it can strengthen the process it uses to plan for and prepare these statements in a way that progressively improves the statement's value and impact over time.
- 4.14 In the next two sections, we consider how future statements and briefings could have better value and impact.

Improving the quality and depth of public information

- 4.15 Boston, Bagnall, and Barry observe that, for people of different cultures and generations, there are many reasons for thinking about, and planning for, the future.⁵⁰ For governments and the public sector, involving the public in that thinking can also improve public trust and confidence.
- 4.16 By improving the quality and depth of public information and supporting people's understanding of the Government's long-term opportunities, challenges, and policy choices, the 2021 Statement can encourage people to think about the future.

Care is needed when integrating a long-term insights briefings with existing work

- 4.17 Overall, although the process for preparing a long-term insights briefing aligns well with the process for preparing a long-term fiscal statement, we consider that the Treasury needs to give more thought to achieving the aims of both processes.

⁵⁰ Boston, J, Bagnall, D, and Barry, A (2019), *Foresight, insight and oversight: Enhancing long-term governance through better parliamentary scrutiny*, Institute for Governance and Policy Studies, Victoria University of Wellington, page 22.

- 4.18 In our view, the Treasury was not able to realise the full potential of integrating the 2021 Briefing into the 2021 Statement. One reason for this was that the short time frame limited the Treasury's ability to make the most of the process for preparing the long-term insights briefing.
- 4.19 The Treasury told us that, despite the relatively compressed time frame, it felt that it had struck the right balance between the need to communicate in a timely manner and the analysis that it wanted to do.
- 4.20 The Treasury also told us that the subject matter and discussion for the long-term insights briefing should complement and draw on existing work where relevant. We agree.
- 4.21 However, care is needed when combining the long-term insights briefing process with another existing process so that the opportunity to explore new or unconsidered issues is not lost or subsumed.

Better integrate the feedback from consultation

- 4.22 The issues that a department focuses time and energy on can be current and important to that department. However, preparing long-term insights briefings provides departments with an opportunity to explore what is important for the public and what may affect them in the future.
- 4.23 Although these documents should reflect the expertise and opinions of the department, consistent with the DPMC's guidance, this is also an opportunity to reflect the voices of those who have been engaged.
- 4.24 Good consultation takes time. We would like the Treasury to consider how it might better incorporate the views that it heard through feedback into future long-term fiscal statements and insights briefings.

Assisting governments in making financially responsible decisions

- 4.25 Governments regularly use information about the future to make financially responsible policy decisions. For Boston, Bagnall, and Barry, understanding long-term challenges and opportunities is fundamental to good governance and decision-making.
- 4.26 This involves:
- looking forward to plan and shape the future;
 - designing and implementing coherent long-term policies;
 - identifying, minimising, and managing significant risks;

- protecting critical resources and ecosystems for future generations; and
- preparing for unexpected eventualities, including economic shocks.⁵¹

4.27 As part of the annual Budget process, the government decides which of its many competing strategic priorities and objectives are achievable with a finite set of resources. For example, one aim of the 2021 Wellbeing Budget is to:

*... improve New Zealanders' living standards by tackling long-term challenges and ensuring what matters to New Zealanders drives Government decision-making.*⁵²

4.28 Combining the long-term insights briefing with the long-term fiscal statement and expanding the range of analytical tools could improve the government's understanding of what could be important to New Zealanders in the future and what this may mean for the government's financial sustainability and its well-being domains.

4.29 We set out some observations that may improve the ability of future statements to provide relevant information that informs the Budget process below.

More comprehensive analysis

4.30 The NCGM allows a more comprehensive analysis of what may happen in the future and the financial implications for the Government. This is the first time that the Treasury has used this type of model for long-term projections, and it is currently used in a limited way to project a narrow set of scenarios.

4.31 Preparing a set of scenarios that captures combinations of opportunities and challenges could generate important and useful insights about the future financial risks, capacity, and sustainability of the government.

4.32 These scenarios could take place in different time periods. For example, a 10-to-20-year horizon may be more appropriate to consider the financial and policy implications of opportunities and challenges that are more defined and likely to impact over the short to medium term (such as housing shortages or raising productivity). A 20- to 30-year horizon might be appropriate to consider the implications of more regular occurring natural disasters and economic crises.

4.33 The Treasury told us that widening the parameters for the range of topics could lead to departments duplicating material in their insights briefings and raises questions about resourcing and what is feasible in the available time frame. We agree that these are important considerations.

4.34 However, in our view, widening their parameters and providing more realistic and understandable scenarios are critical to the usefulness of these documents.

51 Boston, J, Bagnall, D, and Barry, A (2019), *Foresight, insight and oversight: Enhancing long-term governance through better parliamentary scrutiny*, Institute for Governance and Policy Studies, Victoria University of Wellington, page 22.

52 The New Zealand Government (2021), *Wellbeing Budget 2021: Securing our recovery*, page 12.

Think about the financial implications of, and on, other dimensions of well-being

- 4.35 As we have mentioned throughout this paper, understanding and thinking about long-term trends, risks, and opportunities is an important part of the policy decision-making and the annual Budget process.
- 4.36 Not all policy options need to be financially focused. For example, the 2016 long-term fiscal statement considered options such as better education and more social inclusion as possible policy choices.
- 4.37 In our view, policy options that are financially focused are also useful to consider in a wider well-being context. Some options could affect other well-being domains. For example, reducing superannuation or health spending to avoid increasing debt could affect New Zealand's social and human capitals. This in turn could affect long-term productivity and economic growth. Understanding these kinds of feedback effects is important to understanding long-term financial sustainability.

Take a broader approach to financial sustainability

- 4.38 The 2021 Statement defines financial sustainability broadly but measures it narrowly. By focusing on the government's net debt to GDP, the 2021 Statement's discussion about financial sustainability misses the full extent of other projected changes and policy options that could influence the government's financial sustainability over time.
- 4.39 Taking a broader approach to financial sustainability may mean focusing less on the negative factors (such as rapidly increasing debt) and more on positive opportunities (such as becoming more productive and growing GDP).
- 4.40 It could also lead to a wider discussion about what combinations of net debt and tax rates become unsustainable and what is prudent today. It could also mean considering a wider range of options to manage shocks and crises in the future – for example, building up financial resources, insurance, and/or automatic tax adjustments.

Test and challenge the reasonableness of underlying assumptions

- 4.41 In our commentary on the 2016 long-term fiscal statement, we looked at the reasonableness of the assumptions underlying the LTFM projections. We suggested that the Treasury needed to do more work to improve the consistency and realism of some assumptions.
- 4.42 Although the NCGM is helpful, there is still more work to do. When looking 40 years ahead, financial projections can be sensitive to these assumptions and, if not well tested, can raise questions about the reliability of the resulting policy advice.
- 4.43 Some examples of important assumptions include:
- the use of New Zealand's slower average productivity growth in the 10 years since the global financial crisis over the entire projection period; and
 - assuming the long-run growth rate of the economy is expected to almost always be below the real interest rate on borrowing.
- 4.44 The Treasury emphasised to us that a balance needs to be struck between illustrating the sensitivity of projection assumptions and complicating key messages. We agree that quantifying the implications of the projections in a simple way is desirable, but we consider that readers still need to be convinced about the robustness and reliability of those simple messages.

Appendix

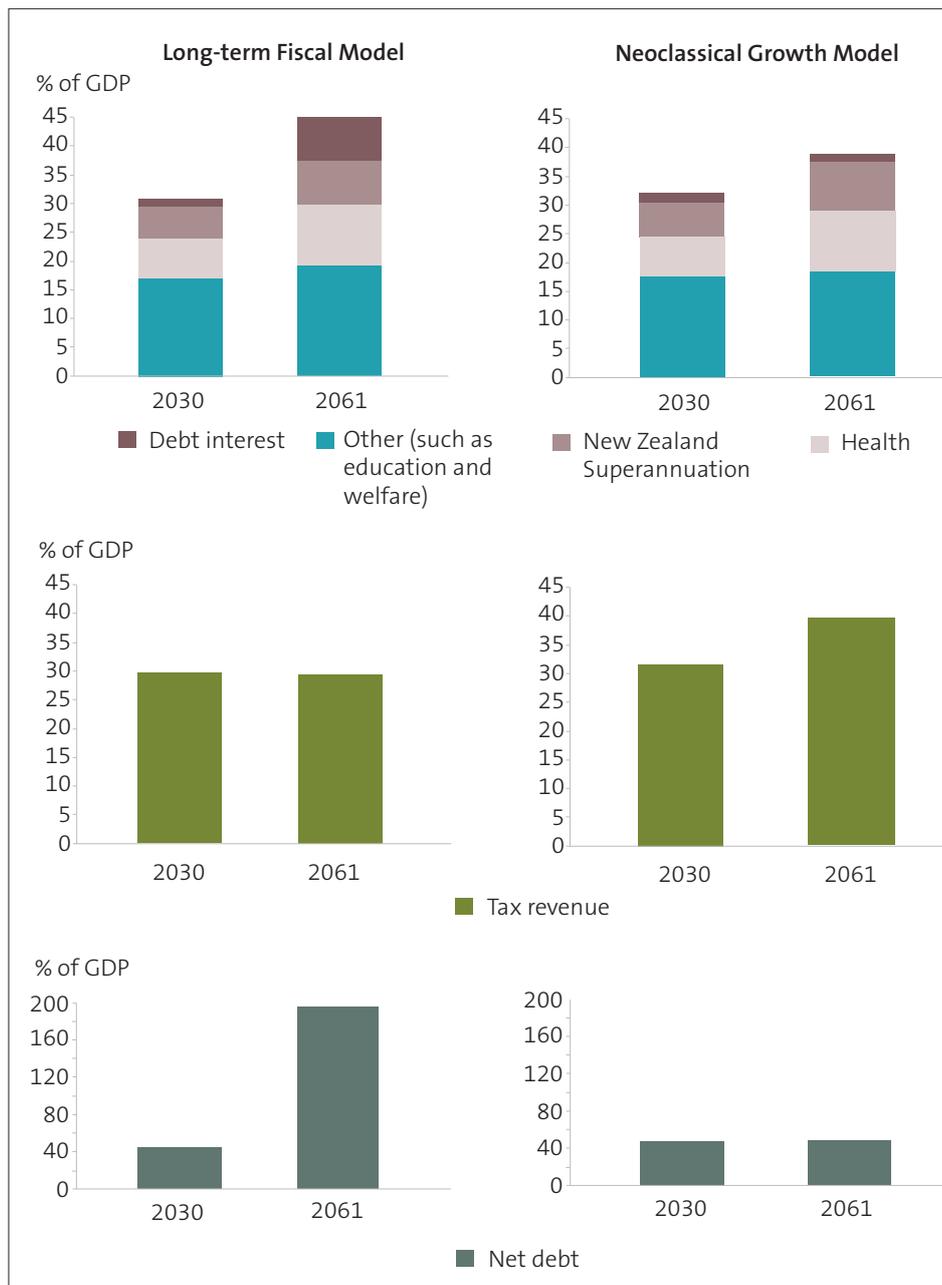
Summary of the two models and their projections

The Long-term Fiscal Model and the Neoclassical Growth Model use radically different frameworks and assumptions to project the financial position of the government over 40 years. The Neoclassical Growth Model is a technically sophisticated economic model, and the Long-term Fiscal Model is a simpler accounting-based projection with few economic behaviours built in.

The Long-term Fiscal Model holds tax revenue constant and assumes the additional spending is funded by increasing debt (which increases the interest on that debt). The Neoclassical Growth Model holds net debt constant and assumes the additional spending is funded by increasing tax revenue.

Figure 6 summarises the differences between the models. It shows how and why the two projections change from 2030 to 2061 (see also Figure 2 and Figure 3).

Figure 6
Increases in superannuation and healthcare spending are funded differently in the Long-term Fiscal and Neoclassical Growth models



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