

Pre-election Economic and Fiscal Update 2023 Projections

Pre-election Economic and Fiscal Update 2023 of the Fiscal Strategy Model (FSM)

12 September 2023

This version of the Fiscal Strategy Model uses economic and fiscal forecasts prepared for the *Pre-election Economic and Fiscal Update 2023* (PREFU). The projection period begins in 2027/28 and extends a decade to 2036/37. These post-forecast fiscal projections are based on the long-run technical and policy assumptions outlined below.

The Fiscal Strategy Model (sometimes referred to by the acronym FSM) that produces the projections can be found on the Treasury website at <https://treasury.govt.nz/government/fiscalstrategy/model>

Forecasts attempt to predict future outcomes by using wide-ranging resources, comprehensive modelling and expert opinion and knowledge. Projections, which arise from and are heavily influenced by their forecast base, are potential paths. These paths are based on trends or long-run averages for growth rates or levels of key economic, fiscal and demographic variables, and generally assume no policy changes beyond those built into their forecast base.

Economic projections and assumptions

Table 1 displays the macroeconomic projections from the PREFU 2023 Fiscal Strategy Model.

Table 1 – Summary of economic projections¹

Year ending 30 June	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2037
	Forecasts					Projections						
Labour force	2.6	1.8	0.9	1.5	1.4	1.2	1.1	1.0	1.0	0.9	...	0.6
Unemployment rate ²	3.4	4.3	5.3	5.1	4.7	4.5	4.4	4.3	4.3	4.3	...	4.3
Average weekly hours worked ³	33.7	33.5	33.6	33.7	33.7	33.7	33.7	33.7	33.7	33.7	...	33.7
Labour productivity growth ⁴	-1.8	1.0	1.8	1.4	1.3	1.2	1.1	1.0	1.0	1.0	...	1.0
Real GDP ⁵	3.1	1.3	2.0	3.3	3.2	2.5	2.4	2.2	2.0	1.9	...	1.6
Nominal GDP ⁶	8.3	5.9	5.1	5.8	5.5	4.5	4.4	4.2	4.0	4.0	...	3.6
Consumers Price Index	6.0	3.8	2.5	2.1	2.0	2.0	2.0	2.0	2.0	2.0	...	2.0
Government 10-year bonds	4.2	4.7	4.7	4.5	4.3	4.3	4.3	4.3	4.3	4.3	...	4.3
Average hourly wage	7.3	6.5	5.6	4.4	3.7	3.2	3.1	3.0	3.0	3.0	...	3.0

Notes:

- 1 Annual average percentage change unless otherwise stated
- 2 Total unemployed as a percentage of the labour force (annual average)
- 3 Average weekly hours worked (total hours worked ÷ total employed labour force)
- 4 Average annual growth in real GDP divided by total hours worked
- 5 Production measure, 2009/10 base
- 6 Expenditure measure

Sources: The Treasury, Stats NZ

Most economic variables are close to their assumed long-run trend growth rates or levels by the end of the forecast. If they differ from this assumption by the final forecast year, then they are transitioned to attain it over the early projected years. The annual convergence rate assumed is based on recent actual and forecast performance. Table 2 reports the five economic variables for which stable assumptions are made and the projected year in which they attain these in the PREFU 2023 Fiscal Strategy Model.

Table 2 – Economic variables with long-run stable assumptions and year of attainment

Economic variable	Stable assumption	End-of-forecast value	Attained in projected year
Unemployment rate	4.25%	4.65%	2029/30
Average weekly hours worked	33.70	33.71	2027/28
Labour productivity annual growth	1.0%	1.3%	2029/30
Consumers Price Index (CPI) annual growth (inflation measure)	2.0%	2.0%	2027/28
Government 10-year bond annual return rate	4.3%	4.3%	2027/28

Source: The Treasury

Projected real gross domestic product (GDP) grows from its forecast base via the annual combined change in the size of the employed labour force, the average hours they work and their productivity. Once the latter two variables, as well as the unemployment rate, stabilise in projected years the only variation in projected real GDP arises from that of the labour force. Statistics New Zealand’s population and labour force projections are used in projecting out the labour force’s size and annual growth.

Growth in nominal GDP in each projected year is achieved by adding inflation, as measured by the Consumers Price Index (CPI), to the real GDP growth. The long-run stable assumption for CPI inflation of 2 per cent per year matches the midpoint of the band set in the remit for the Reserve Bank of New Zealand’s Monetary Policy Committee. Nominal GDP growth is used to project many fiscal variables, including tax revenue. It is also the denominator for most major fiscal indicators, such as net debt to GDP.

Fiscal projections and assumptions

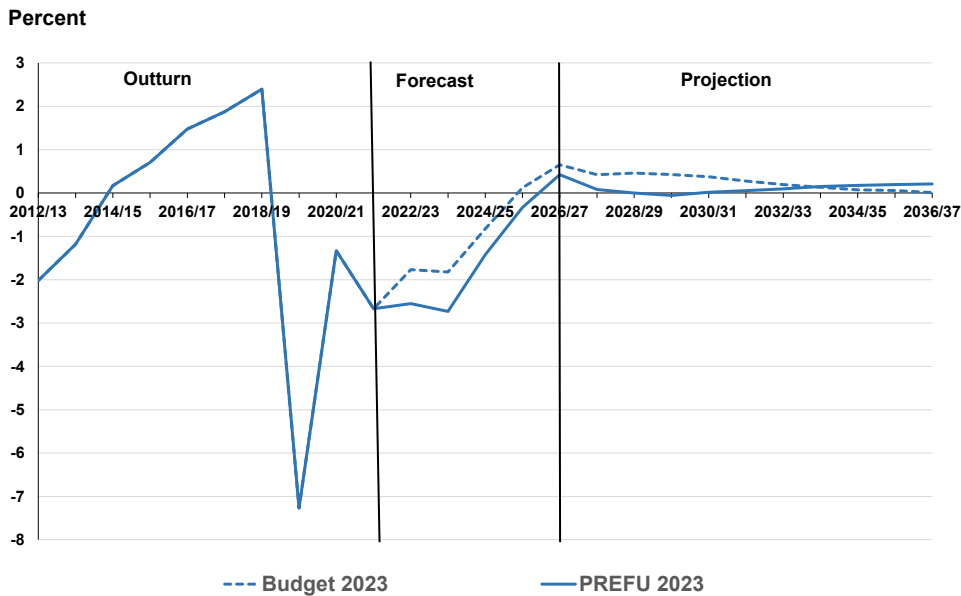
Fiscal projections have changed from those published as part of the *Budget Economic and Fiscal Update 2023* (BEFU) version of the Fiscal Strategy Model. This reflects changes in the economic and fiscal forecast bases of the projections, as well as some changes in assumptions and modelling logic.

The key fiscal indicator of financial performance, the total Crown operating balance before gains and losses (OBEGAL), is lower as a percentage of nominal GDP than it is in the BEFU 2023 track over the forecast years and the first six projected years. However, as is shown in Chart 1 below, the gap between the two tracks declines beyond the third projected year until, in 2033/34, they cross over. Beyond this the PREFU OBEGAL track continues rising above the BEFU version.

Revenue is lower over most forecast and projected years than it was at BEFU, mainly because tax revenue is lower in all years. That is one reason why the PREFU OBEGAL track is weaker than the BEFU one over the forecast years and the first half of the decade of projections. The other contributing factor is that expenses are higher at PREFU over the forecast years and in the projections up until 2031/32. Beyond that year the reduced operating allowances, beginning at \$3 billion per annum and growing at 2% per year rather than the \$3.5 billion starting value used at BEFU, result in total Crown expenses being lower at PREFU in the second half of the projections. The reduction in expenses between PREFU and BEFU is bigger than the one in revenue from 2033/34 onwards, which is why the

PREFU OBEGAL track lifts above the BEFU one in this year. As the difference in expenses between the two forecast rounds continues to grow in later years, while the difference in revenue stays relatively constant, the OBEGAL tracks move further apart.

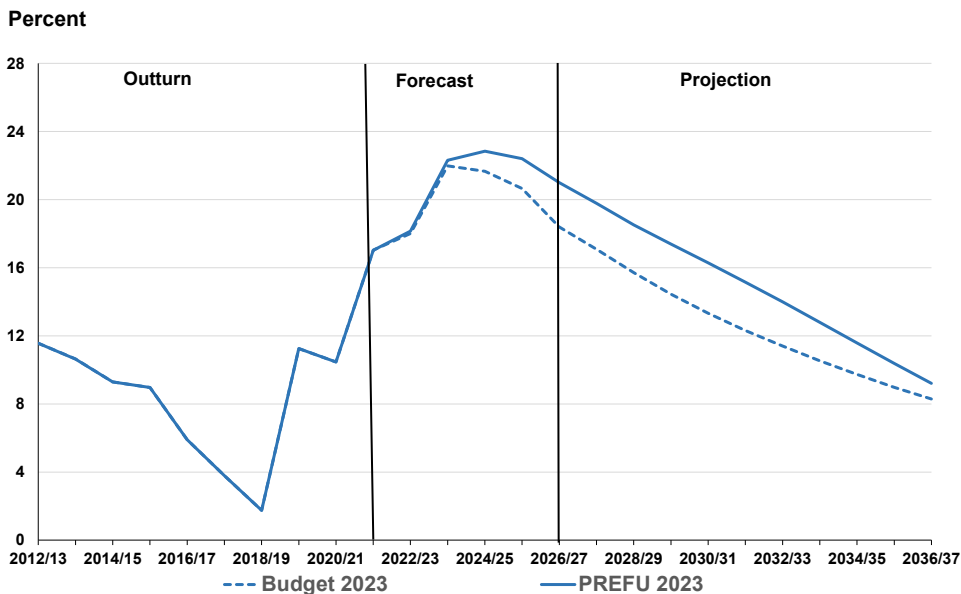
Chart 1 – OBEGAL as a percentage of nominal GDP, PREFU and BEFU



Despite a reduced revenue outlook and higher expenses over the forecast years and first half of the projections, the Government’s long-term fiscal objectives are still being met in the PREFU forecasts and projections. These objectives are to **maintain an average OBEGAL surplus in the range of 0% to 2% of GDP** once an OBEGAL surplus has been returned and subject to economic and fiscal conditions, and to **maintain net debt below 30% of GDP**, subject to significant shocks.

Over the years 2026/27, when OBEGAL is first forecast to return to surplus, until the final year of the projections, 2036/37, OBEGAL moves into deficit only in a single year (-0.1% of GDP in 2029/30) and averages 0.1% of GDP over this period.

Chart 2 – Net debt as a percentage of nominal GDP, PREFU and BEFU



Net debt peaks at 22.8% of GDP in the forecast year 2024/25, and then reduces in all later years, reducing to 9.2% of GDP by 2036/37. As is illustrated in Chart 2, OBEGAL being lower over forecast years and the first half of projections causes the PREFU net debt to GDP track to lift above the BEFU track, although the gap between them reduces over the second half of the projections.

Table 3 reports the fiscal projections from the updated Fiscal Strategy Model, projecting onward from the fiscal forecasts for 2022/23 to 2026/27.

Table 3 – Summary of fiscal projections, as percentages of nominal GDP

Year ending 30 June	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2037
	Forecasts					Projections						
Core Crown revenue	31.2	32.2	32.4	32.8	32.7	32.5	32.2	32.0	31.9	31.8	...	31.4
Core Crown expenses	32.5	33.5	32.7	32.2	31.4	31.5	31.3	31.2	31.1	31.0	...	30.6
Core Crown residual cash	-6.5	-6.1	-0.8	-0.1	-1.0	-0.9	-0.8	-0.9	-0.8	-0.7	...	-0.4
Total Crown revenue	38.7	39.9	39.9	40.2	40.0	39.8	39.5	39.3	39.3	39.2	...	38.8
Total Crown expenses	41.1	42.5	41.2	40.5	39.5	39.6	39.5	39.3	39.2	39.1	...	38.5
Total Crown OBEGAL ¹	-2.5	-2.7	-1.4	-0.3	0.4	0.1	0.0	-0.1	0.0	0.1	...	0.2
Total Crown operating balance ²	1.3	-1.8	0.0	1.1	1.8	1.5	1.5	1.4	1.6	1.6	...	1.9
Net debt ³	18.1	22.3	22.8	22.4	21.0	19.8	18.5	17.4	16.3	15.2	...	9.2
Net core Crown debt ⁴	39.5	43.6	42.4	40.4	39.6	38.7	37.9	37.1	36.5	35.8	...	31.8
Gross debt (core Crown)	35.9	39.8	43.6	44.8	45.8	45.9	46.0	45.7	44.7	43.6	...	38.3
Total Crown net worth	48.6	44.2	42.1	40.8	40.6	40.3	40.1	39.9	39.9	40.0	...	41.8
Net worth attributable to the Crown ⁵	46.6	42.2	40.2	39.1	38.9	38.6	38.4	38.2	38.2	38.3	...	40.0

Notes:

- 1 Operating balance before gains/(losses)
- 2 Excludes minority interests
- 3 Includes Crown entity borrowings and financial assets of the New Zealand Superannuation Fund (NZSF) and core Crown advances
- 4 Excludes financial assets of the NZSF and core Crown advances and excludes Crown entity borrowings
- 5 Excludes assets and liabilities belonging to minority interests

The assumptions underpinning the projections are reported in Table 4.

Table 4 – Summary of fiscal assumptions

Tax revenue	<p>Linked to growth in nominal GDP. Each of the six major tax types, as well as the inter-segment elimination between core Crown and total Crown tax, moves from its end-of-forecast percentage of GDP towards a stable percentage of GDP, based on the average for the tax type over the five forecast years and the previous four outturn (historical) years. A transition rate of 0.05 percentage points of GDP is used for all of the tax types.</p> <p>The category <i>Remaining tax types</i> includes excise equivalent revenue from imported cigarettes and other tobacco products. As significant decreases are expected in import volumes of these products over the initial years of projections a negative adjustment of 0.4 percentage points of GDP is made to the stable percentage. Because this average value is based on a period with higher import volumes this adjustment reflects this expected declining trend.</p>
New Zealand Superannuation (NZS)	<p>Demographically adjusted and linked to net wage growth, via the “wage floor.” The latter refers to the net (after-tax) weekly NZS rate for a couple as set in legislation to lie between 66 per cent and 72.5 per cent of net (after tax) average ordinary time weekly earnings (AOTWE).</p>
Jobseeker Support, Supported Living Payment and Sole Parent Support	<p>The three main working-age benefits are grown via demographic adjustment of recipient numbers and annual growth in the net AOTWE for payment rate indexation. For Jobseeker Support, which is the most sensitive in terms of recipient numbers to economic conditions, modelling is incorporated to reduce or increase recipient growth in early projected years if recipient numbers are considered to be unusually high or low at the end of the forecast period.</p>
Other transfers	<p>There are five transfer types, including Accommodation Assistance and Working for Families tax credits, which are projected in the same way as tax revenue types. A transition rate of 0.05 percentage points of GDP is applied for each of the transfer categories.</p>
Climate Emergency Response Fund (CERF) expenses	<p>Projected CERF operating expenses of \$482 million per year and capital expenses of \$54 million per year in total match the \$536 million per year in projected cash proceeds from auctions of Emissions Trading Scheme units.</p>
Other expenditure	<p>Most expense categories, such as health, education, core government services, etc, are held constant in projected years at their end-of-forecast values. This is because their growth is assumed to come from a share of the projected Operating Allowance annual increment. A notable exception is transport expenditure, which is funded from hypothecated transport taxes and hence is projected in line with that tax type’s growth. A few small components of expenses, like Student allowances in Education, are projected by some form of growth driver, rather than kept constant, because they are not funded from the Operating Allowances.</p>
Finance costs	<p>A function of debt levels and interest rates.</p>
Operating allowance	<p>\$3.0 billion in 2027/28. Operating Allowances continue to grow at 2 per cent per year from this value in later projected years.</p>
Capital allowance	<p>\$7.0 billion in 2027/28. Capital Allowances continue to grow at 2 per cent per year from this value in later projected years.</p>
National Resilience Plan (NRP)	<p>Operating expenditure related to the NRP of \$286 million per year continues for one year into the projections while NRP capital expenditure continues for six years into projections at \$247 million per year.</p>
New Zealand Superannuation Fund (NZSF)	<p>Contributions to the NZSF follow the legislated formula and are calculated by the Treasury’s NZSF model using PREFU 2023 economic and fiscal forecast inputs, in particular nominal GDP and aggregate net NZS expenses.</p>