TE TAI ŌHANGA
THE TREASURY

Pre-election Economic and Fiscal Update 2020 Medium-term Projection Assumptions

16 September 2020

The economic and fiscal forecasts, from 2019/20 to 2023/24, are detailed in the 2020 *Pre-election Economic and Fiscal Update* (PREFU). The projection period begins in 2024/25 and extends a decade to 2033/34. These post-forecast fiscal projections are based on the long-run technical and policy assumptions outlined below.

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

Economic projections and assumptions

Table 1 – Summary of economic projections[1]

Year ending 30 June	2020	2021	2022	2023	2024	2025	2026	2027	2028	....	2034
	Forecasts					Projections					
Labour force	1.3	0.1	1.8	1.7	1.8	1.3	1.2	1.1	1.1	...	0.6
Unemployment rate[2]	4.1	7.2	7.8	7.0	5.7	5.4	5.1	4.8	4.5	...	4.3
Average weekly hours worked	33.1	33.2	33.3	33.4	33.4	33.5	33.5	33.6	33.7	...	33.7
Labour productivity growth[3]	-1.8	2.5	2.1	1.2	0.8	1.0	1.2	1.2	1.2	...	1.2
Real GDP[4]	-3.1	-0.5	3.6	3.9	4.1	2.8	2.9	2.9	2.8	...	1.8
Nominal GDP[5]	-0.4	0.2	5.8	6.3	6.8	4.9	5.0	4.9	4.8	...	3.9
Consumers Price Index (CPI) (annual percentage change)	1.5	1.2	1.2	1.4	1.8	2.0	2.0	2.0	2.0	...	2.0
Government 10-year bonds (average percentage rate)	1.2	0.7	1.0	1.5	1.8	2.0	2.2	2.4	2.6	...	3.6
Nominal average hourly wage	3.6	1.6	2.1	2.5	2.8	3.0	3.2	3.2	3.2	...	3.2

Notes:

1 Annual average percentage change unless otherwise stated

2 Total unemployed as a percentage of the labour force (annual average)

3 Hours worked measure

4 Production measure, 2009/10 base

5 Expenditure measure

Sources: The Treasury, Statistics New Zealand

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 trend 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.

While most economic variables are at, or very close to, their assumed long-run trend growth rates or levels by the end of the forecast, a few require transition over the early years of projections. In these cases, the annual convergence rate assumed is based on recent actual and forecast performance.

In the early years of *Pre-election Update* 2020 projections, several economic variables that are still influenced by the impacts of the COVID-19 pandemic, like the unemployment rate and average weekly hours worked, are transitioned back to long-run stable assumptions. Once these are attained the economy is assumed to grow at trend growth rates with no economic cycles in the projections.

Other economic variables reach their long-run assumed rates or levels within the first three projected years, such as CPI growth, annual labour productivity growth, and nominal average hourly wage growth.

The government 10-year bond annual rate of return rises gradually over the entire decade of projections, reaching 3.6% by 2033/34. This is driven by assumed movement towards the current long-run stable projection assumption of 5.0%. However, as the annual rate of return in the final forecast year is only 1.8%, the rate does not reach the long-run level within the projection period. The long-run assumption of 5% will be reviewed in the near future, as both actual and forecast interest rates have reduced in recent years.

Projected real 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.

Growth in nominal GDP in each projected year is achieved by adding CPI-based inflation to the real GDP growth. The long-run stable assumption for CPI inflation is 2 per cent per year, which matches the midpoint of the band set in remit for the 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 core Crown debt to GDP.

Fiscal projections and assumptions

Table 2 – Summary of fiscal projections, as percentages of nominal GDP

Year ended 30 June	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Forecasts					Projections									
Core Crown revenue	30.4	30.1	28.4	29.2	29.1	29.5	29.9	30.2	30.4	30.5	30.5	30.6	30.6	30.7	30.7
Core Crown expenses	36.0	39.4	34.3	32.8	31.9	31.1	30.9	30.7	30.5	30.3	30.2	30.2	30.2	30.2	30.2
Core Crown residual cash	-7.8	-13.5	-8.9	-6.5	-5.2	-3.6	-3.0	-2.3	-1.7	-1.4	-1.1	-1.1	-0.9	-0.8	-0.7
Total Crown revenue	38.3	37.3	35.6	36.6	36.3	36.7	37.1	37.5	37.7	37.7	37.8	37.9	37.9	38.0	38.0
Total Crown expenses	46.0	47.7	42.4	40.6	39.6	38.8	38.6	38.4	38.3	38.1	38.1	38.2	38.2	38.3	38.4
Total Crown OBEGAL[1]	-7.7	-10.5	-6.9	-4.2	-3.4	-2.1	-1.6	-1.1	-0.7	-0.5	-0.4	-0.5	-0.4	-0.4	-0.5
Total Crown operating balance[2]	-10.0	-11.6	-6.3	-2.9	-2.1	-1.1	-0.5	0.0	0.4	0.7	0.8	0.8	0.9	0.9	0.9
Core Crown GSID[3]	41.1	59.0	65.2	67.4	67.8	69.1	69.7	69.5	68.7	67.6	66.5	65.4	64.3	63.1	61.9
Net core Crown debt[4]	27.6	43.0	49.9	53.5	55.3	56.2	56.3	55.9	54.9	53.7	52.6	51.5	50.4	49.2	48.0
Total Crown net worth	38.3	26.6	18.9	14.9	12.0	10.3	9.3	8.9	8.9	9.2	9.7	10.1	10.6	11.1	11.6
Net worth attributable to the Crown[5]	36.4	24.8	17.2	13.3	10.4	8.7	7.8	7.4	7.5	7.8	8.3	8.7	9.3	9.8	10.3

Notes:

1 Operating balance before gains/(losses)

2 Excludes minority interests

3 Gross sovereign-issued debt

4 Excludes financial assets of the NZS Fund and core Crown advances

5 Excludes assets and liabilities belonging to minority interests

Source: The Treasury

Fiscal projections have changed from those published as part of the 2020 *Budget Economic and Fiscal Update* (BEFU) and this reflects changes in the economic and fiscal forecast bases of the projections.

Table 3 – Summary of fiscal assumptions

Tax revenue	Linked to growth in nominal GDP. All tax categories change at a rate of 0.1 percentage points of GDP per annum from their end-of-forecast percentage of GDP, either upward or downward, until they reach a long-run stable percentage of GDP. These stable assumptions are based on historical data, taking into account tax rate and policy changes that could affect them. • Source deductions (mainly PAYE tax on salary and wages) track towards a stable percentage to nominal GDP of 11.4 per cent. • The stable percentage for corporate tax (dominated by company tax) is 4.5 per cent. • The assumption for goods and services tax (GST) is 7.3 per cent. • Hypothecated transport taxes, used to fund most transport-related operating and capital expenditure, stabilise at 1.2 per cent of GDP. • All remaining tax types are aggregated into the other taxes category, which uses a long-run stable assumption of 3.6 per cent of GDP. The elimination from core Crown tax to total Crown tax applies a long-run stable assumption of 0.3 per cent of GDP.
New Zealand Superannuation (NZS)	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 65 per cent and 72.5 per cent of net average weekly earnings.
Jobseeker Support, Supported Living Payment and Sole Parent Support	These three main working-age benefits are grown via demographic adjustment of recipient numbers and net average wage growth for payment rate indexation. 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.
Other benefits	Demographically adjusted and linked to inflation for payment rate indexation. 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.
Health and education	Held constant at the end-of-forecast values, because their growth is assumed to come from a share of the projected Operating Allowance annual increment.
Other expenditure	Held constant at the end-of-forecast values, because their growth is assumed to come from a share of the projected Operating Allowance annual increment.
Finance costs	A function of debt levels and interest rates.
Operating allowance	$2.1 billion in 2024/25. Operating Allowances continue to grow at 2 per cent per annum from this value in later projected years.
Capital allowance	$3 billion in 2024/25. Capital Allowances continue to grow at 2 per cent per annum from this value in later projected years.
NZS Fund	Contributions to the Fund follow the Government's planned track until 2021/22, after which they revert to values determined by the legislated formula and calculated by the Treasury's NZSF model using the latest economic and fiscal forecast inputs.