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THE TREASURY

# Budget Economic and Fiscal Update 2025 Projections

## Budget Economic and Fiscal Update 2025 of the Fiscal Strategy Model (FSM)

22 May 2025

This version of the Fiscal Strategy Model uses economic and fiscal forecasts prepared for the *Budget Economic and Fiscal Update 2025* (BEFU 2025). The projection period begins in 2029/30 and extends a decade out to 2038/39. These post-forecast fiscal projections are based on the long-run technical and policy assumptions outlined in this note.

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

Most economic variables which are assumed to eventually settle at a stable growth rate or level in the projected years are close to these assumed values by the final forecast year. If they differ from their stable assumption in this last 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. Most of the economic variables that are modelled in this manner reach their stable growth rate or level within the first three years of the projections.

The main exception to this “stabilise within the first three projected years” modelling logic occurs with labour productivity annual growth. Initially this variable lifts towards 1.0 percent, reaching it midway through the decade-long projection horizon. This rise reflects tax policy changes, of which the full effects are not expected to occur until this post-forecast period. In the second half of the projections labour productivity annual growth gradually returns to its long-run stable assumption of 0.9 percent.

Projected real gross domestic product (GDP) grows from its forecast base via the annual combined change in the employed labour force’s size, the average hours they work and their productivity. Once the latter two and the unemployment rate have all stabilised in projected years the only variation in projected real GDP growth 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.

Nominal GDP is projected by multiplying the real GDP growth by inflation, as measured by the Consumers Price Index (CPI). The stable assumption for CPI inflation of 2 percent 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 is the denominator for most major fiscal indicators, such as net core Crown debt to GDP, and its growth is used to project many fiscal variables, including tax revenue.

***Table 1** – Main economic projections of the BEFU 2025 FSM, with the first year displayed being the last forecast year*

| Fiscal Year | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Real GDP[1] apg[2] | 2.59 | 2.27 | 2.22 | 2.06 | 1.90 | 1.84 | 1.77 | 1.68 | 1.60 | 1.53 | 1.48 |
| Nominal GDP[3] apg | 4.64 | 4.31 | 4.27 | 4.10 | 3.94 | 3.87 | 3.80 | 3.71 | 3.63 | 3.56 | 3.51 |
| Labour force apg | 1.49 | 1.10 | 1.03 | 0.97 | 0.90 | 0.83 | 0.76 | 0.70 | 0.65 | 0.61 | 0.58 |
| Unemployment rate[4] | 4.38 | 4.31 | 4.25 | 4.25 | 4.25 | 4.25 | 4.25 | 4.25 | 4.25 | 4.25 | 4.25 |
| Average weekly hours worked[5] | 33.4 | 33.5 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 |
| Labour productivity apg[6] | 0.87 | 0.90 | 0.93 | 0.96 | 0.99 | 1.00 | 1.00 | 0.97 | 0.94 | 0.91 | 0.90 |
| Consumers Price Index (CPI) inflation | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Government 10-year bond rate | 4.26 | 4.30 | 4.30 | 4.30 | 4.30 | 4.30 | 4.30 | 4.30 | 4.30 | 4.30 | 4.30 |

Notes:

1 Production measure, 2009/10 base
2 Annual percentage growth is abbreviated to apg in this table
3 Expenditure measure
4 Total unemployed as a percentage of the labour force
5 Total hours worked divided by the total employed labour force
6 Average over the four quarters of the fiscal year of annual growth in real GDP divided by total hours worked

Source: The Treasury

## Fiscal projections and assumptions

The FSM's principal purpose is to produce post-forecast fiscal projections, particularly of key fiscal indicators. The main indicator of financial performance is the total Crown operating balance before gains and losses excluding Accident Compensation Corporation (ACC) revenue and expenses, denoted by the acronym OBEGALx. Net core Crown debt excluding the New Zealand Superannuation Fund (NZSF) and advances, usually just referred to as net core Crown debt, is the main indicator for financial position.

Two major fiscal objectives over the projection period are reducing net core Crown debt below 40 percent of GDP and then keeping it within a range of 20 to 40 percent of GDP after that, and maintaining OBEGALx surpluses sufficient to ensure consistency with the debt objective. The projections of the BEFU 2025 FSM for the four main scenarios modelled illustrate whether or not the assumptions underpinning them achieve these key fiscal objectives. All four scenarios differ only in two major ways, which relate to projecting operating expenditure, and two smaller distinctions concerning the size of projected operating and capital allowances.

All of the scenarios project revenue, including tax, in the same manner and the amounts projected in each scenario are identical. This is true of welfare transfers, such as New Zealand Superannuation (NZS), Jobseeker Support and Accommodation Assistance, also. However, some of the projection

assumptions used for some tax revenue and welfare transfer categories have been updated, from those used in the BEFU 2024 version of the FSM, to more accurately reflect historic trends.

The FSM projects six categories of tax revenue. Source deductions and Other personal income tax types are both projected using a combination of aggregate labour force growth and average hourly wage growth. Corporate tax, Goods and Services Tax (GST) and Hypothecated transport taxes are all transitioned to stable percentages of GDP, based on the average for the tax type over the five forecast years and the most recent five outturn or historical years. A transition rate of 0.05 percentage points of GDP per year is used for all three tax types and once each one attains its stable percentage it then grows in line with nominal GDP in later projected years. Remaining tax types is projected using a combination of the growth of the working-age population (everyone aged 15 years and above) and CPI, as the main tax types in this category have their tax rates inflation adjusted.

NZS is projected using the growth of the "65 years and above" age group as its demographic driver and average hourly wage growth as its payment indexation driver. Other welfare transfers use age and gender distributions specific to their recipient groups, which in some cases are based on Ministry of Social Development administrative data, and CPI indexation of payment rates.

A small number of other operating expenses are modelled in the same way, and produce the same projected amounts, in all scenarios. Core Crown Transport and communications expenditure, of which the majority is funded from Hypothecated transport taxes, is projected in line with the growth of this tax type. A few small sub-components of larger expense categories, such as KiwiSaver subsidies and Emissions Trading Scheme expenses, are projected using some form of modelled growth specific to them. This is because, unlike the other components of their expense category in Scenario One and Scenario Two, they are not assumed to be funded from the operating allowances.

Interest expenses, or finance costs, are projected as a function of debt levels and interest rates in all scenarios. However, the amounts projected differ amongst the scenarios due to different expenditure projections affecting the debt levels that strongly influence these interest expenses.

Projections of all asset categories not controlled by capital allowances are identical for all scenarios. All of them apply the same modelling logic for all liability categories, although different assumptions for operating expenditure growth and capital allowance amounts do produce very different profiles for borrowings projections, which in turn affect projections of the net core Crown debt fiscal indicator.

Scenario One and Scenario Two continue the Budget process used in forecasting years of controlling most categories of operating expenditure, other than welfare transfers, interest costs and a few exceptions listed earlier, using set operating allowances in projected years. These scenarios differ only in the starting projected amounts used for both operating and capital allowances.

Recent versions of the FSM have applied 2 percent annual growth to the amounts assumed in the first projected year, for both operating and capital allowances, in later years. This was effectively a proxy for CPI inflation. Scenario One and Scenario Two apply 3 percent annual growth to both operating and capital allowances in projected years, and Scenario Three and Scenario Four use this growth rate for capital allowances. Using these higher growth rates is consistent with evidence that the cost of delivering public services and capital investment increases faster than general inflation.

In scenarios, like Scenario One and Scenario Two, that control the growth of most categories of operating expenditure via projected operating allowances, the expense types that are expected to derive their growth in this way are just left at their end-of-forecast levels. This is because they are not intended to be an accurate representation of the expense type in these years, but rather just to contribute to the overall category of core Crown expenses and fiscal indicators like OBEGALx. As their growth is already captured by the projected operating allowance, it would lead to double counting if it were also built into the actual expense type's projection.

Scenario Three and Scenario Four project the operating expenditure that is controlled by operating allowances in forecast years via a "bottom-up" process. The modelling applied is very similar to that used in the Long-Term Fiscal Model (LTFM) that is used to produce fiscal projections shown in the Long-Term Fiscal Statement. These scenarios, unlike those of the LTFM, still use capital allowances to control the growth of some asset categories in projected years and Scenario Three and Scenario Four differ only in the starting projected amounts that they use for the capital allowances.

Bottom-up operating expense projections are done in two ways, depending on the expense category projected. For health and education, where the expense per person can differ depending on age and possibly gender too, a combination of demographic and economic variables is used. These reflect both their historical growth and, particularly in regard to New Zealand's ageing population structure, their potential future growth under existing policy settings.

For other types of expenditure, such as primary services or defence, where it is not feasible to differentiate the spending among different age or gender groups, the expense category is transitioned to a stable level of nominal GDP, based on its recent history. Once this percentage of GDP is attained the expense category just grows in line with GDP in later years.

For more detailed information about bottom-up modelling for different expenditure categories see: Demographic, Economic and Fiscal Assumptions and Logic in the 2021 Long-term Fiscal Model

***Table 2** – Main fiscal projections of the BEFU 2025 FSM, with first year displayed being the last forecast year, and all values in terms of the fiscal variable as a percentage of nominal GDP*

| **Fiscal Year** | **2029** | **2030** | **2031** | **2032** | **2033** | **2034** | **2035** | **2036** | **2037** | **2038** | **2039** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OBEGALx[1] | | | | | | | | | | | |
| Scenario One | 0.04 | 0.25 | 0.61 | 0.92 | 1.19 | 1.46 | 1.73 | 1.98 | 2.21 | 2.42 | 2.65 |
| Scenario Two | 0.04 | 0.03 | 0.15 | 0.23 | 0.27 | 0.30 | 0.34 | 0.36 | 0.35 | 0.33 | 0.32 |
| Scenario Three | 0.04 | -0.25 | -0.33 | -0.45 | -0.59 | -0.70 | -0.81 | -0.90 | -1.00 | -1.11 | -1.21 |
| Scenario Four | 0.04 | -0.26 | -0.37 | -0.52 | -0.68 | -0.82 | -0.95 | -1.07 | -1.20 | -1.34 | -1.46 |
| Net core Crown debt | | | | | | | | | | | |
| Scenario One | 45.5 | 44.3 | 42.8 | 41.2 | 39.4 | 37.5 | 35.4 | 33.1 | 30.8 | 28.3 | 25.7 |
| Scenario Two | 45.5 | 45.1 | 44.7 | 44.3 | 43.9 | 43.5 | 43.2 | 42.9 | 42.6 | 42.4 | 42.2 |
| Scenario Three | 45.5 | 44.8 | 44.3 | 43.9 | 43.8 | 43.9 | 44.1 | 44.4 | 44.8 | 45.4 | 46.1 |
| Scenario Four | 45.5 | 45.4 | 45.5 | 45.8 | 46.3 | 47.0 | 47.8 | 48.7 | 49.8 | 51.0 | 52.4 |
| Core Crown revenue[2] | 31.0 | 30.8 | 30.8 | 30.7 | 30.7 | 30.6 | 30.6 | 30.6 | 30.5 | 30.5 | 30.5 |
| Core Crown expenses | | | | | | | | | | | |
| Scenario One | 30.9 | 30.6 | 30.2 | 29.9 | 29.6 | 29.4 | 29.1 | 28.9 | 28.7 | 28.5 | 28.3 |
| Scenario Two | 30.9 | 30.8 | 30.6 | 30.6 | 30.6 | 30.5 | 30.5 | 30.5 | 30.6 | 30.6 | 30.6 |
| Scenario Three | 30.9 | 31.1 | 31.1 | 31.3 | 31.4 | 31.5 | 31.7 | 31.8 | 31.9 | 32.0 | 32.1 |
| Scenario Four | 30.9 | 31.1 | 31.2 | 31.3 | 31.5 | 31.7 | 31.8 | 32.0 | 32.1 | 32.3 | 32.4 |

Notes:

1 Total Crown operating balance before gains and losses excluding ACC revenue and expenses

2 Core Crown revenue is identical for all four scenarios

Source: The Treasury