# Half Year Economic and Fiscal Update 2015 Additional Information

The following information forms part of the *Half Year Economic and Fiscal Update 2015 (Half Year Update)* released by the Treasury on 15 December 2015. This information provides further details on the *Half Year Update* and should be read in conjunction with the published document. The additional information includes:

- **Detailed economic forecast information** – tables providing breakdowns of the economic forecasts.
- **Treasury and Inland Revenue tax forecasts** – detailed tax revenue and receipts tables comparing Treasury's forecasts with IR's forecasts.
- **Tax Policy changes –** details of material changes to tax revenue since the *Budget Update* as a result of policy initiatives.
- **Additional fiscal indicators** – estimates of the cyclically-adjusted balance and fiscal impulse.
- **Government Finance Statistics (GFS) for central government** – fiscal tables presented under a GFS presentation framework to help with cross-country comparisons.
- **Accounting policies** – outline of the specific Crown accounting policies.

# Detailed Economic Forecast Information

This section includes tables with additional detail on the economic forecasts in the Half Year Update.

The economic numbers and forecasts in this section were finalised on 20 November 2015.

***Table 1*** – Real Gross Domestic Product

Production based chain volume series expressed in 2009/10 prices

Seasonally adjusted

| | $ million | Quarterly % change | Annual % change | Annual average % change |
|---|---|---|---|---|
| 2013Q1 | 51,454 | 0.1 | 1.9 | 2.2 |
| 2013Q2 | 51,682 | 0.4 | 2.1 | 2.1 |
| 2013Q3 | 52,239 | 1.1 | 2.9 | 2.4 |
| 2013Q4 | 52,497 | 0.5 | 2.1 | 2.3 |
| 2014Q1 | 53,049 | 1.1 | 3.1 | 2.5 |
| 2014Q2 | 53,454 | 0.8 | 3.4 | 2.9 |
| 2014Q3 | 53,935 | 0.9 | 3.2 | 3.0 |
| 2014Q4 | 54,352 | 0.8 | 3.5 | 3.3 |
| 2015Q1 | 54,479 | 0.2 | 2.7 | 3.2 |
| 2015Q2 | 54,712 | 0.4 | 2.4 | 3.0 |
| 2015Q3 | 55,040 | 0.6 | 2.0 | 2.7 |
| 2015Q4 | 55,371 | 0.6 | 1.9 | 2.2 |
| 2016Q1 | 55,651 | 0.5 | 2.2 | 2.1 |
| 2016Q2 | 55,965 | 0.6 | 2.3 | 2.1 |
| 2016Q3 | 56,258 | 0.5 | 2.2 | 2.1 |
| 2016Q4 | 56,691 | 0.8 | 2.4 | 2.3 |
| 2017Q1 | 57,156 | 0.8 | 2.7 | 2.4 |
| 2017Q2 | 57,678 | 0.9 | 3.1 | 2.6 |
| 2017Q3 | 58,283 | 1.0 | 3.6 | 2.9 |
| 2017Q4 | 58,873 | 1.0 | 3.8 | 3.3 |
| 2018Q1 | 59,357 | 0.8 | 3.9 | 3.6 |
| 2018Q2 | 59,799 | 0.7 | 3.7 | 3.7 |
| 2018Q3 | 60,104 | 0.5 | 3.1 | 3.6 |
| 2018Q4 | 60,470 | 0.6 | 2.7 | 3.3 |
| 2019Q1 | 60,831 | 0.6 | 2.5 | 3.0 |
| 2019Q2 | 61,176 | 0.6 | 2.3 | 2.7 |
| 2019Q3 | 61,492 | 0.5 | 2.3 | 2.5 |
| 2019Q4 | 61,796 | 0.5 | 2.2 | 2.3 |
| 2020Q1 | 62,080 | 0.5 | 2.1 | 2.2 |
| 2020Q2 | 62,365 | 0.5 | 1.9 | 2.1 |

Source: Statistics New Zealand, the Treasury

***Table 2*** – Consumers Price Index and Exchange Rates

| | Consumers Price Index | | | Exchange rates | |
|---|---|---|---|---|---|
| | Index | Quarterly % change | Annual % change | TWI | USD |
| 2013Q1 | 1174 | 0.4 | 0.9 | 75.9 | 0.83 |
| 2013Q2 | 1176 | 0.2 | 0.7 | 76.3 | 0.82 |
| 2013Q3 | 1187 | 0.9 | 1.4 | 76.0 | 0.80 |
| 2013Q4 | 1188 | 0.1 | 1.6 | 78.2 | 0.83 |
| 2014Q1 | 1192 | 0.3 | 1.5 | 80.0 | 0.84 |
| 2014Q2 | 1195 | 0.3 | 1.6 | 81.5 | 0.86 |
| 2014Q3 | 1199 | 0.3 | 1.0 | 80.1 | 0.84 |
| 2014Q4 | 1197 | -0.2 | 0.8 | 77.5 | 0.78 |
| 2015Q1 | 1195 | -0.2 | 0.3 | 77.9 | 0.75 |
| 2015Q2 | 1200 | 0.4 | 0.4 | 76.2 | 0.73 |
| 2015Q3 | 1204 | 0.3 | 0.4 | 69.8 | 0.65 |
| 2015Q4 | 1205 | 0.1 | 0.7 | 71.0 | 0.66 |
| 2016Q1 | 1212 | 0.6 | 1.4 | 68.5 | 0.62 |
| 2016Q2 | 1221 | 0.7 | 1.7 | 67.5 | 0.61 |
| 2016Q3 | 1227 | 0.6 | 1.9 | 67.0 | 0.60 |
| 2016Q4 | 1231 | 0.3 | 2.1 | 66.0 | 0.59 |
| 2017Q1 | 1237 | 0.5 | 2.1 | 66.4 | 0.60 |
| 2017Q2 | 1243 | 0.5 | 1.9 | 66.8 | 0.60 |
| 2017Q3 | 1252 | 0.7 | 2.0 | 67.2 | 0.61 |
| 2017Q4 | 1254 | 0.1 | 1.9 | 67.6 | 0.62 |
| 2018Q1 | 1260 | 0.5 | 1.9 | 68.0 | 0.63 |
| 2018Q2 | 1268 | 0.6 | 1.9 | 68.5 | 0.63 |
| 2018Q3 | 1277 | 0.8 | 2.0 | 68.8 | 0.64 |
| 2018Q4 | 1280 | 0.2 | 2.1 | 69.1 | 0.65 |
| 2019Q1 | 1287 | 0.6 | 2.1 | 69.3 | 0.65 |
| 2019Q2 | 1295 | 0.6 | 2.1 | 69.4 | 0.65 |
| 2019Q3 | 1305 | 0.8 | 2.2 | 69.5 | 0.65 |
| 2019Q4 | 1308 | 0.2 | 2.2 | 69.4 | 0.65 |
| 2020Q1 | 1316 | 0.6 | 2.2 | 69.2 | 0.65 |
| 2020Q2 | 1324 | 0.6 | 2.3 | 68.9 | 0.66 |

Source: RBNZ, Statistics New Zealand, the Treasury

***Table 3*** – Expenditure on Gross Domestic Product and Gross Domestic Product (income) in current prices

| Year ended March | 2015 | | | 2016 | | | 2017 | | | 2018 | | | 2019 | | | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Actual | | | Forecast | | | Forecast | | | Forecast | | | Forecast | | | Forecast |
| | $million | %volume | %price | $million | %volume | %price | $million | %volume | %price | $million | %volume | %price | $million | %volume | %price | $million |
| Consumption: | | | | | | | | | | | | | | | | |
| - *Private* | 135,830 | 2.7 | 0.9 | 140,735 | 2.3 | 2.0 | 146,986 | 2.3 | 1.5 | 152,692 | 2.5 | 1.6 | 158,932 | 2.1 | 1.7 | 165,135 |
| - *Public* | 45,176 | 2.7 | 1.0 | 46,872 | 1.0 | 1.1 | 47,885 | 1.9 | 2.2 | 49,892 | 1.9 | 2.4 | 52,054 | 0.9 | 2.4 | 53,798 |
| Gross Fixed Capital Formation: | | | | | | | | | | | | | | | | |
| - *Residential* | 15,812 | 5.9 | 5.5 | 17,673 | 6.7 | 4.8 | 19,766 | 4.9 | 3.1 | 21,367 | 2.8 | 3.0 | 22,628 | 1.4 | 3.4 | 23,725 |
| - *Market ** | 35,626 | 3.5 | 1.4 | 37,395 | 3.4 | -1.0 | 38,281 | 4.2 | -0.6 | 39,645 | 6.3 | 0.3 | 42,265 | 3.3 | 0.7 | 43,979 |
| - *Non-market *** | 3,301 | 10.7 | 1.4 | 3,708 | 8.0 | 2.4 | 4,104 | 3.0 | 2.4 | 4,327 | -9.5 | 2.4 | 4,009 | -0.8 | 2.4 | 4,075 |
| - *Total all sectors* | 54,855 | 3.6 | 2.2 | 58,039 | 4.6 | 1.9 | 61,839 | 4.4 | 1.0 | 65,212 | 4.4 | 1.1 | 68,850 | 2.6 | 1.6 | 71,757 |
| Change in Stocks | 688 | | | 918 | | | 327 | | | 740 | | | 1,312 | | | 2,325 |
| Gross National Expenditure | 236,547 | 2.8 | 1.5 | 246,608 | 2.6 | 1.6 | 257,037 | 2.9 | 1.5 | 268,536 | 3.0 | 1.6 | 281,148 | 2.4 | 1.8 | 293,015 |
| Exports | 67,263 | 2.9 | 0.7 | 69,709 | 0.1 | 5.5 | 73,641 | 4.3 | 4.3 | 80,161 | 4.2 | 2.4 | 85,523 | 2.8 | 1.2 | 88,925 |
| Imports | 65,747 | 4.1 | 5.3 | 72,062 | 0.7 | 8.7 | 78,860 | 2.2 | 1.4 | 81,717 | 4.2 | -0.4 | 84,774 | 3.2 | 1.0 | 88,384 |
| Expenditure on GDP | 238,216 | 2.1 | 0.5 | 244,557 | 2.4 | 0.5 | 251,823 | 3.6 | 2.3 | 266,981 | 3.0 | 2.5 | 281,897 | 2.2 | 1.9 | 293,556 |
| Statistical Discrepancy | -235 | | | -233 | | | -231 | | | -226 | | | -222 | | | -218 |
| Gross Domestic Product | 237,981 | | | 244,324 | | | 251,592 | | | 266,754 | | | 281,675 | | | 293,339 |
| Compensation of employees | 106,043 | | | 110,452 | | | 113,117 | | | 117,078 | | | 122,698 | | | 128,477 |
| Operating Surplus, net: | | | | | | | | | | | | | | | | |
| - *Agriculture* | 6,563 | | | 5,050 | | | 5,650 | | | 7,094 | | | 8,007 | | | 8,174 |
| - *Other* | 60,930 | | | 61,334 | | | 62,068 | | | 68,472 | | | 73,360 | | | 75,581 |
| - *Total all sectors* | 67,493 | | | 66,385 | | | 67,718 | | | 75,567 | | | 81,367 | | | 83,755 |
| Consumption of fixed capital | 33,430 | | | 35,101 | | | 36,856 | | | 38,699 | | | 40,634 | | | 42,666 |
| Indirect Taxes | 31,885 | | | 33,255 | | | 34,771 | | | 36,280 | | | 37,846 | | | 39,310 |
| Less subsidies | 870 | | | 870 | | | 870 | | | 870 | | | 870 | | | 870 |
| Gross Domestic Product | 237,981 | | | 244,324 | | | 251,592 | | | 266,754 | | | 281,675 | | | 293,339 |

* Includes Local Government and Non-profit Organisations
** Central Government (includes Crown Entities but not SOEs)

Source: Statistics New Zealand, the Treasury

***Table 4*** – Labour Market Indicators

| **Annual Average Percentage Change**<br>**Year ended March** | **2015**<br>Actual | **2016**<br>Forecast | **2017**<br>Forecast | **2018**<br>Forecast | **2019**<br>Forecast | **2020**<br>Forecast |
|---|---|---|---|---|---|---|
| Real GDP (production basis) | 3.2 | 2.1 | 2.4 | 3.6 | 3.0 | 2.2 |
| Working Age Population | 1.9 | 2.3 | 1.9 | 1.2 | 1.1 | 1.0 |
| Labour Force | 2.8 | 1.9 | 1.4 | 1.2 | 1.5 | 1.3 |
| Employment | 3.4 | 1.4 | 1.3 | 1.9 | 2.4 | 1.6 |
| Labour Productivity* | -0.2 | 1.0 | 1.6 | 2.1 | 0.8 | 0.7 |
| CPI (annual percentage change) | 0.3 | 1.4 | 2.1 | 1.9 | 2.1 | 2.2 |
| Average Ordinary Time Hourly Wages | 2.4 | 2.4 | 1.8 | 2.1 | 2.5 | 3.2 |
| Average Weekly Earnings | 2.2 | 2.8 | 1.1 | 1.5 | 2.3 | 3.1 |
| Real Wages | 1.5 | 1.7 | -0.1 | 0.1 | 0.5 | 1.0 |
| Compensation of Employees | 5.9 | 4.2 | 2.4 | 3.5 | 4.8 | 4.7 |
| Unit Labour Costs (Hours worked basis) | 2.6 | 1.4 | 0.2 | -0.1 | 1.7 | 2.4 |
| Real Unit Labour Costs | 1.7 | 0.7 | -1.7 | -2.0 | -0.3 | 0.2 |

* Hours worked basis

| **Number (000's)**<br>**As at March Quarter** | **2015**<br>Actual | **2016**<br>Forecast | **2017**<br>Forecast | **2018**<br>Forecast | **2019**<br>Forecast | **2020**<br>Forecast |
|---|---|---|---|---|---|---|
| Total Population | 4,580 | 4,664 | 4,723 | 4,767 | 4,810 | 4,852 |
| Natural Increase | 28 | 22 | 32 | 32 | 31 | 31 |
| Net Migration | 56 | 62 | 27 | 12 | 12 | 12 |
| Annual Change | 84 | 84 | 59 | 44 | 43 | 43 |
| Working Age Population | 3,594 | 3,677 | 3,733 | 3,774 | 3,814 | 3,854 |
| Annual Change | 73 | 84 | 56 | 41 | 40 | 40 |
| Not in the labour force (s.a.) | 1,095 | 1,153 | 1,177 | 1,184 | 1,183 | 1,196 |
| Annual Change | 1 | 58 | 25 | 6 | -1 | 13 |
| Labour Force (s.a.) | 2,499 | 2,525 | 2,556 | 2,590 | 2,631 | 2,658 |
| Annual Change | 72 | 26 | 31 | 35 | 40 | 27 |
| Total Employment (s.a.) | 2,354 | 2,361 | 2,400 | 2,453 | 2,508 | 2,538 |
| Annual Change | 74 | 7 | 39 | 53 | 55 | 30 |
| Unemployment (s.a.) | 145 | 164 | 156 | 137 | 123 | 120 |
| Annual Change | -1 | 19 | -8 | -18 | -15 | -3 |
| Participation Rate (%, s.a.) | 69.5 | 68.7 | 68.5 | 68.6 | 69.0 | 69.0 |
| Unemployment Rate (%, s.a.) | 5.8 | 6.5 | 6.1 | 5.3 | 4.7 | 4.5 |

Source: Statistics New Zealand, the Treasury
s.a. - seasonally adjusted

## *Table 5* – Exports – SNA basis

**Breakdown of Exports**

| Year ended | Dairy Products | | | Meat and Meat Products | | | Non-Commodity* | | |
|---|---|---|---|---|---|---|---|---|---|
| March | %volume | %price | $million | %volume | %price | $million | %volume | %price | $million |
| **2012** | 9.0 | 0.4 | 12,767 | -5.2 | 10.3 | 5,742 | 5.8 | -0.1 | 14,064 |
| **2013** | 18.5 | -16.5 | 12,589 | 9.9 | -8.9 | 5,734 | -1.9 | -4.8 | 13,124 |
| **2014** | -6.9 | 32.7 | 15,681 | 3.7 | -0.9 | 5,901 | 0.0 | 0.9 | 13,250 |
| **2015** | 7.8 | -14.2 | 14,426 | 1.1 | 10.7 | 6,608 | 5.0 | -6.8 | 12,968 |
| **2016** | -2.5 | -14.8 | 12,017 | 5.6 | 5.2 | 7,343 | -1.7 | 9.0 | 13,876 |
| **2017** | -5.6 | 3.8 | 11,773 | -10.1 | 0.2 | 6,606 | 5.1 | 10.1 | 16,077 |
| **2018** | 9.4 | 8.9 | 14,024 | 0.9 | -0.7 | 6,625 | 7.6 | 2.2 | 17,680 |
| **2019** | 6.8 | 6.0 | 15,873 | 3.8 | -1.8 | 6,752 | 6.2 | 0.6 | 18,883 |
| **2020** | 3.2 | -0.6 | 16,285 | 1.3 | -0.2 | 6,825 | 4.1 | 2.2 | 20,087 |

| Year ended | Total Goods** | | | Services | | | Total Exports | | |
|---|---|---|---|---|---|---|---|---|---|
| March | %volume | %price | $million | %volume | %price | $million | %volume | %price | $million |
| **2012** | 2.6 | 3.3 | 47,964 | 1.3 | 1.7 | 16,739 | 2.2 | 2.9 | 64,704 |
| **2013** | 5.5 | -8.0 | 46,517 | -3.8 | 0.9 | 16,255 | 3.1 | -5.8 | 62,772 |
| **2014** | -0.4 | 8.6 | 50,404 | 0.9 | 1.2 | 16,593 | -0.1 | 6.7 | 66,996 |
| **2015** | 2.7 | -5.0 | 49,118 | 8.1 | 1.2 | 18,146 | 4.2 | -3.5 | 67,263 |
| **2016** | 0.2 | 0.1 | 49,330 | 10.7 | 1.5 | 20,379 | 2.9 | 0.7 | 69,709 |
| **2017** | -1.2 | 5.7 | 51,498 | 2.6 | 5.9 | 22,147 | 0.1 | 5.5 | 73,641 |
| **2018** | 5.1 | 3.7 | 56,127 | 2.7 | 5.7 | 24,039 | 4.3 | 4.3 | 80,161 |
| **2019** | 4.6 | 2.2 | 59,993 | 3.5 | 2.6 | 25,534 | 4.2 | 2.4 | 85,523 |
| **2020** | 2.8 | 0.8 | 62,183 | 2.8 | 1.9 | 26,746 | 2.8 | 1.2 | 88,925 |

* Consists of 'Metal Products and Machinery Equipment', 'Chemicals, Rubber and Other Non-Metallic Goods' and 'Textile, Apparel and Leather'
** Note that Statistics NZ withholds data for some components of exports for confidentiality reasons. As a result we have not published the "Wood and Wood Products' and 'Other Goods' components of exports.
Source: Statistics New Zealand, the Treasury

## *Table 6* – Imports – SNA basis

**Breakdown of Imports**

| Year ended | Capital Goods (Value for Duty) | | | Mineral Fuel* (VFD) | | | Intermediate Goods** (VFD) | | | Consumption Goods (VFD) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| March | %volume | %price | $million | %volume | %price | $million | %volume | %price | $million | %volume | %price | $million |
| **2012** | 14.9 | -6.6 | 7,983 | 5.9 | 19.4 | 8,795 | 5.7 | 1.0 | 17,773 | 5.7 | -2.1 | 11,498 |
| **2013** | 7.3 | -6.3 | 8,041 | -2.8 | 0.3 | 8,537 | 0.6 | -1.6 | 17,581 | 4.1 | -1.4 | 11,798 |
| **2014** | 20.2 | -6.5 | 9,031 | 0.2 | -5.3 | 8,139 | 8.1 | -3.5 | 18,347 | 6.1 | -3.0 | 12,138 |
| **2015** | 22.1 | -5.6 | 10,416 | 0.8 | -14.3 | 7,004 | 6.4 | -1.2 | 19,295 | 8.0 | -1.5 | 12,922 |
| **2016** | 0.7 | 11.6 | 11,706 | 8.6 | -23.4 | 5,857 | 1.3 | 10.5 | 21,598 | 5.6 | 8.3 | 14,783 |
| **2017** | -1.7 | 4.6 | 12,037 | -5.6 | 4.5 | 5,776 | 2.8 | 9.1 | 24,234 | 1.1 | 10.0 | 16,442 |
| **2018** | -0.7 | -2.2 | 11,686 | 2.1 | 6.7 | 6,289 | 3.7 | 0.9 | 25,358 | 3.4 | 1.3 | 17,231 |
| **2019** | 3.9 | -3.2 | 11,749 | 3.3 | 6.2 | 6,899 | 4.9 | -0.6 | 26,445 | 4.9 | -0.8 | 17,925 |
| **2020** | 2.9 | -1.8 | 11,874 | 1.6 | 7.2 | 7,518 | 3.3 | 1.0 | 27,591 | 4.7 | 0.6 | 18,873 |

| Year ended | Total Goods (VFD) | | | Services | | | Total Imports | | |
|---|---|---|---|---|---|---|---|---|---|
| March | %volume | %price | $million | %volume | %price | $million | %volume | %price | $million |
| **2012** | 6.9 | 1.8 | 46,086 | 5.9 | -0.2 | 15,370 | 6.7 | 1.3 | 61,456 |
| **2013** | 2.0 | -2.1 | 46,009 | -0.7 | -0.1 | 15,233 | 1.3 | -1.6 | 61,242 |
| **2014** | 8.5 | -4.4 | 47,709 | 6.9 | -4.2 | 15,591 | 8.1 | -4.4 | 63,300 |
| **2015** | 8.7 | -4.3 | 49,633 | 3.5 | -0.2 | 16,114 | 7.5 | -3.3 | 65,747 |
| **2016** | 4.6 | 4.0 | 53,981 | 1.9 | 10.1 | 18,080 | 4.1 | 5.3 | 72,062 |
| **2017** | 0.2 | 8.0 | 58,391 | 2.0 | 11.0 | 20,469 | 0.7 | 8.7 | 78,860 |
| **2018** | 2.4 | 1.2 | 60,470 | 1.6 | 2.2 | 21,247 | 2.2 | 1.4 | 81,717 |
| **2019** | 4.5 | -0.4 | 62,954 | 3.3 | -0.6 | 21,819 | 4.2 | -0.4 | 84,774 |
| **2020** | 3.4 | 1.1 | 65,833 | 2.4 | 0.9 | 22,550 | 3.2 | 1.0 | 88,384 |

* Consists of 'Fuels and Lubricants' and 'Petrol and Aviation Gas'
** Consists of 'Intermediate Goods' excluding 'Fuels and Lubricants' and 'Passenger Cars'
Source: Statistics New Zealand, the Treasury

Source: Statistics New Zealand, the Treasury

***Table 7*** – Balance of Payments – Current Account

| $ millions<br>**Year ended March** | **2015**<br>Actual | **2016**<br>Forecast | **2017**<br>Forecast | **2018**<br>Forecast | **2019**<br>Forecast | **2020**<br>Forecast |
|---|---|---|---|---|---|---|
| Exports Goods | 49,118 | 49,330 | 51,498 | 56,127 | 59,993 | 62,183 |
| *annual % change* | *-2.6* | *0.4* | *4.4* | *9.0* | *6.9* | *3.7* |
| Imports Goods | 49,633 | 53,981 | 58,391 | 60,470 | 62,954 | 65,833 |
| *annual % change* | *4.0* | *8.8* | *8.2* | *3.6* | *4.1* | *4.6* |
| Balance on Goods | -515 | -4,651 | -6,893 | -4,344 | -2,962 | -3,650 |
| *% of nominal GDP* | *-0.2* | *-1.9* | *-2.7* | *-1.6* | *-1.1* | *-1.2* |
| Exports Services | 18,146 | 20,379 | 22,147 | 24,039 | 25,534 | 26,746 |
| *annual % change* | *9.4* | *12.3* | *8.7* | *8.5* | *6.2* | *4.7* |
| Imports Services | 16,114 | 18,080 | 20,469 | 21,247 | 21,819 | 22,550 |
| *annual % change* | *3.4* | *12.2* | *13.2* | *3.8* | *2.7* | *3.4* |
| Balance on services | 2,032 | 2,299 | 1,678 | 2,792 | 3,714 | 4,196 |
| *% of nominal GDP* | *0.9* | *0.9* | *0.7* | *1.0* | *1.3* | *1.4* |
| Balance on goods & services | 1,517 | -2,352 | -5,215 | -1,552 | 753 | 546 |
| *% of nominal GDP* | *0.6* | *-1.0* | *-2.1* | *-0.6* | *0.3* | *0.2* |
| Primary and secondary income balance | -9,765 | -9,487 | -9,811 | -10,524 | -11,683 | -13,041 |
| *% of nominal GDP* | *-4.1* | *-3.9* | *-3.9* | *-3.9* | *-4.1* | *-4.4* |
| **Current account balance** | **-8,251** | **-11,836** | **-15,027** | **-12,076** | **-10,930** | **-12,495** |
| ***% of nominal GDP*** | ***-3.5*** | ***-4.8*** | ***-6.0*** | ***-4.5*** | ***-3.9*** | ***-4.3*** |

Source: Statistics New Zealand, the Treasury

# Treasury and Inland Revenue Tax Forecasts

In line with established practice, Inland Revenue has also prepared a set of tax forecasts, which, like the Treasury's tax forecasts, were based on the Treasury's macroeconomic forecasts.  The two sets of forecasts differ from each other because of the different modelling approaches used by the two agencies and the various assumptions and judgements made by the forecasting teams in producing their forecasts.

For most tax types, the two agencies' forecasts are very close to each. However, there are two tax types that stand out:

- the Treasury's corporate tax forecast incorporates a larger response to the business cycle than does Inland Revenue's, causing the Treasury's corporate tax forecast to be lower than Inland Revenue's in every year of the forecast period, and
- owing to different forecasting model structure, parameters and assumptions, the Treasury's forecast of withholding tax on resident interest (RWT) grows at a faster rate than Inland Revenue's forecast to be $0.6 billion higher by the end of the forecast period.

In total, the Treasury's tax forecast is initially (2015/16) lower than Inland Revenue's, but grows at a faster rate to be higher than Inland Revenue's by the end of the forecast period (2019/20), mainly as a result of differences in the interest RWT forecasts.

The following two tables detail the respective forecasts by the Treasury and IR for tax revenue and receipts across each of the various sources:

**Table 8** Treasury and Inland Revenue forecasts of tax revenue (accrual)

**Table 9** Treasury and Inland Revenue forecasts of tax receipts (cash)

## *Table 8* – Treasury and Inland Revenue forecasts of tax revenue (accrual)

| | 2014/15 | 2015/16 | | | 2016/17 | | | 2017/18 | | | 2018/19 | | | 2019/20 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Actual | Forecast | | | Forecast | | | Forecast | | | Forecast | | | Forecast | | |
| **$ million** | | **Treasury** | **IRD** | **Difference** | **Treasury** | **IRD** | **Difference** | **Treasury** | **IRD** | **Difference** | **Treasury** | **IRD** | **Difference** | **Treasury** | **IRD** | **Difference** |
| ***Direct tax*** | | | | | | | | | | | | | | | | |
| **Individuals** | | | | | | | | | | | | | | | | |
| Source deductions | 25,778 | 26,802 | 26,939 | (137) | 27,810 | 27,852 | (42) | 29,078 | 29,140 | (62) | 30,729 | 30,810 | (81) | 32,454 | 32,516 | (62) |
| Other persons tax | 5,848 | 5,593 | 5,537 | 56 | 5,717 | 5,612 | 105 | 6,087 | 5,932 | 155 | 6,409 | 6,238 | 171 | 6,684 | 6,405 | 279 |
| Refunds | (1,595) | (1,753) | (1,610) | (143) | (1,740) | (1,610) | (130) | (1,740) | (1,590) | (150) | (1,760) | (1,550) | (210) | (1,848) | (1,560) | (288) |
| Fringe benefit tax | 514 | 526 | 513 | 13 | 540 | 527 | 13 | 560 | 551 | 9 | 587 | 574 | 13 | 613 | 588 | 25 |
| **Subtotal: Individuals** | **30,545** | **31,168** | **31,379** | **(211)** | **32,327** | **32,381** | **(54)** | **33,985** | **34,033** | **(48)** | **35,965** | **36,072** | **(107)** | **37,903** | **37,949** | **(46)** |
| **Company tax (net)** | **10,384** | **10,534** | **10,709** | **(175)** | **11,450** | **11,765** | **(315)** | **12,489** | **12,830** | **(341)** | **13,397** | **13,704** | **(307)** | **13,992** | **14,068** | **(76)** |
| **Withholding taxes on:** | | | | | | | | | | | | | | | | |
| Resident interest income | 1,830 | 1,925 | 1,771 | 154 | 1,837 | 1,621 | 216 | 2,088 | 1,751 | 337 | 2,700 | 2,227 | 473 | 3,203 | 2,622 | 581 |
| Non-resident income | 470 | 573 | 505 | 68 | 496 | 504 | (8) | 559 | 582 | (23) | 626 | 662 | (36) | 662 | 689 | (27) |
| Foreign-source dividends | (3) | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 |
| Resident dividend income | 543 | 538 | 539 | (1) | 557 | 556 | 1 | 619 | 623 | (4) | 659 | 665 | (6) | 682 | 676 | 6 |
| **Subtotal: Withholding tax** | **2,840** | **3,038** | **2,816** | **222** | **2,892** | **2,682** | **210** | **3,268** | **2,957** | **311** | **3,987** | **3,555** | **432** | **4,549** | **3,988** | **561** |
| **Total direct tax** | **43,769** | **44,740** | **44,904** | **(164)** | **46,669** | **46,828** | **(159)** | **49,742** | **49,820** | **(78)** | **53,349** | **53,331** | **18** | **56,444** | **56,005** | **439** |
| ***Indirect tax*** | | | | | | | | | | | | | | | | |
| **GST (net)** | **23,678** | **24,749** | **24,890** | **(141)** | **25,700** | **25,735** | **(35)** | **26,993** | **26,898** | **95** | **28,276** | **28,095** | **181** | **29,386** | **29,267** | **119** |
| **Excise duties on:** | | | | | | | | | | | | | | | | |
| Alcoholic drinks | 651 | 677 | 670 | 7 | 701 | 690 | 11 | 734 | 720 | 14 | 761 | 745 | 16 | 791 | 770 | 21 |
| Tobacco products | 310 | 307 | 305 | 2 | 324 | 315 | 9 | 322 | 315 | 7 | 322 | 320 | 2 | 322 | 325 | (3) |
| Petroleum fuels | 1,018 | 1,172 | 1,150 | 22 | 1,184 | 1,185 | (1) | 1,215 | 1,215 | .. | 1,246 | 1,245 | 1 | 1,272 | 1,270 | 2 |
| **Subtotal: excise duties** | **1,979** | **2,156** | **2,125** | **31** | **2,209** | **2,190** | **19** | **2,271** | **2,250** | **21** | **2,329** | **2,310** | **19** | **2,385** | **2,365** | **20** |
| **Other indirect tax** | | | | | | | | | | | | | | | | |
| Customs duty | 2,391 | 2,284 | 2,260 | 24 | 2,347 | 2,320 | 27 | 2,363 | 2,340 | 23 | 2,388 | 2,345 | 43 | 2,413 | 2,380 | 33 |
| Road user charges | 1,283 | 1,342 | 1,329 | 13 | 1,403 | 1,388 | 15 | 1,476 | 1,478 | (2) | 1,548 | 1,554 | (6) | 1,621 | 1,616 | 5 |
| Gaming duties | 264 | 270 | 269 | 1 | 274 | 271 | 3 | 276 | 273 | 3 | 279 | 275 | 4 | 282 | 277 | 5 |
| Motor vehicle fees | 181 | 197 | 196 | 1 | 204 | 201 | 3 | 207 | 208 | (1) | 210 | 214 | (4) | 212 | 218 | (6) |
| Exhaustible resource levy | 36 | 37 | 32 | 5 | 35 | 30 | 5 | 36 | 30 | 6 | 35 | 29 | 6 | 35 | 28 | 7 |
| Approved issuer levy, cheque duty & other | 102 | 97 | 98 | (1) | 102 | 98 | 4 | 102 | 101 | 1 | 102 | 104 | (2) | 102 | 104 | (2) |
| **Subtotal: Other indirect tax** | **4,257** | **4,227** | **4,184** | **43** | **4,365** | **4,308** | **57** | **4,460** | **4,430** | **30** | **4,562** | **4,521** | **41** | **4,665** | **4,623** | **42** |
| **Total indirect tax** | **29,914** | **31,132** | **31,199** | **(67)** | **32,274** | **32,233** | **41** | **33,724** | **33,578** | **146** | **35,167** | **34,926** | **241** | **36,436** | **36,255** | **181** |
| **Total tax** | **73,683** | **75,872** | **76,103** | **(231)** | **78,943** | **79,061** | **(118)** | **83,466** | **83,398** | **68** | **88,516** | **88,257** | **259** | **92,880** | **92,260** | **620** |
| Total tax (% of GDP) | 30.6% | 31.0% | 31.1% | -0.1% | 31.0% | 31.0% | 0.0% | 30.8% | 30.8% | 0.0% | 31.1% | 31.0% | 0.1% | 31.3% | 31.1% | 0.2% |
| ***less Core Crown tax eliminations*** | | | | | | | | | | | | | | | | |
| Core Crown income tax | 46 | 227 | 227 | | 629 | 629 | | 672 | 672 | | 720 | 720 | | 772 | 772 | |
| GST on Crown expenses and departmental outputs | 6,509 | 6,733 | 6,733 | | 6,816 | 6,816 | | 7,169 | 7,169 | | 7,367 | 7,367 | | 7,587 | 7,587 | |
| Crown ESCT | 446 | 449 | 449 | | 440 | 440 | | 442 | 442 | | 444 | 444 | | 445 | 445 | |
| Crown AIL | 46 | 50 | 50 | | 55 | 55 | | 55 | 55 | | 55 | 55 | | 55 | 55 | |
| **Core Crown taxation** | **66,636** | **68,413** | **68,644** | **(231)** | **71,003** | **71,121** | **(118)** | **75,128** | **75,060** | **68** | **79,930** | **79,671** | **259** | **84,021** | **83,401** | **620** |
| Core Crown tax (% of GDP) | 27.7% | 27.9% | 28.0% | -0.1% | 27.8% | 27.8% | 0.0% | 27.7% | 27.7% | 0.0% | 28.1% | 28.0% | 0.1% | 28.4% | 28.2% | 0.2% |
| ***less Total Crown tax eliminations*** | | | | | | | | | | | | | | | | |
| Income tax from SOEs and CEs | 508 | 690 | 690 | | 699 | 699 | | 697 | 697 | | 715 | 715 | | 797 | 797 | |
| Other Crown GST | .. | .. | .. | | .. | .. | | .. | .. | | .. | .. | | .. | .. | |
| ESCT from SOEs and CEs | 23 | 20 | 20 | | 20 | 20 | | 20 | 20 | | 20 | 20 | | 20 | 20 | |
| Lottery duty | 50 | 55 | 55 | | 58 | 58 | | 60 | 60 | | 61 | 61 | | 63 | 63 | |
| **Total Crown taxation** | **66,055** | **67,648** | **67,879** | **(231)** | **70,226** | **70,344** | **(118)** | **74,351** | **74,283** | **68** | **79,134** | **78,875** | **259** | **83,141** | **82,521** | **620** |
| Total Crown tax (% of GDP) | 27.5% | 27.6% | 27.7% | -0.1% | 27.5% | 27.5% | 0.0% | 27.4% | 27.4% | 0.0% | 27.8% | 27.7% | 0.1% | 28.1% | 27.9% | 0.2% |
| Nominal GDP | 240,591 | 244,923 | 244,923 | | 254,972 | 254,972 | | 271,233 | 271,233 | | 284,874 | 284,874 | | 296,300 | 296,300 | |

## *Table 9* - Treasury and Inland Revenue forecasts of tax receipts (cash)

| | 2014/15 | 2015/16 | | | 2016/17 | | | 2017/18 | | | 2018/19 | | | 2019/20 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Actual | | Forecast | | | Forecast | | | Forecast | | | Forecast | | | Forecast | |
| $ million | | Treasury | IRD | Difference | Treasury | IRD | Difference | Treasury | IRD | Difference | Treasury | IRD | Difference | Treasury | IRD | Difference |
| ***Direct tax*** | | | | | | | | | | | | | | | | |
| **Individuals** | | | | | | | | | | | | | | | | |
| Source deductions | 25,596 | 26,670 | 26,800 | (130) | 27,654 | 27,690 | (36) | 28,916 | 28,971 | (55) | 30,560 | 30,642 | (82) | 32,285 | 32,348 | (63) |
| Other persons tax | 6,044 | 5,789 | 5,850 | (61) | 5,933 | 5,970 | (37) | 6,468 | 6,270 | 198 | 6,872 | 6,580 | 292 | 7,114 | 6,745 | 369 |
| Refunds | (2,275) | (2,416) | (2,330) | (86) | (2,346) | (2,380) | 34 | (2,494) | (2,330) | (164) | (2,687) | (2,290) | (397) | (2,731) | (2,305) | (426) |
| Fringe benefit tax | 498 | 524 | 516 | 8 | 538 | 525 | 13 | 558 | 546 | 12 | 585 | 569 | 16 | 611 | 586 | 25 |
| **Subtotal: Individuals** | **29,863** | **30,567** | **30,836** | **(269)** | **31,779** | **31,805** | **(26)** | **33,448** | **33,457** | **(9)** | **35,330** | **35,501** | **(171)** | **37,279** | **37,374** | **(95)** |
| **Company tax (net)** | **11,174** | **10,130** | **10,390** | **(260)** | **10,673** | **11,026** | **(353)** | **12,199** | **12,577** | **(378)** | **13,160** | **13,472** | **(312)** | **13,714** | **13,835** | **(121)** |
| **Withholding taxes on:** | | | | | | | | | | | | | | | | |
| Resident interest income | 1,810 | 1,924 | 1,770 | 154 | 1,836 | 1,620 | 216 | 2,087 | 1,750 | 337 | 2,698 | 2,225 | 473 | 3,201 | 2,620 | 581 |
| Non-resident income | 532 | 577 | 505 | 72 | 496 | 504 | (8) | 559 | 582 | (23) | 626 | 662 | (36) | 662 | 689 | (27) |
| Foreign-source dividends | (5) | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 |
| Resident dividend income | 542 | 538 | 539 | (1) | 557 | 556 | 1 | 619 | 623 | (4) | 659 | 665 | (6) | 682 | 676 | 6 |
| **Subtotal: Withholding tax** | **2,879** | **3,041** | **2,815** | **226** | **2,891** | **2,681** | **210** | **3,267** | **2,956** | **311** | **3,985** | **3,553** | **432** | **4,547** | **3,986** | **561** |
| **Total direct tax** | **43,916** | **43,738** | **44,041** | **(303)** | **45,343** | **45,512** | **(169)** | **48,914** | **48,990** | **(76)** | **52,475** | **52,526** | **(51)** | **55,540** | **55,195** | **345** |
| ***Indirect tax*** | | | | | | | | | | | | | | | | |
| **GST (net)** | **23,251** | **24,392** | **24,520** | **(128)** | **25,286** | **25,325** | **(39)** | **26,590** | **26,473** | **117** | **27,868** | **27,654** | **214** | **28,973** | **28,826** | **147** |
| **Excise duties on:** | | | | | | | | | | | | | | | | |
| Alcoholic drinks | 652 | 677 | 670 | 7 | 701 | 690 | 11 | 734 | 720 | 14 | 761 | 745 | 16 | 791 | 770 | 21 |
| Tobacco products | 284 | 307 | 305 | 2 | 324 | 315 | 9 | 322 | 315 | 7 | 322 | 320 | 2 | 322 | 325 | (3) |
| Petroleum fuels | 988 | 1,172 | 1,150 | 22 | 1,184 | 1,185 | (1) | 1,215 | 1,215 | .. | 1,246 | 1,245 | 1 | 1,272 | 1,270 | 2 |
| **Subtotal: Excise duties** | **1,924** | **2,156** | **2,125** | **31** | **2,209** | **2,190** | **19** | **2,271** | **2,250** | **21** | **2,329** | **2,310** | **19** | **2,385** | **2,365** | **20** |
| **Other indirect tax** | | | | | | | | | | | | | | | | |
| Customs duty | 2,395 | 2,284 | 2,260 | 24 | 2,347 | 2,320 | 27 | 2,363 | 2,340 | 23 | 2,388 | 2,345 | 43 | 2,413 | 2,380 | 33 |
| Road user charges | 1,283 | 1,342 | 1,329 | 13 | 1,403 | 1,388 | 15 | 1,476 | 1,478 | (2) | 1,548 | 1,554 | (6) | 1,621 | 1,616 | 5 |
| Gaming duties | 265 | 270 | 269 | 1 | 274 | 271 | 3 | 276 | 273 | 3 | 279 | 275 | 4 | 282 | 277 | 5 |
| Motor vehicle fees | 173 | 197 | 196 | 1 | 204 | 201 | 3 | 207 | 208 | (1) | 210 | 214 | (4) | 212 | 218 | (6) |
| Exhaustible resource levy | 36 | 37 | 32 | 5 | 35 | 30 | 5 | 36 | 30 | 6 | 35 | 29 | 6 | 35 | 28 | 7 |
| Approved issuer levy, cheque duty & other | 99 | 97 | 98 | (1) | 102 | 98 | 4 | 102 | 101 | 1 | 102 | 104 | (2) | 102 | 104 | (2) |
| **Subtotal: Other indirect tax** | **4,251** | **4,227** | **4,184** | **43** | **4,365** | **4,308** | **57** | **4,460** | **4,430** | **30** | **4,562** | **4,521** | **41** | **4,665** | **4,623** | **42** |
| **Total indirect tax** | **29,426** | **30,775** | **30,829** | **(54)** | **31,860** | **31,823** | **37** | **33,321** | **33,153** | **168** | **34,759** | **34,485** | **274** | **36,023** | **35,814** | **209** |
| **Total tax** | **73,342** | **74,513** | **74,870** | **(357)** | **77,203** | **77,335** | **(132)** | **82,235** | **82,143** | **92** | **87,234** | **87,011** | **223** | **91,563** | **91,009** | **554** |
| Total tax (% of GDP) | 30.5% | 30.4% | 30.5% | -0.1% | 30.3% | 30.4% | -0.1% | 30.3% | 30.3% | 0.0% | 30.6% | 30.5% | 0.1% | 30.9% | 30.7% | 0.2% |
| ***less Core Crown tax eliminations*** | | | | | | | | | | | | | | | | |
| Core Crown income tax | 718 | 126 | 126 | | 225 | 225 | | 664 | 664 | | 711 | 711 | | 761 | 761 | |
| GST on Crown expenses and departmental outputs | 6,498 | 6,751 | 6,751 | | 6,797 | 6,797 | | 7,177 | 7,177 | | 7,386 | 7,386 | | 7,601 | 7,601 | |
| Crown ESCT | 449 | 447 | 447 | | 438 | 438 | | 440 | 440 | | 442 | 442 | | 443 | 443 | |
| Crown AIL | 46 | 50 | 50 | | 55 | 55 | | 55 | 55 | | 55 | 55 | | 55 | 55 | |
| **Core Crown taxation** | **65,631** | **67,139** | **67,496** | **(357)** | **69,688** | **69,820** | **(132)** | **73,899** | **73,807** | **92** | **78,640** | **78,417** | **223** | **82,703** | **82,149** | **554** |
| Core Crown tax (% of GDP) | 27.3% | 27.4% | 27.5% | -0.1% | 27.3% | 27.4% | -0.1% | 27.2% | 27.2% | 0.0% | 27.6% | 27.5% | 0.1% | 27.9% | 27.7% | 0.2% |
| ***less Total Crown tax eliminations*** | | | | | | | | | | | | | | | | |
| Income tax from SOEs and CEs | 616 | 632 | 632 | | 684 | 684 | | 677 | 677 | | 663 | 663 | | 758 | 758 | |
| Other Crown GST | .. | (68) | (68) | | 29 | 29 | | 27 | 27 | | 11 | 11 | | 10 | 10 | |
| ESCT from SOEs and CEs | 19 | 15 | 15 | | 15 | 15 | | 15 | 15 | | 15 | 15 | | 16 | 16 | |
| Lottery duty | 51 | 55 | 55 | | 58 | 58 | | 60 | 60 | | 61 | 61 | | 63 | 63 | |
| **Total Crown taxation** | **64,945** | **66,505** | **66,862** | **(357)** | **68,902** | **69,034** | **(132)** | **73,120** | **73,028** | **92** | **77,890** | **77,667** | **223** | **81,856** | **81,302** | **554** |
| Total Crown tax (% of GDP) | 27.0% | 27.2% | 27.3% | -0.1% | 27.0% | 27.1% | -0.1% | 27.0% | 27.0% | 0.0% | 27.3% | 27.2% | 0.1% | 27.6% | 27.4% | 0.2% |

# Tax Policy Changes

This section details the material changes to forecast tax revenue since the *Budget Update* as a result of revenue and spending initiatives. Table 10 shows a breakdown of the changes and the supplementary text describes each initiative.

***Table 10*** – Tax forecasting effects of *Half-Year Update* initiatives

| **Year ending 30 June<br>$ millions** | **2016<br>Forecast** | **2017<br>Forecast** | **2018<br>Forecast** | **2019<br>Forecast** | **2020<br>Forecast** | **Total<br>5 years** |
|---|---|---|---|---|---|---|
| Business Transformation | .. | .. | .. | 90 | 190 | 280 |
| GST on online services | .. | 30 | 40 | 40 | 40 | 150 |
| Related parties debt remission | .. | 10 | 10 | 10 | 10 | 40 |
| Other | 1 | 3 | (27) | 23 | 19 | 19 |
| **Total** | **1** | **43** | **23** | **163** | **259** | **489** |

### *Half-Year Update initiatives*

*Business Transformation*

As part of Inland Revenue's Business Transformation programme, it is estimated that additional tax will be collected owing to increased tax compliance resulting from improvements in analytics, and in tax administration and collection systems.

*GST on online services*

With effect from 1 October 2016, all imports of online services will be subject to GST.

*Related parties debt remission*

The rules around the remission of debt between related parties will be amended to ensure that both sides of such transactions are treated symmetrically for tax purposes.

*Other initiatives*

The 'Other' line in table 10 aggregates a number of smaller initiatives.

# Additional Fiscal Indicators

The Treasury calculates two summary fiscal indicators: the cyclically-adjusted balance (CAB) and the fiscal impulse indicator.

- The CAB adjusts the operating balance before gains and losses (OBEGAL) for the cyclical position of the economy. The CAB is subject to uncertainty because it uses estimated variables and is sensitive to new information, particularly regarding the output gap.
- The fiscal impulse indicator uses the change in a cash-based version of the fiscal balance to estimate the contribution of discretionary fiscal policy to aggregate demand.

Further information on the methodology, interpretation and limitations behind the indicators can be found in Treasury Working Papers 02/30 and 10/08.[1]

### *Central estimates*

This section discusses the Treasury's central estimates of the CAB and fiscal impulse. The next section discusses sensitivity analysis. Detailed tables of data can be found at the end of the Additional Fiscal Indicators section.

Significant "one-off" impacts on expenses from the Canterbury earthquake are removed from estimates of the CAB. This is to give a better indication of underlying fiscal performance. Similarly for one measure of the fiscal impulse, some earthquake expenditures that are more of a financial nature are removed as the demand effects arising from such flows (eg, EQC payments to households) will show up in other parts of the economy.

*Cyclically-adjusted balance*

Figure 1 shows the operating balance (before gains and losses) and the cyclically-adjusted balance. In the first two years of the forecast period, the CAB is slightly higher than the OBEGAL owing to the forecast assumption that the economy will be operating below its potential level (ie, a negative output gap). The difference between forecast and potential GDP is largest in the 2015/16 fiscal year, leading to a surplus in the CAB while the OBEGAL is in deficit. This suggests that the OBEGAL deficit forecast for 2015/16 is not a structural deficit. From 2017/18 the economy is forecast to be operating above its potential level causing the CAB to drop below the OBEGAL. Cyclically-adjusted surpluses increase over the forecast period with a surplus of 0.4% of GDP in 2014/15, growing to 1.6% of GDP in 2019/20.

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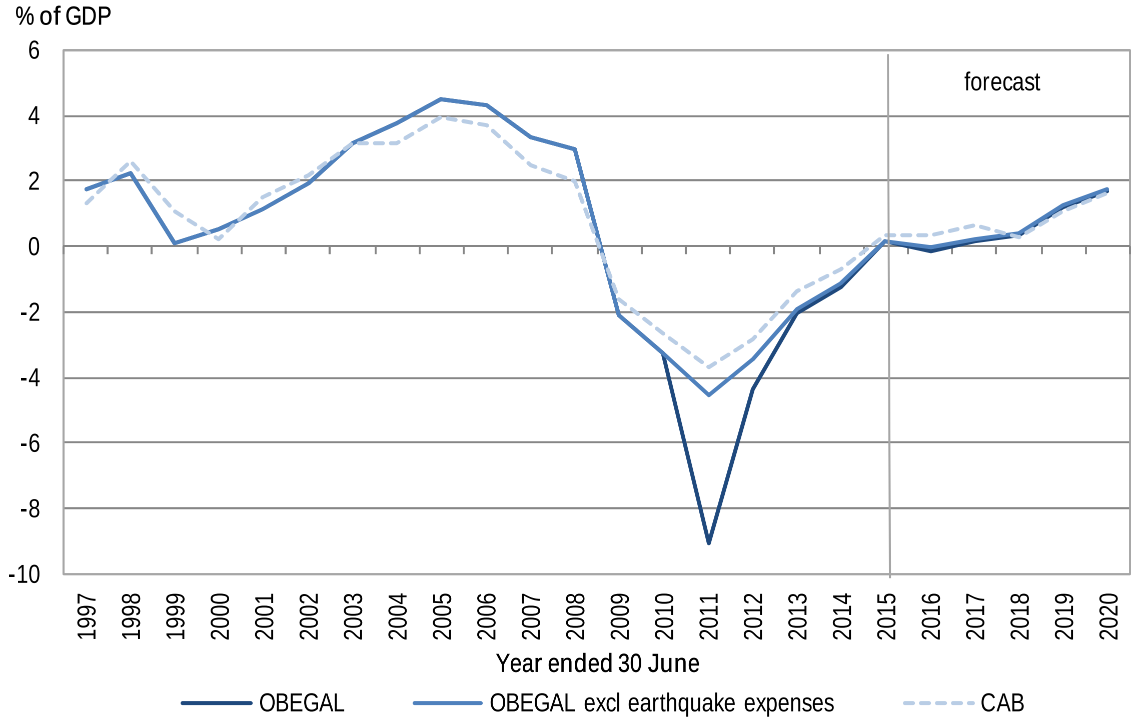
1 Renee Philip and John Janssen (2002) "Indicators of Fiscal Impulse for New Zealand" New Zealand Treasury Working Paper 02/30, December 2002 http://www.treasury.govt.nz/publications/research-policy/wp/2002/02-30/

Oscar Parkyn (2010) "Estimating New Zealand's Structural Budget Balance" New Zealand Treasury Working Paper 10/08, December 2010 http://www.treasury.govt.nz/publications/research-policy/wp/2010/10-08/

***Figure 1*** – Cyclically-adjusted balance




Source: The Treasury

*Fiscal impulse*

The fiscal impulse indicator is shown in Figure 2. The fiscal impulse is an estimate of discretionary changes in the fiscal position that have an impact on aggregate demand in the economy. The year-to-year change in the structural budget balance is a rough indicator of the fiscal impulse. The fiscal impulse indicator calculated by the Treasury aims to provide a more accurate guide to the contribution of discretionary fiscal policy to aggregate demand. It does this by calculating the change in a cash-based version of the fiscal balance (a cyclically-adjusted primary balance supplemented by capital expenditure). Capital expenditure on defence, KiwiSaver subsidies and Deposit Guarantee Scheme payments are excluded from the measure since these are expected to have a limited direct impact on aggregate demand. Purchases and sales of investments are also excluded from the measure.

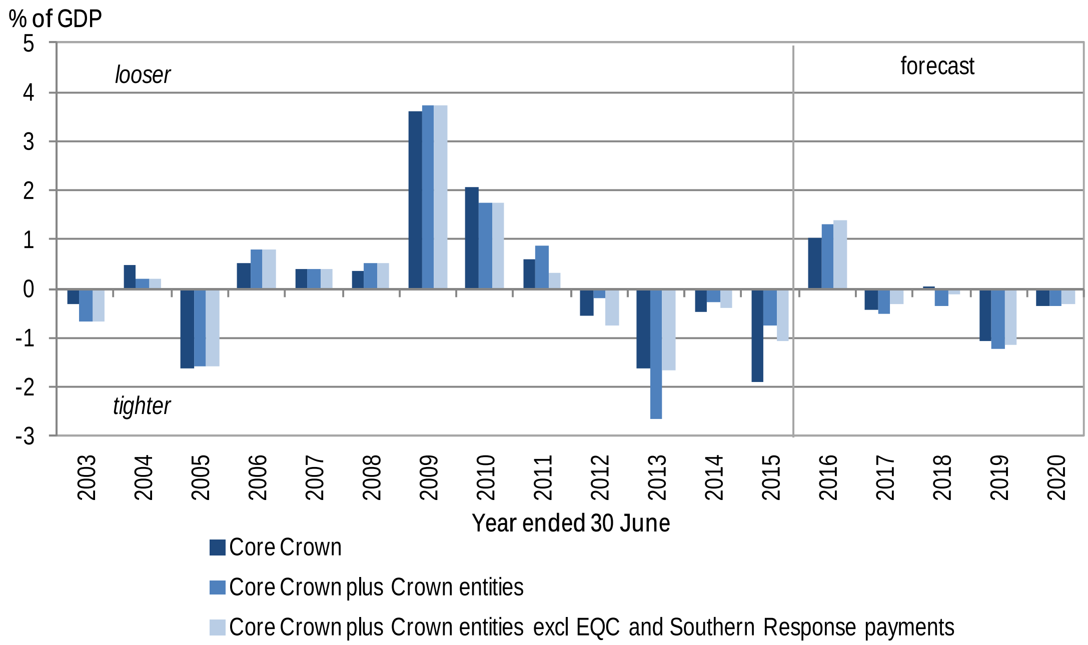
The fiscal impulse is shown for both the core Crown and combined core Crown and Crown entity segments. The core Crown indicator mostly reflects changes in receipts and expenditure impacted by Budget decisions, whereas the core Crown plus Crown entity indicator provides a better indication of the total impact of central government activities (ie, excluding State-owned enterprises). A measure of the fiscal impulse that excludes Canterbury-related financial transactions is also shown, which adjusts for EQC and Southern Response payments and receipts. EQC and Southern Response payments and receipts account for much of the difference between the core Crown fiscal impulse and the indicator for the core Crown plus Crown entities. The core Crown plus Crown entity (excluding EQC and Southern Response) is used by the Treasury as the headline estimate of the fiscal impulse.

It is worth noting that summary indicators such as the fiscal impulse do not take account of the composition of fiscal policy changes or how a change in fiscal policy will be transmitted through the economy. Treasury research using time series statistical analysis indicates that spending and taxes have different effects on New Zealand GDP.[2] Therefore the fiscal impulse indicator is only a very imprecise guide to the impact of fiscal policy on the economy.

The fiscal impulse shows that fiscal policy is expected to have a contractionary impact on demand in all but the first year of the forecast horizon. Fiscal policy is expected to have a broadly neutral impact on aggregate demand on average over the five years to June 2020. The positive fiscal impulse in 2015/16 is due to an increase in the ratio of operating expenses to GDP in that year as well as stimulus from higher capital spending, partly reflecting some re-phasing of expenditure originally planned for previous years. The negative fiscal impulse from 2016/17 to 2019/20 reflects ongoing reductions in operating spending (relative to GDP), and from 2017/18, a decline in capital spending. The most contractionary impulse across the forecast period occurs in 2018/19, reflecting accelerating revenue growth along with operating and capital expenditure falling as a percentage of GDP.

Compared with the *Budget Update,* the direction of the headline fiscal impulse in each year is unchanged although there have been some changes in magnitude. The fiscal impulses in 2015/16 and 2016/17 are more stimulatory and less contractionary respectively, than at the *Budget Update*. This is driven in part by larger-than-expected growth in operating expenses in 2015/16 and higher capital spending in 2016/17, reflecting the increase in the capital allowance for Budget 2016. Overall the changes since the *Budget Update* make the average fiscal impulse is less contractionary.

***Figure 2*** – Estimates of the fiscal impulse




Source: The Treasury

2 Parkyn and Vehbi (2013) "The Effects of Fiscal Policy in New Zealand: Evidence from a VAR Model with Debt Constraints" New Zealand Treasury Working Paper 13/02.

### *Sensitivity analysis*

There is much uncertainty about the summary indicator estimates. There are two broad sources of that uncertainty that can lead to revisions in the indicator estimates:

- estimation uncertainty of the key model parameters (ie, the output gap and the average sensitivity of tax revenues to changes in the output gap), and
- forecast uncertainty relating to future fiscal and economic developments.

Sensitivity analysis is performed by calculating the indicators using alternative output gap estimates (from the RBNZ, IMF and OECD) and values for the elasticity of tax revenues with respect to the output gap that are half and twice the magnitude of the baseline estimate. The range of alternative estimates is plotted in Figures 4 to 6 (with data reported in Tables 14 and 15). These estimates show little difference across the forecast horizon.

An alternative means of illustrating uncertainty is to show a probability distribution around the central forecast. A probability distribution requires making some assumptions about future forecast errors based on historical forecast errors of observable economic and fiscal variables and historical revisions to the Treasury's output gap estimates. In Figure 3, a fan chart of the cyclically-adjusted balance indicator is shown. The probability intervals calculated are conditional on current policy and reflect historical revisions to the Treasury's official output gap estimate, rather than the full uncertainty implied by different estimation techniques. Details of the methodology and parameter values for the confidence intervals are reported in Treasury Working Paper 10/08.[3] This analysis shows that the central estimate of the cyclically-adjusted balance is expected to achieve a surplus each year over the forecast period but there is considerable forecast uncertainty around this.

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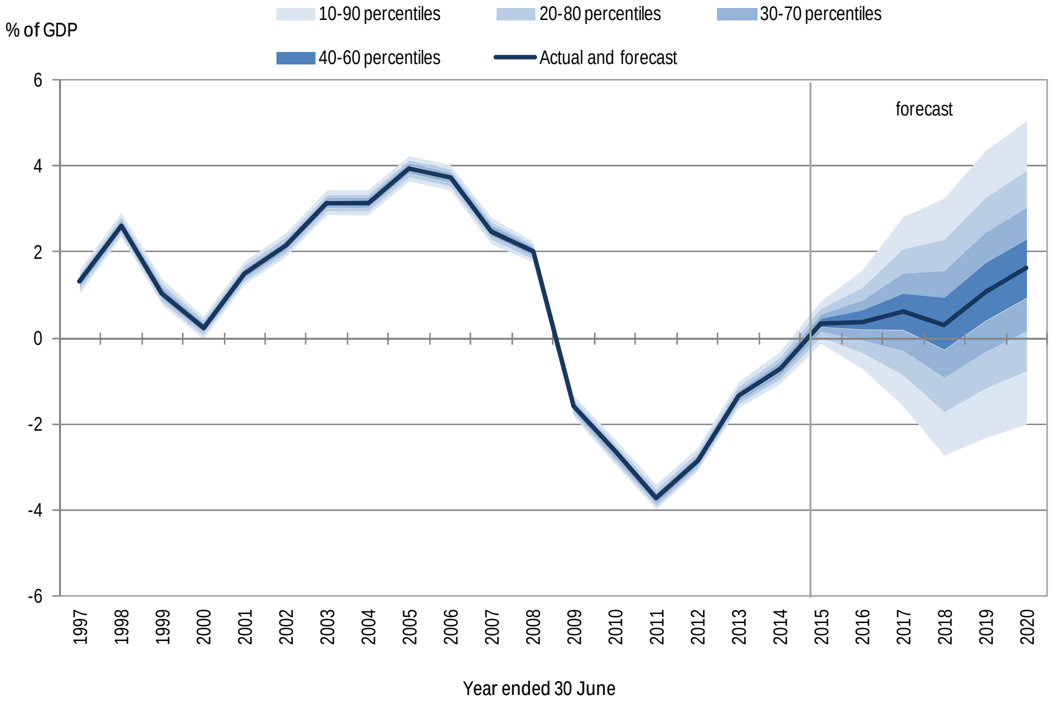
3 Oscar Parkyn (2010) "Estimating New Zealand's Structural Budget Balance." New Zealand Treasury Working Paper 10/08 http://www.treasury.govt.nz/publications/research-policy/wp/2010/10-08/

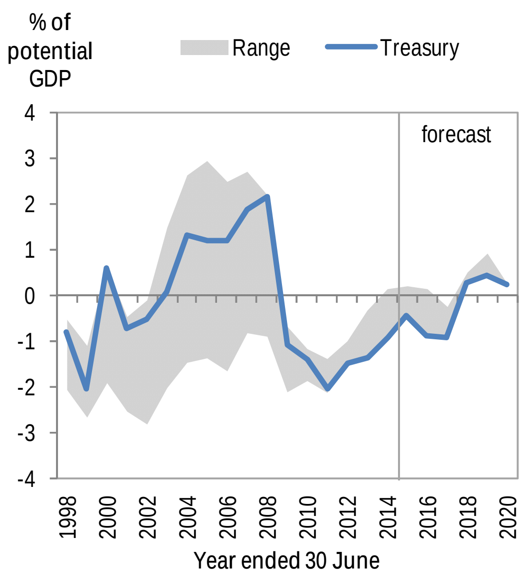
***Figure 3*** – Fan chart for cyclically-adjusted balance




Source: The Treasury

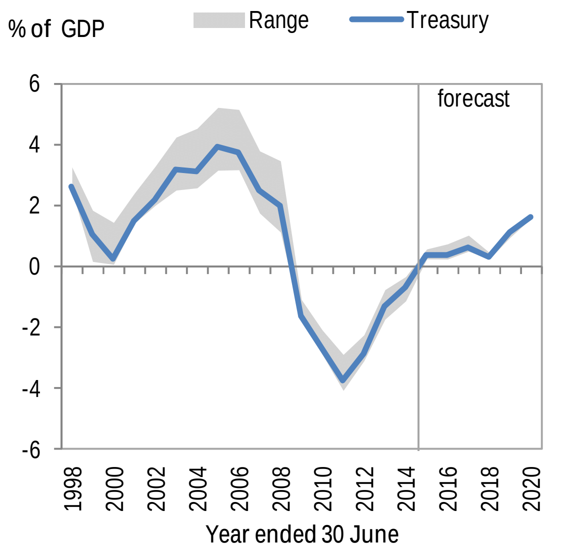
Note: The bands represent sequential deciles such that the difference between the 10th and 90th percentiles represents an 80% confidence interval.

**Figure 4** – Output gap range



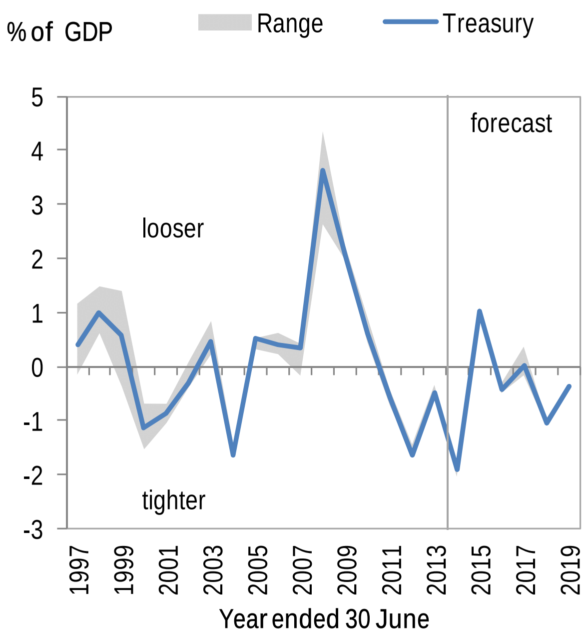

Source: The Treasury

**Figure 5** – Cyclically-adjusted balance range




Source: The Treasury

**Figure 6** – Core Crown fiscal impulse range




Source: The Treasury

***Terms of trade adjustment***

The Treasury produces regular estimates of the terms of trade effect on the budget balance following the methodology outlined in Treasury Working Paper 10/08.[4]

Estimating the terms of trade effect involves calculating the approximate amount of tax revenue that is due to deviations in the terms of trade from some specified structural, or long-run, level.

Although the terms of trade has recently fallen from a 40-year high, it remains above long-term historical averages. The medium-term outlook for New Zealand's terms of trade has also been revised down, reflecting weaker commodity prices for several key exports and structural changes in the dairy market. Despite this the Treasury's central forecast is for the terms of trade to remain elevated over the long term. The terms of trade for the June 2015 quarter is approximately 22% higher than the 30-year average and remains 19% higher at the end of the forecast period. A terms of trade adjustment to the fiscal balance is made to understand what the underlying fiscal position may be under different assumptions (ie, scenarios) about the long-run level of the terms of trade. The purpose is to produce information that helps to make judgements about the fiscal position from a medium-term perspective, without compromising the forecasts' role of presenting the most likely near-term outcome.

Figure 7 shows New Zealand's terms of trade with historical average levels (50-, 30- and 20-year averages) and a time-varying trend using a statistical filter.[5] The historical average and trend estimates are used as estimates of the structural level of the terms of trade. Using the statistical filter runs the risk of interpreting long cycles as structural shifts in real time, whereas using an historical average suffers from the opposite risk.

A terms of trade adjustment, for each alternative assumption, is reported in Table 16. The CAB with a terms of trade adjustment, using the 30-year average is plotted in Figure 8. Using the 30-year average, this analysis suggests that a terms of trade adjustment would subtract 1.5% of GDP from structural tax revenues in 2015/16. This implies a structural budget deficit of 1.1% of GDP with the terms of trade adjustment. Alternatively, a terms of trade adjustment using a statistical filter, which smoothes out fluctuations around a time-varying trend, would subtract 0.3% of GDP from the structural budget balance in 2014/15, but add 0.3% of GDP to 2015/16.

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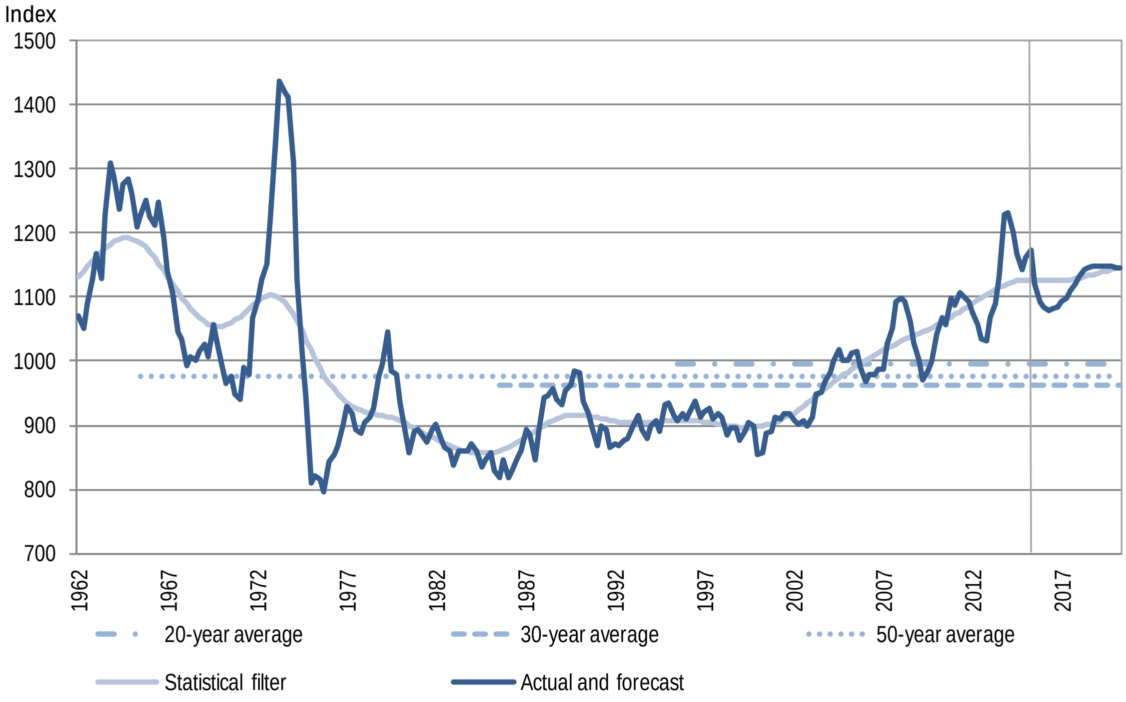
4 Oscar Parkyn (2010) "Estimating New Zealand's Structural Budget Balance." New Zealand Treasury Working Paper 10/08 http://www.treasury.govt.nz/publications/research-policy/wp/2010/10-08/

5 A Hodrick-Prescott filter is used on quarterly data with a smoothing parameter of 1600.

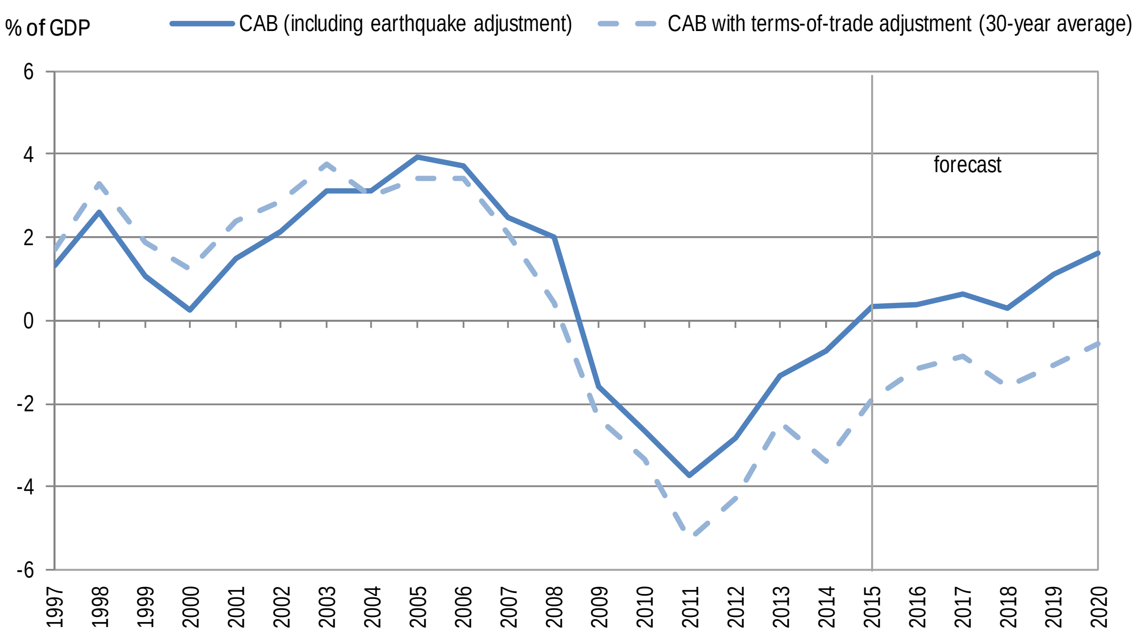
**Figure 7** – Terms of trade with historical average and time-varying trend




Sources: Statistics New Zealand, the Treasury

Note: Due to data availability, this uses the goods and services terms of trade spliced with the goods terms of trade for the period prior to 1987.

***Figure 8*** – Cyclically-adjusted balance with terms of trade adjustment




Source: The Treasury

### *Data tables for summary fiscal indicators*

***Table 11*** – Central estimates of output gap, cyclically-adjusted balance and fiscal impulse (% of GDP)

| June year | Output gap | OBEGAL | OBEGAL excl earthquake expenses | CAB | Fiscal impulse (core Crown) | Fiscal impulse (core Crown plus Crown entity) | Fiscal impulse (core Crown plus CE) excluding EQC & Southern Response payouts |
|---|---|---|---|---|---|---|---|
| 1997 | 1.0 | 1.8 | | 1.3 | 2.3 | | |
| 1998 | -0.8 | 2.2 | | 2.6 | 0.4 | | |
| 1999 | -2.1 | 0.1 | | 1.1 | 1.0 | | |
| 2000 | 0.6 | 0.5 | | 0.2 | 0.6 | | |
| 2001 | -0.7 | 1.2 | | 1.5 | -1.1 | | |
| 2002 | -0.5 | 1.9 | | 2.1 | -0.9 | | |
| 2003 | 0.1 | 3.2 | | 3.1 | -0.3 | -0.7 | -0.7 |
| 2004 | 1.3 | 3.8 | | 3.1 | 0.5 | 0.2 | 0.2 |
| 2005 | 1.2 | 4.5 | | 3.9 | -1.6 | -1.6 | -1.6 |
| 2006 | 1.2 | 4.3 | | 3.7 | 0.5 | 0.8 | 0.8 |
| 2007 | 1.9 | 3.3 | | 2.5 | 0.4 | 0.4 | 0.4 |
| 2008 | 2.2 | 3.0 | | 2.0 | 0.3 | 0.5 | 0.5 |
| 2009 | -1.1 | -2.1 | | -1.6 | 3.6 | 3.7 | 3.7 |
| 2010 | -1.4 | -3.2 | | -2.7 | 2.1 | 1.8 | 1.8 |
| 2011 | -2.0 | -9.0 | -4.6 | -3.7 | 0.6 | 0.9 | 0.3 |
| 2012 | -1.5 | -4.4 | -3.5 | -2.8 | -0.6 | -0.2 | -0.7 |
| 2013 | -1.4 | -2.0 | -1.9 | -1.3 | -1.6 | -2.6 | -1.7 |
| 2014 | -0.9 | -1.3 | -1.1 | -0.7 | -0.5 | -0.3 | -0.4 |
| 2015 | -0.5 | 0.2 | 0.1 | 0.4 | -1.9 | -0.7 | -1.1 |
| 2016 | -0.9 | -0.2 | 0.0 | 0.4 | 1.0 | 1.3 | 1.4 |
| 2017 | -0.9 | 0.1 | 0.2 | 0.6 | -0.4 | -0.5 | -0.3 |
| 2018 | 0.3 | 0.4 | 0.4 | 0.3 | 0.0 | -0.4 | -0.1 |
| 2019 | 0.5 | 1.2 | 1.3 | 1.1 | -1.1 | -1.2 | -1.2 |
| 2020 | 0.2 | 1.7 | 1.7 | 1.6 | -0.4 | -0.4 | -0.3 |

Source: The Treasury

***Table 12*** – Sources for alternative output gaps

| Institution | Source | Publication date |
|---|---|---|
| The Treasury | *Half Year Economic and Fiscal Update* | December 2015 |
| RBNZ | *Monetary Policy Statement* | September 2015 |
| IMF | *World Economic Outlook* | October 2015 |
| OECD | *Economic Outlook* | November 2015 |

***Table 13*** – Elasticity values used in sensitivity analysis

| Elasticities | Base case | Low | High |
|---|---|---|---|
| Individual income tax | 0.9 | 0.5 | 1.8 |
| Company tax | 1.4 | 0.7 | 2.8 |
| GST | 1.0 | 0.5 | 2.0 |
| Excise duties | 1.0 | 0.5 | 2.0 |
| Other indirect tax | 1.0 | 0.5 | 2.0 |
| Interest, profits and dividends | 0.0 | 0.0 | 0.0 |
| Other receipts | 1.0 | 0.5 | 2.0 |

Source: The Treasury

***Table 14*** – Output gap estimates used in sensitivity analysis (% of potential GDP)

| June year | The Treasury | RBNZ | IMF | OECD |
|---|---|---|---|---|
| 1997 | 1.0 | 1.6 | -0.8 | 0.8 |
| 1998 | -0.8 | -0.8 | -2.1 | -0.5 |
| 1999 | -2.1 | -2.2 | -2.7 | -1.1 |
| 2000 | 0.6 | 0.3 | -1.9 | -0.2 |
| 2001 | -0.7 | -1.0 | -2.6 | -0.5 |
| 2002 | -0.5 | -0.4 | -2.8 | -0.1 |
| 2003 | 0.1 | 0.5 | -2.0 | 1.5 |
| 2004 | 1.3 | 2.0 | -1.5 | 2.6 |
| 2005 | 1.2 | 1.7 | -1.4 | 2.9 |
| 2006 | 1.2 | 1.6 | -1.7 | 2.5 |
| 2007 | 1.9 | 2.2 | -0.8 | 2.7 |
| 2008 | 2.2 | 2.1 | -0.9 | 1.5 |
| 2009 | -1.1 | -1.5 | -2.1 | -0.7 |
| 2010 | -1.4 | -1.8 | -1.9 | -1.2 |
| 2011 | -2.0 | -2.1 | -1.5 | -1.4 |
| 2012 | -1.5 | -1.2 | -1.0 | -1.4 |
| 2013 | -1.4 | -1.0 | -0.3 | -0.9 |
| 2014 | -0.9 | -0.5 | 0.1 | -0.5 |
| 2015 | -0.5 | -0.1 | 0.2 | -0.3 |
| 2016 | -0.9 | -0.6 | -0.1 | -0.6 |
| 2017 | -0.9 | -0.3 | | -0.9 |
| 2018 | 0.3 | 0.5 | | |
| 2019 | 0.5 | 0.9 | | |
| 2020 | 0.2 | | | |

Sources: The Treasury, RBNZ, IMF, OECD

***Table 15*** – Cyclically-adjusted balance with alternative output gap and elasticity values (% of GDP)

| June year | OBEGAL | Baseline CAB | CAB using alternative output gaps | | | CAB using alternative elasticities | |
|---|---|---|---|---|---|---|---|
| | | | RBNZ | IMF | OECD | Low | High |
| 1997 | 1.8 | 1.3 | 1.0 | 2.1 | 1.4 | 1.5 | 1.0 |
| 1998 | 2.2 | 2.6 | 2.6 | 3.2 | 2.5 | 2.5 | 2.9 |
| 1999 | 0.1 | 1.1 | 0.1 | 1.3 | 0.6 | 0.7 | 1.8 |
| 2000 | 0.5 | 0.2 | 0.4 | 1.4 | 0.6 | 0.3 | 0.0 |
| 2001 | 1.2 | 1.5 | 1.6 | 2.4 | 1.4 | 1.4 | 1.8 |
| 2002 | 1.9 | 2.1 | 2.1 | 3.2 | 2.0 | 2.0 | 2.3 |
| 2003 | 3.2 | 3.1 | 2.9 | 4.2 | 2.5 | 3.2 | 3.1 |
| 2004 | 3.8 | 3.1 | 2.8 | 4.5 | 2.5 | 3.4 | 2.6 |
| 2005 | 4.5 | 3.9 | 3.7 | 5.2 | 3.1 | 4.2 | 3.5 |
| 2006 | 4.3 | 3.7 | 3.5 | 5.1 | 3.1 | 4.0 | 3.2 |
| 2007 | 3.3 | 2.5 | 2.3 | 3.7 | 2.1 | 2.9 | 1.7 |
| 2008 | 3.0 | 2.0 | 2.1 | 3.4 | 2.3 | 2.5 | 1.1 |
| 2009 | -2.1 | -1.6 | -1.4 | -1.1 | -1.8 | -1.8 | -1.1 |
| 2010 | -3.2 | -2.7 | -2.5 | -2.5 | -2.7 | -2.9 | -2.1 |
| 2011 | -9.0 | -3.7 | -3.7 | -3.9 | -4.0 | -4.1 | -2.9 |
| 2012 | -4.4 | -2.8 | -3.0 | -3.0 | -2.9 | -3.1 | -2.3 |
| 2013 | -2.0 | -1.3 | -1.5 | -1.8 | -1.5 | -1.6 | -0.8 |
| 2014 | -1.3 | -0.7 | -0.9 | -1.2 | -0.9 | -0.9 | -0.4 |
| 2015 | 0.2 | 0.4 | 0.3 | 0.2 | 0.4 | 0.3 | 0.5 |
| 2016 | -0.2 | 0.4 | 0.4 | 0.2 | 0.5 | 0.2 | 0.7 |
| 2017 | 0.1 | 0.6 | 0.6 | | 0.8 | 0.5 | 1.0 |
| 2018 | 0.4 | 0.3 | 0.4 | | | 0.4 | 0.2 |
| 2019 | 1.2 | 1.1 | 1.1 | | | 1.2 | 0.9 |
| 2020 | 1.7 | 1.6 | | | | 1.7 | 1.5 |

Source: The Treasury

***Table 16*** – Core Crown fiscal impulse with alternative output gap and elasticity values (% of GDP)

| June year | Fiscal impulse | Fiscal impulse using alternative output gaps | | | Fiscal impulse using alternative elasticities | |
|---|---|---|---|---|---|---|
| | | RBNZ | IMF | OECD | Low | High |
| 1997 | 2.3 | 2.1 | 2.1 | 2.4 | 2.2 | 2.4 |
| 1998 | 0.4 | 1.2 | 0.6 | 0.6 | 0.7 | -0.2 |
| 1999 | 1.0 | 1.5 | 1.3 | 1.3 | 1.2 | 0.6 |
| 2000 | 0.6 | -0.4 | -0.2 | -0.1 | 0.2 | 1.4 |
| 2001 | -1.1 | -1.1 | -0.8 | -0.7 | -0.9 | -1.5 |
| 2002 | -0.8 | -0.7 | -1.0 | -0.8 | -0.9 | -0.8 |
| 2003 | -0.3 | -0.2 | -0.2 | 0.1 | -0.4 | -0.1 |
| 2004 | 0.5 | 0.5 | 0.2 | 0.4 | 0.3 | 0.8 |
| 2005 | -1.6 | -1.7 | -1.6 | -1.4 | -1.6 | -1.7 |
| 2006 | 0.5 | 0.5 | 0.4 | 0.3 | 0.5 | 0.5 |
| 2007 | 0.4 | 0.4 | 0.5 | 0.2 | 0.3 | 0.6 |
| 2008 | 0.3 | 0.2 | 0.3 | -0.2 | 0.3 | 0.4 |
| 2009 | 3.6 | 3.5 | 4.4 | 4.0 | 4.1 | 2.6 |
| 2010 | 2.0 | 2.1 | 2.2 | 2.0 | 2.1 | 2.0 |
| 2011 | 0.6 | 0.7 | 0.9 | 0.7 | 0.7 | 0.4 |
| 2012 | -0.5 | -0.4 | -0.6 | -0.7 | -0.6 | -0.4 |
| 2013 | -1.6 | -1.6 | -1.4 | -1.5 | -1.6 | -1.6 |
| 2014 | -0.4 | -0.4 | -0.4 | -0.5 | -0.5 | -0.3 |
| 2015 | -1.5 | -1.9 | -2.0 | -2.0 | -2.0 | -1.8 |
| 2016 | 0.3 | 1.0 | 1.1 | 1.0 | 1.1 | 0.9 |
| 2017 | -0.7 | -0.3 | | -0.5 | -0.4 | -0.4 |
| 2018 | -0.2 | -0.1 | | | -0.2 | 0.4 |
| 2019 | -0.7 | -1.0 | | | -1.1 | -1.0 |
| 2020 | -0.5 | | | | -0.3 | -0.4 |

Source: The Treasury

***Table 17*** – Terms of trade adjustment to the cyclically-adjusted balance (% of GDP)

| June year | Baseline CAB | Terms-of-trade adjustment (impact on CAB) | | | | CAB with terms-of-trade adjustment | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 50-year average | 30-year average | 20-year average | Statistical filter | 50-year average | 30-year average | 20-year average | Statistical filter |
| 1997 | 1.3 | 0.5 | 0.4 | 0.7 | -0.2 | 1.8 | 1.7 | 2.0 | 1.1 |
| 1998 | 2.6 | 0.8 | 0.7 | 1.0 | -0.1 | 3.4 | 3.3 | 3.6 | 2.6 |
| 1999 | 1.1 | 1.0 | 0.8 | 1.2 | 0.1 | 2.0 | 1.9 | 2.2 | 1.2 |
| 2000 | 0.2 | 1.1 | 1.0 | 1.3 | 0.2 | 1.4 | 1.2 | 1.6 | 0.5 |
| 2001 | 1.5 | 1.0 | 0.9 | 1.3 | 0.0 | 2.5 | 2.4 | 2.8 | 1.6 |
| 2002 | 2.1 | 0.9 | 0.7 | 1.1 | 0.1 | 3.0 | 2.9 | 3.3 | 2.2 |
| 2003 | 3.1 | 0.8 | 0.6 | 1.0 | 0.3 | 3.9 | 3.8 | 4.2 | 3.4 |
| 2004 | 3.1 | 0.0 | -0.2 | 0.2 | -0.2 | 3.1 | 3.0 | 3.4 | 2.9 |
| 2005 | 3.9 | -0.4 | -0.5 | -0.1 | -0.3 | 3.6 | 3.4 | 3.8 | 3.6 |
| 2006 | 3.7 | -0.2 | -0.3 | 0.1 | 0.1 | 3.6 | 3.4 | 3.8 | 3.8 |
| 2007 | 2.5 | -0.2 | -0.4 | 0.0 | 0.2 | 2.3 | 2.1 | 2.5 | 2.7 |
| 2008 | 2.0 | -1.4 | -1.6 | -1.1 | -0.7 | 0.6 | 0.4 | 0.9 | 1.3 |
| 2009 | -1.6 | -0.6 | -0.7 | -0.3 | 0.3 | -2.2 | -2.3 | -1.9 | -1.3 |
| 2010 | -2.7 | -0.6 | -0.7 | -0.3 | 0.3 | -3.2 | -3.3 | -3.0 | -2.3 |
| 2011 | -3.7 | -1.4 | -1.6 | -1.1 | -0.2 | -5.1 | -5.3 | -4.8 | -3.9 |
| 2012 | -2.8 | -1.3 | -1.5 | -1.0 | 0.1 | -4.1 | -4.3 | -3.9 | -2.8 |
| 2013 | -1.3 | -0.9 | -1.1 | -0.7 | 0.5 | -2.3 | -2.4 | -2.0 | -0.8 |
| 2014 | -0.7 | -2.5 | -2.7 | -2.2 | -0.8 | -3.2 | -3.4 | -3.0 | -1.5 |
| 2015 | 0.4 | -2.1 | -2.2 | -1.8 | -0.3 | -1.7 | -1.9 | -1.4 | 0.0 |
| 2016 | 0.4 | -1.4 | -1.5 | -1.1 | 0.3 | -1.0 | -1.1 | -0.7 | 0.7 |
| 2017 | 0.6 | -1.3 | -1.5 | -1.1 | 0.4 | -0.7 | -0.8 | -0.4 | 1.0 |
| 2018 | 0.3 | -1.8 | -1.9 | -1.5 | 0.0 | -1.4 | -1.6 | -1.2 | 0.3 |
| 2019 | 1.1 | -2.0 | -2.2 | -1.7 | -0.1 | -0.9 | -1.1 | -0.7 | 1.0 |
| 2020 | 1.6 | -2.0 | -2.2 | -1.7 | 0.0 | -0.4 | -0.6 | -0.1 | 1.6 |

Source: The Treasury

# Government Finance Statistics for Central Government

Government Finance Statistics (GFS) is a fiscal reporting framework developed by the International Monetary Fund (IMF) and is specifically designed for government reporting.

The main purpose for having a common government reporting framework is to more easily enable cross-country comparisons of fiscal data and assessment of fiscal policy (eg, as in the case of the IMF's Article IV consultation with New Zealand).

It is important to note that even though the GFS framework provides a consistent presentation format there are underlying differences between countries in measurement and recognition. These differences mean that it can be difficult to make meaningful cross-country comparisons.

Further information on GFS can be found on the IMF's website[6].

***New Zealand's GFS accounts***

The following section provides fiscal forecasts for central Government on a GFS basis. These are prepared by applying top-down adjustments to the Forecast Financial Statements presented in the *Half Year Update*, which were prepared on a Generally Accepted Accounting Practice (GAAP) basis. The major differences between the forecasts are:

| | |
|---|---|
| Coverage | The Central Government entity is defined here as the consolidation of core Crown (excluding Reserve Bank) and Crown entities, as opposed to the emphasis on the total Crown in the *Half Year Update* document. As a result, the Government's interest in the Reserve Bank and State-Owned Enterprises is equity accounted rather than consolidated line-by-line. |
| Other economic flows | The GFS operating balance excludes valuation changes on assets and liabilities, which are instead reported in a Statement of other economic flows. |
| Transactions | Defence weapons are treated as being expensed at the time of purchase. In addition there are some reclassifications of transactions (eg, some levies move to taxation revenue). |

The GFS data presented in this section is provisional. Statistics New Zealand release an official GFS series for actuals, which will also include local government. Table 18 outlines some of the key indicators for the central government under a GFS presentation.

6 http://www.imf.org/external/np/sta/gfsm/index.htm

***Table 18*** – Summary indicators for central government

| | 2015 Actual | 2016 Forecast | 2017 Forecast | 2018 Forecast | 2019 Forecast | 2020 Forecast |
|---|---|---|---|---|---|---|
| **$million** | | | | | | |
| Net operating balance | 3,347 | 2,730 | 2,904 | 3,411 | 5,882 | 7,252 |
| Fiscal Balance (Net lending/borrowing) | 2,618 | (977) | (886) | 455 | 3,251 | 5,049 |
| Cash surplus/(deficit) | (1,701) | (3,706) | (3,365) | (1,428) | 2,061 | 3,340 |
| Net worth | 84,615 | 84,913 | 87,638 | 91,041 | 97,219 | 105,011 |
| Net financial worth | 15,680 | 19,089 | 20,154 | 19,707 | 16,160 | 10,571 |
| Borrowing | 75,246 | 78,708 | 87,814 | 85,807 | 82,661 | 83,763 |
| **%GDP** | | | | | | |
| Net operating balance | 1.4 | 1.1 | 1.1 | 1.3 | 2.1 | 2.4 |
| Fiscal Balance (Net lending/borrowing) | 1.1 | (0.4) | (0.3) | 0.2 | 1.1 | 1.7 |
| Cash surplus/(deficit) | (0.7) | (1.5) | (1.3) | (0.5) | 0.7 | 1.1 |
| Net worth | 35.2 | 34.7 | 34.4 | 33.6 | 34.1 | 35.4 |
| Net financial worth | 6.5 | 7.8 | 7.9 | 7.3 | 5.7 | 3.6 |
| Borrowing | 31.3 | 32.1 | 34.4 | 31.6 | 29.0 | 28.3 |

*Source: The Treasury*

The following tables provide additional detail around the calculation of the key indicators.

| Table | Name of the statement | What the statement shows |
|---|---|---|
| 19 | Statement of operations | A summary of the results of all transactions during an accounting period. |
| 20 | Statement of other economic flows | Changes to stocks of assets, liabilities and net worth that come about from sources other than transactions. |
| 21 | Balance sheet | Stocks of assets and liabilities and the corresponding net worth. |
| 22 | Statement of sources and uses of cash | A summary of all cash flows presented using classifications similar to the Statement of operations. |
| 23 | Statement of stocks and flows | How the operating balance is applied to capital investment and debt repayment at a component level. |
| 24 | Reconciliation between GAAP and GFS operating balance | The adjustments between the GAAP and GFS operating balance. |
| 25 | Reconciliation between GAAP residual cash and GFS cash surplus/(deficit) | The adjustments between the GAAP and GFS cash indicators. |

The GFS manual (on the IMF's website) includes additional explanations on definitions for some of the terminology used in this section.

## *Table 19* – Statement of operations

for the years ended 30 June

| | 2015 Actual $m | 2016 Forecast $m | 2017 Forecast $m | 2018 Forecast $m | 2019 Forecast $m | 2020 Forecast $m |
|---|---|---|---|---|---|---|
| **Revenue** | | | | | | |
| Taxation revenue | 70,488 | 71,749 | 74,305 | 78,538 | 83,492 | 87,721 |
| Interest revenue and dividends | 3,325 | 4,302 | 3,947 | 4,026 | 4,212 | 4,396 |
| Sale of goods and services and other revenue | 9,868 | 9,320 | 9,447 | 9,592 | 9,689 | 9,808 |
| **Total revenue** | **83,681** | **85,371** | **87,699** | **92,156** | **97,393** | **101,925** |
| **Expenses** | | | | | | |
| Compensation of employees | 20,861 | 21,648 | 21,592 | 21,700 | 21,780 | 21,959 |
| Consumption of capital | 3,365 | 3,443 | 3,578 | 3,663 | 3,748 | 3,807 |
| Social benefits | 23,210 | 23,926 | 24,994 | 25,854 | 26,617 | 27,767 |
| Grants and subsidies | 5,078 | 5,836 | 5,773 | 5,810 | 5,728 | 5,786 |
| Finance costs | 3,259 | 3,100 | 3,521 | 3,624 | 3,709 | 3,770 |
| Other expenses | 24,561 | 25,442 | 24,814 | 24,888 | 25,014 | 25,148 |
| Forecast for new operating spending and top-down adjustment | - | (754) | 523 | 3,206 | 4,915 | 6,436 |
| **Total expenses** | **80,334** | **82,641** | **84,795** | **88,745** | **91,511** | **94,673** |
| **Net operating balance** | **3,347** | **2,730** | **2,904** | **3,411** | **5,882** | **7,252** |
| **Net acquisition of non-financial assets** | | | | | | |
| Acquisition of non-financial assets | 4,731 | 7,577 | 7,159 | 6,376 | 6,139 | 5,632 |
| Disposal of non-financial assets | (666) | (319) | (500) | (506) | (440) | (479) |
| Consumption of fixed assets | (3,365) | (3,443) | (3,578) | (3,663) | (3,748) | (3,807) |
| Change in inventories | 29 | (4) | (12) | 8 | (5) | (6) |
| Forecast for new capital spending and top-down adjustment | | (104) | 721 | 741 | 685 | 863 |
| **Fiscal Balance (Net lending/borrowing)** | **2,618** | **(977)** | **(886)** | **455** | **3,251** | **5,049** |
| **Net acquisition of financial assets** | | | | | | |
| Receivables | (512) | 974 | 1,342 | 1,927 | 2,128 | 2,103 |
| Advances | 1,743 | 1,939 | 995 | 995 | 926 | 911 |
| Other financial assets | (866) | (3,771) | 3,873 | (4,188) | (1,805) | 3,445 |
| Other assets | 1,868 | 119 | 388 | 26 | 62 | 8 |
| | **2,233** | **(739)** | **6,598** | **(1,240)** | **1,311** | **6,467** |
| **Net incurrence of liabilities** | | | | | | |
| Borrowings | 1,037 | 1,776 | 9,086 | (2,069) | (3,223) | 1,017 |
| Accounts payable | (159) | 240 | (731) | 451 | 948 | (153) |
| Other liabilities | (1,263) | (1,778) | (871) | (77) | 335 | 554 |
| | **(385)** | **238** | **7,484** | **(1,695)** | **(1,940)** | **1,418** |
| **Difference between net lending/borrowing and financing** | **-** | **-** | **-** | **-** | **-** | **-** |

*Source: The Treasury*

## *Table 20* – Statement of other economic flows

for the years ended 30 June

| | 2015 Actual $m | 2016 Forecast $m | 2017 Forecast $m | 2018 Forecast $m | 2019 Forecast $m | 2020 Forecast $m |
|---|---|---|---|---|---|---|
| **Other Economic Flows** | | | | | | |
| Impairments and write-offs of financial assets | (1,893) | (2,156) | (2,212) | (2,257) | (2,309) | (2,260) |
| GSF valuations changes | (322) | (370) | - | - | - | - |
| Other gains/(losses) on non financial instruments | (1,863) | 91 | (218) | (292) | (238) | (226) |
| Derivatives gains | 592 | 255 | 667 | 658 | 692 | 730 |
| Derivatives losses | (2,802) | (1,451) | (26) | (21) | 4 | 4 |
| Gains/(losses) on financial assets | 8,303 | 1,502 | 1,451 | 1,694 | 1,918 | 2,120 |
| Gains/(losses) on financial liabilities | (470) | (235) | 6 | (41) | (81) | (89) |
| Reserve Bank equity accounted | 624 | 283 | 178 | 224 | 282 | 310 |
| SOEs equity accounted | (101) | 63 | 36 | 110 | 151 | 164 |
| Other items | 356 | (414) | (61) | (83) | (123) | (213) |
| **Total other economic flows** | **2,424** | **(2,432)** | **(179)** | **(8)** | **296** | **540** |

*Source: The Treasury*

## *Table 21* – Balance sheet

as at 30 June

| | 2015 Actual $m | 2016 Forecast $m | 2017 Forecast $m | 2018 Forecast $m | 2019 Forecast $m | 2020 Forecast $m |
|---|---|---|---|---|---|---|
| **Assets** | | | | | | |
| Cash and cash equivalents | 11,468 | 9,629 | 9,571 | 10,077 | 10,768 | 11,477 |
| Receivables | 15,818 | 15,524 | 15,547 | 16,112 | 16,827 | 17,520 |
| Marketable securities, deposits and derivatives in gain | 32,259 | 31,073 | 35,712 | 31,837 | 30,274 | 34,148 |
| Share investments | 25,792 | 26,681 | 27,983 | 29,409 | 30,975 | 32,641 |
| Advances | 13,440 | 14,613 | 14,823 | 15,030 | 15,171 | 15,278 |
| Inventory | 568 | 564 | 552 | 560 | 555 | 549 |
| Other assets | 1,665 | 1,538 | 1,581 | 1,632 | 1,684 | 1,740 |
| Property, plant & equipment | 99,727 | 103,542 | 106,623 | 108,830 | 110,781 | 112,127 |
| Equity accounted investments | 23,680 | 23,585 | 23,923 | 24,140 | 24,469 | 24,729 |
| Intangible assets and goodwill | 1,842 | 2,115 | 2,275 | 2,284 | 2,275 | 2,228 |
| Forecast for new capital spending and top-down adjustment | - | (104) | 617 | 1,358 | 2,043 | 2,906 |
| **Total assets** | **226,259** | **228,760** | **239,207** | **241,269** | **245,822** | **255,343** |
| **Liabilities** | | | | | | |
| Payables | 10,819 | 11,100 | 10,405 | 10,881 | 11,858 | 11,732 |
| Deferred revenue | 1,751 | 1,710 | 1,674 | 1,649 | 1,620 | 1,593 |
| Borrowings | 75,246 | 78,708 | 87,814 | 85,807 | 82,661 | 83,763 |
| Insurance liabilities | 36,423 | 35,210 | 35,327 | 36,144 | 37,317 | 38,637 |
| Retirement plan liabilities | 10,845 | 10,752 | 10,246 | 9,738 | 9,236 | 8,743 |
| Provisions | 6,560 | 6,367 | 6,103 | 6,009 | 5,911 | 5,864 |
| **Total liabilities** | **141,644** | **143,847** | **151,569** | **150,228** | **148,603** | **150,332** |
| **Net Worth** | **84,615** | **84,913** | **87,638** | **91,041** | **97,219** | **105,011** |

*Source: The Treasury*

## *Table 22 – Statement of sources and uses of cash*

for the years ended 30 June

| | 2015 Actual $m | 2016 Forecast $m | 2017 Forecast $m | 2018 Forecast $m | 2019 Forecast $m | 2020 Forecast $m |
|---|---|---|---|---|---|---|
| **Cash receipts from operating activities** | | | | | | |
| Total tax receipt | 69,284 | 70,617 | 72,769 | 77,143 | 82,053 | 86,257 |
| Interest and dividends | 2,820 | 3,510 | 3,277 | 3,391 | 3,605 | 3,811 |
| Sale of goods and services and other receipts | 9,871 | 9,832 | 9,615 | 9,541 | 9,530 | 9,648 |
| **Total receipts** | 81,975 | 83,959 | 85,661 | 90,075 | 95,188 | 99,716 |
| **Cash payments from operating activities** | | | | | | |
| Compensation of employees and other payments | (44,501) | (46,625) | (45,063) | (44,259) | (43,870) | (44,271) |
| Social benefits | (23,896) | (24,489) | (25,538) | (26,421) | (27,186) | (28,650) |
| Grants and subsidies | (6,999) | (7,587) | (7,610) | (7,976) | (7,444) | (7,502) |
| Finance costs | (3,356) | (3,141) | (3,445) | (3,501) | (3,580) | (3,316) |
| Forecast for new operating spending and top-down adjustment | - | 754 | (523) | (3,206) | (4,915) | (6,436) |
| **Total payments** | (78,752) | (81,088) | (82,179) | (85,363) | (86,995) | (90,175) |
| **Net cash inflow/(outflow) from operating activities** | 3,223 | 2,871 | 3,482 | 4,712 | 8,193 | 9,541 |
| **Net cash outflow from investments in non-financial assets** | | | | | | |
| Acquisition of non-financial assets | (5,590) | (7,002) | (6,628) | (5,907) | (5,889) | (5,819) |
| Disposal of non-financial assets | 666 | 321 | 502 | 508 | 442 | 481 |
| Forecast for new capital spending and top-down adjustment | - | 104 | (721) | (741) | (685) | (863) |
| **Cash surplus/(deficit)** | **(1,701)** | **(3,706)** | **(3,365)** | **(1,428)** | **2,061** | **3,340** |
| **Net acquisition of financial assets** | | | | | | |
| Advances | (47) | (891) | (435) | (418) | (341) | (288) |
| Share investments | (4,652) | (271) | (5,364) | 4,192 | 1,974 | (3,348) |
| Net purchase of investments | (94) | (228) | (143) | 43 | (38) | - |
| Capital contributions | - | 75 | 13 | 8 | (28) | (28) |
| **Net incurrence of liabilities** | | | | | | |
| New Zealand dollar borrowings | 4,856 | (2,668) | (6) | 766 | (2) | (12) |
| Foreign currency borrowings | (1,350) | (965) | (481) | (105) | (1) | 24 |
| Government stock | 1,637 | 6,743 | 9,723 | (2,552) | (2,934) | 1,021 |
| **Net cash inflows from financing activities** | **350** | **1,795** | **3,307** | **1,934** | **(1,370)** | **(2,631)** |
| Foreign-exchange gains/(losses) on opening cash | 368 | 72 | - | - | - | - |
| **Net change in the stock of cash** | **(983)** | **(1,839)** | **(58)** | **506** | **691** | **709** |

*Source: The Treasury*

## *Table 23* – Statement of stocks and flows

### for the year ended 30 June 2015

| Opening balance statement | $million | Statement of operations | $million | Other economic flows | $million | Closing balance sheet | $million |
|---|---|---|---|---|---|---|---|
| Opening net worth | 73,169 | Operating balance | 3,347 | Holding gains | 8,099 | Closing net worth | 84,615 |
| *Equals* | | *Equals* | | | | | |
| Non-financial assets | 93,891 | Transactions | 729 | Valuation changes | 5,675 | Non-financial assets | 100,295 |
| *plus* | | *plus* | | *plus* | | *plus* | |
| **Net financial worth** | **(20,722)** | **Net lending** | **2,618** | **Change in net financial worth** | **2,424** | **Net financial worth** | **(15,680)** |
| *Equals* | | *Equals* | | | | | |
| Financial assets | 115,850 | Transactions in financial assets | 2,233 | Changes in financial assets | 7,881 | Closing financial assets | 125,964 |
| *less* | | *less* | | *less* | | *less* | |
| Opening liabilities | 136,572 | Transactions in liabilities | (385) | Changes in liabilities | 5,457 | Closing liabilities | 141,644 |

### for the year ended 30 June 2016

| Opening balance statement | $million | Statement of operations | $million | Other economic flows | $million | Closing balance sheet | $million |
|---|---|---|---|---|---|---|---|
| Opening net worth | 84,615 | Operating balance | 2,730 | Holding gains | (2,432) | Closing net worth | 84,913 |
| *Equals* | | *Equals* | | | | | |
| Non-financial assets | 100,295 | Transactions | 3,707 | Valuation changes | - | Non-financial assets | 104,002 |
| *plus* | | *plus* | | *plus* | | *plus* | |
| **Net financial worth** | **(15,680)** | **Net lending** | **(977)** | **Change in net financial worth** | **(2,432)** | **Net financial worth** | **(19,089)** |
| *Equals* | | *Equals* | | | | | |
| Financial assets | 125,964 | Transactions in financial assets | (739) | Changes in financial assets | (467) | Closing financial assets | 124,758 |
| *less* | | *less* | | *less* | | *less* | |
| Opening liabilities | 141,644 | Transactions in liabilities | 238 | Changes in liabilities | 1,965 | Closing liabilities | 143,847 |

### for the year ended 30 June 2017

| Opening balance statement | $million | Statement of operations | $million | Other economic flows | $million | Closing balance sheet | $million |
|---|---|---|---|---|---|---|---|
| Opening net worth | 84,913 | Operating balance | 2,904 | Holding gains | (179) | Closing net worth | 87,638 |
| *Equals* | | *Equals* | | | | | |
| Non-financial assets | 104,002 | Transactions | 3,790 | Valuation changes | - | Non-financial assets | 107,792 |
| *plus* | | *plus* | | *plus* | | *plus* | |
| **Net financial worth** | **(19,089)** | **Net lending** | **(886)** | **Change in net financial worth** | **(179)** | **Net financial worth** | **(20,154)** |
| *Equals* | | *Equals* | | | | | |
| Financial assets | 124,758 | Transactions in financial assets | 6,598 | Changes in financial assets | 59 | Closing financial assets | 131,415 |
| *less* | | *less* | | *less* | | *less* | |
| Opening liabilities | 143,847 | Transactions in liabilities | 7,484 | Changes in liabilities | 238 | Closing liabilities | 151,569 |

### for the year ended 30 June 2018

| Opening balance statement | $million | Statement of operations | $million | Other economic flows | $million | Closing balance sheet | $million |
|---|---|---|---|---|---|---|---|
| Opening net worth | 87,638 | Operating balance | 3,411 | Holding gains | (8) | Closing net worth | 91,041 |
| *Equals* | | *Equals* | | | | | |
| Non-financial assets | 107,792 | Transactions | 2,956 | Valuation changes | - | Non-financial assets | 110,748 |
| *plus* | | *plus* | | *plus* | | *plus* | |
| **Net financial worth** | **(20,154)** | **Net lending** | **455** | **Change in net financial worth** | **(8)** | **Net financial worth** | **(19,707)** |
| *Equals* | | *Equals* | | | | | |
| Financial assets | 131,415 | Transactions in financial assets | (1,240) | Changes in financial assets | 346 | Closing financial assets | 130,521 |
| *less* | | *less* | | *less* | | *less* | |
| Opening liabilities | 151,569 | Transactions in liabilities | (1,695) | Changes in liabilities | 354 | Closing liabilities | 150,228 |

### for the year ended 30 June 2019

| Opening balance statement | $million | Statement of operations | $million | Other economic flows | | Closing balance sheet | $million |
|---|---|---|---|---|---|---|---|
| Opening net worth | 91,041 | Operating balance | 5,882 | Holding gains | 296 | Closing net worth | 97,219 |
| *Equals* | | *Equals* | | | | | |
| Non-financial assets | 110,748 | Transactions | 2,631 | Valuation changes | - | Non-financial assets | 113,379 |
| *plus* | | *plus* | | *plus* | | *plus* | |
| **Net financial worth** | **(19,707)** | **Net lending** | **3,251** | **Change in net financial worth** | **296** | **Net financial worth** | **(16,160)** |
| *Equals* | | *Equals* | | | | | |
| Financial assets | 130,521 | Transactions in financial assets | 1,311 | Changes in financial assets | 611 | Closing financial assets | 132,443 |
| *less* | | *less* | | *less* | | *less* | |
| Opening liabilities | 150,228 | Transactions in liabilities | (1,940) | Changes in liabilities | 315 | Closing liabilities | 148,603 |

### for the year ended 30 June 2020

| Opening balance statement | $million | Statement of operations | $million | Other economic flows | | Closing balance sheet | $million |
|---|---|---|---|---|---|---|---|
| Opening net worth | 97,219 | Operating balance | 7,252 | Holding gains | 540 | Closing net worth | 105,011 |
| *Equals* | | *Equals* | | | | | |
| Non-financial assets | 113,379 | Transactions | 2,203 | Valuation changes | - | Non-financial assets | 115,582 |
| *plus* | | *plus* | | *plus* | | *plus* | |
| **Net financial worth** | **(16,160)** | **Net lending** | **5,049** | **Change in net financial worth** | **540** | **Net financial worth** | **(10,571)** |
| *Equals* | | *Equals* | | | | | |
| Financial assets | 132,443 | Transactions in financial assets | 6,467 | Changes in financial assets | 851 | Closing financial assets | 139,761 |
| *less* | | *less* | | *less* | | *less* | |
| Opening liabilities | 148,603 | Transactions in liabilities | 1,418 | Changes in liabilities | 311 | Closing liabilities | 150,332 |

## ***Table 24** – Reconciliation between GAAP and GFS operating balance*

as at 30 June

| | 2015 Actual $m | 2016 Forecast $m | 2017 Forecast $m | 2018 Forecast $m | 2019 Forecast $m | 2020 Forecast $m |
|---|---|---|---|---|---|---|
| **Operating balance per GAAP** | **5,771** | **298** | **2,725** | **3,403** | **6,178** | **7,792** |
| Remove gains/losses and net surpluses from associates and joint ventures | (5,357) | (699) | (2,369) | (2,446) | (2,693) | (2,847) |
| **Operating balance before gains and losses (OBEGAL)** | **414** | **(401)** | **356** | **957** | **3,485** | **4,945** |
| Remove SOE portion of OBEGAL (incl. eliminations) | 60 | 43 | (27) | (91) | (137) | (162) |
| Remove ETS expenses | 133 | 115 | 118 | 149 | 152 | 120 |
| Remove impairments and write-offs on financial assets | 1,893 | 2,156 | 2,212 | 2,257 | 2,309 | 2,260 |
| Tertiary institutions included on a line-by-line basis | 685 | 185 | 186 | 185 | 185 | 185 |
| Reserve Bank (equity accounted) | 184 | 586 | 71 | (36) | (91) | (91) |
| Other adjustments | (22) | 46 | (12) | (10) | (21) | (5) |
| **Net operating balance per GFS** | **3,347** | **2,730** | **2,904** | **3,411** | **5,882** | **7,252** |

*Source: The Treasury*

## ***Table 25*** – Reconciliation between GAAP residual cash and GFS cash surplus/(deficit)

as at 30 June

| | 2015 Actual $m | 2016 Forecast $m | 2017 Forecast $m | 2018 Forecast $m | 2019 Forecast $m | 2020 Forecast $m |
|---|---|---|---|---|---|---|
| **Residual cash per GAAP** | **(1,827)** | **(5,398)** | **(4,662)** | **(2,779)** | **523** | **1,930** |
| Back out advances | 570 | 609 | 569 | 461 | 386 | 217 |
| Back out investments | 1,525 | 1,974 | 1,983 | 1,546 | 1,509 | 1,466 |
| Add in cash flows from Crown entities | (1,089) | (1,809) | (1,585) | (614) | (300) | (246) |
| Remove cash flows from the Reserve Bank | (170) | 351 | (17) | (36) | (58) | (13) |
| Back out proceeds from government share offer | (628) | - | - | - | - | - |
| Add in NZSF cash flows | (86) | 547 | 356 | 4 | 7 | 12 |
| Other adjustments | 4 | 20 | (9) | (10) | (6) | (26) |
| **Cash surplus/(deficit)** | **(1,701)** | **(3,706)** | **(3,365)** | **(1,428)** | **2,061** | **3,340** |

*Source: The Treasury*

# Accounting Policies

The forecast financial statements contained in the published *Half Year Economic and Fiscal Update 2015* are based on the following accounting policies:

## Statement of compliance

These forecast financial statements have been prepared in accordance with the Public Finance Act 1989 and with New Zealand Generally Accepted Accounting Practice (NZ GAAP) as defined in the Financial Reporting Act 2013.

These forecasts have been prepared in accordance with Public Sector PBE Accounting Standards (PBE Standards) – Tier 1. These standards are based on International Public Sector Accounting Standards (IPSAS).

For the purposes of these financial statements, the Government reporting entity has been designated as a public benefit entity (PBE). Public benefit entities (PBEs) are reporting entities whose primary objective is to provide goods or services for community or social benefit and where any equity has been provided with a view to supporting that primary objective rather than for a financial return to equity holders. The forecast financial statements comply with PBE FRS-42: *Prospective Financial Statements* and NZ GAAP as it relates to prospective financial statements.

The use of public resources by the Government is primarily governed by the Public Finance Act 1989, the State Sector Act 1988, the Crown Entities Act 2004 and the State-Owned Enterprises Act 1986.

## Reporting and forecast period

The reporting periods for these Forecast Financial Statements are the years ending 30 June 2016 to 30 June 2020.

The “2015 Actual” figures reported in the statements are the audited results reported in the Financial Statements of Government for the year ended 30 June 2015. The “2016 Previous Budget” figures are the original forecasts to 30 June 2016 as presented in the 2015 Budget.

Where necessary, the financial information for SOEs and Crown entities that have a balance date other than 30 June has been adjusted for any transactions or events that have occurred since their most recent balance date and that are significant for the Financial Statements of the Government. Such entities are primarily in the education sector.

## Basis of preparation

These forecast financial statements have been prepared on the basis of historic cost modified by the revaluation of certain assets and liabilities, and prepared on an accrual basis, unless otherwise specified (for example, the Statement of Cash Flows).

The forecast financial statements are presented in New Zealand dollars rounded to the nearest million, unless separately identified.

## Judgements and estimations

The preparation of these financial statements requires judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, revenue and expenses. For example, the present value of large cash flows that are predicted to occur a long time into the future, as with the settlement of ACC outstanding claim obligations and Government superannuation retirement benefits, depends critically on judgements regarding future cash flows, including inflation assumptions and the risk-free discount rate used to calculate present values.

These forecasts include budget adjustments for new unallocated spending during the year (both operating and capital) and top-down adjustments which reduce the bias for forecast expenditure by departments to reflect maximum spending limits instead of mid-point estimates. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised, if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Where these judgements significantly affect the amounts recognised in the forecast financial statements they are described below.

## Reporting entity

The Government reporting entity as defined in section 2(1) of the Public Finance Act 1989 means:

- the Sovereign in right of New Zealand, and
- the legislative, executive, and judicial branches of the Government of New Zealand.

The description "Consolidated Financial Statements of the Government reporting entity" and the description "Financial Statements of the Government" have the same meaning and can be used interchangeably.

## Basis of combination

These forecast financial statements combine the following entities using the acquisition method of combination:

### Core Crown Entities

- Ministers of the Crown
- Government departments
- Offices of Parliament
- the Reserve Bank of New Zealand
- New Zealand Superannuation Fund

### Other Entities

- State-owned Enterprises
- Crown entities (excluding tertiary education institutions)
- Air New Zealand Limited
- Organisations listed in Schedule 4 and 4A of the Public Finance Act 1989
- Organisations listed in Schedule 5 of the Public Finance Act 1989
- Legal entities listed in Schedule 6 of the Public Finance Act 1989

The Crown has a full residual interest in all the above entities with the exception of Air New Zealand Limited, Tāmaki Redevelopment Company Limited and the entities listed in Schedule 5 of the Public Finance Act 1989 (Mixed Ownership Model Companies).

Corresponding assets, liabilities, revenue and expenses, are added together line by line. Transactions and balances between these sub-entities are eliminated on combination. Where necessary, adjustments are made to the financial statements of controlled entities to bring the accounting policies into line with those used by the Government reporting entity.

Tertiary education institutions are equity-accounted for the reasons explained in the notes to the Government's financial statements for the period ended 30 June 2015. This treatment recognises these entities' net assets, including asset revaluation movements, surpluses and deficits.

The basis of combination for a joint venture depends on the form of the joint venture.

## Significant Accounting Policies

The accounting policies set out below have been applied consistently to all periods in the *Half Year Update*.

### *Revenue*

*Taxation revenue levied through the Crown's sovereign power*

The Government provides many services and benefits that do not give rise to revenue. Further, payment of tax does not of itself entitle a taxpayer to an equivalent value of services or benefits, since there is no relationship between paying tax and receiving Crown services and transfers. Such revenue is received through the exercise of the sovereign power of the Crown in Parliament.

Tax revenue is recognised when a taxable event has occurred and the tax revenue can be reliably measured. The taxable event is defined as follows:

| Revenue Type | Revenue Recognition Point |
|---|---|
| Source deductions | When an individual earns income that is subject to PAYE |
| Resident withholding tax (RWT) | When an individual is paid interest or dividends subject to deduction at source |
| Fringe benefit tax (FBT) | When benefits are provided that give rise to FBT |
| Income tax | The earning of assessable income during the taxation period by the taxpayer |
| Goods and services tax (GST) | When the purchase or sale of taxable goods and services occurs during the taxation period |
| Customs and excise duty | When goods become subject to duty |
| Road user charges and motor vehicle fees | When payment of the fee or charge is made |
| Other indirect taxes | When the debt to the Crown arises |
| ACC levies | The levy revenue is earned evenly over the levy period |
| Other levies | When the obligation to pay the levy is incurred |

The New Zealand tax system is predicated on self-assessment where taxpayers are expected to understand the tax laws and comply with them. Inland Revenue has implemented systems and controls (eg, performing audits of taxpayer records) in order to detect and correct situations where taxpayers are not complying with the various acts it administers.

*Revenue earned through operations*

Revenue from the supply of goods and services to third parties is measured at the fair value of consideration received. Revenue from the supply of goods is recognised when the significant risks and rewards of ownership have been transferred to the buyer. Revenue from the supply of services is recognised on a straight-line basis over the specified period for the services unless an alternative method better represents the stage of completion of the transaction.

*Interest revenue*

Interest revenue is accrued using the effective interest method.

The effective interest rate exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount. The method applies this rate to the principal outstanding to determine interest revenue each period.

*Dividend revenue*

Dividend revenue from investments is recognised when the Government's rights as a shareholder to receive payment have been established.

*Rental revenue*

Rental revenue is recognised in the statement of financial performance on a straight-line basis over the term of the lease. Lease incentives granted are recognised evenly over the term of the lease as a reduction in total rental revenue.

*Donated or subsidised assets*

Where an asset is acquired for nil or nominal consideration, the fair value of the asset received is recognised as revenue in the statement of financial performance.

If control of the donated assets is conditional on the satisfaction of performance obligations, the revenue is deferred and recognised when the conditions are satisfied.

*Gains*

Gains may be reported in the Statement of Financial Performance when assets are revalued or liabilities are devalued in certain circumstances as described in the accounting policies for those assets and liabilities. For the purposes of reporting OBEGAL these gains are excluded from total revenue and presented elsewhere in the Statement of Financial Performance.

### *Expenses*

*General*

Expenses are recognised in the period to which they relate.

*Welfare benefits and entitlements*

Welfare benefits and entitlements, including New Zealand Superannuation, are recognised in the period when an application for a benefit has been received and the eligibility criteria have been met.

*Grants and subsidies*

Where grants and subsidies are at the government's discretion until payment, the expense is recognised when the payment is made. Otherwise, the expense is recognised when the specified criteria for the grant or subsidy have been fulfilled and notice has been given to the government.

*Interest expense*

Interest expense is accrued using the effective interest method.

The effective interest rate exactly discounts estimated future cash payments through the expected life of the financial liability to that liability's net carrying amount. The method applies this rate to the principal outstanding to determine interest expense each period.

*Losses*

Losses may be reported in the Statement of Financial Performance when assets are devalued or liabilities are revalued in certain circumstances as described in the accounting policies for those assets and liabilities. For the purposes of reporting OBEGAL these losses are excluded from total expenses and presented elsewhere in the Statement of Financial Performance.

*Foreign currency*

Transactions in foreign currencies are initially translated at the foreign exchange rate at the date of the transaction. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of financial performance, except when recognised in the statement of comprehensive revenue and expense when hedge accounting is applied.

Non-monetary assets and liabilities measured at historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies and measured at fair value are translated into New Zealand dollars at the exchange rate applicable at the fair value date. The associated foreign exchange gains or losses follow the fair value gains or losses to either the statement of financial performance or the statement of comprehensive revenue and expense.

Foreign exchange gains and losses arising from translating monetary items that form part of the net investment in a foreign operation are reported in a translation reserve in net worth and recognised in the statement of comprehensive revenue and expense.

### *Sovereign receivables and taxes repayable*

Receivables from taxes, levies and fines (and any penalties associated with these activities) as well as social benefit receivables which do not arise out of a contract are collectively referred to as sovereign receivables.

Receivables arising from sovereign revenue will be initially recognised at fair value. These receivables are subsequently adjusted for penalties and interest as they are charged, and tested for impairment. Interest and penalties charged on tax receivables are presented as tax revenue in the statement of financial performance.

Taxes repayable represent refunds due to taxpayers and are recognised at their nominal value. They are subsequently adjusted for interest once account and refund reviews are complete.

### *Financial Instruments – forecasting policies*

For forecasting purposes, financial instruments held at the forecast preparation date are assumed to be held until they mature. Additional gains and losses on financial assets measured at fair value are based on long-run rate of return assumptions appropriate to the forecast portfolio mix, after adjusting for interest revenue and dividend revenue which are reported separately. Gains and losses on financial liabilities measured at fair value are assumed to unwind over the period to maturity, as they are assumed to be redeemed at par value.

Forecast sales and purchases of financial instruments are assumed to be issued at par value, with no premiums or discounts forecast. The exceptions are interest-free assets with long maturities, such as student loans, where a write-down to fair value is recognised when the loan or receivable is issued.

Derivatives held for trading are measured at fair value, which is nil when initially entered into. That is, fair value changes are only recognised after the derivative is created and as a result of changes in underlying variables such as exchange rates. Hence, forecasts for derivatives expected to be entered into over the forecast period are assumed to have a nil balance. Forward margins on forward-exchange contracts existing at the forecast preparation date are amortised over the period of the contract on a straight line basis.

Gains and losses are not forecast for financial assets measured at amortised cost.

### *Financial instruments – accounting policies*

*Non-derivative financial assets*

Financial assets are designated into the following categories: loans and receivables at amortised cost, financial assets available-for-sale, financial assets held-for-trading and financial assets designated as fair value through the operating balance. This designation is made by reference to the purpose of the financial instruments, policies and practices for their management, their relationship with other instruments and the reporting costs and benefits associated with each designation.

The maximum loss due to default on any financial asset is the carrying value reported in the statement of financial position.

| Major Financial Asset Type | Designation |
|---|---|

| Major Financial Asset Type | Designation |
|---|---|
| Trade and other receivables | All designated as loans and receivables at amortised cost |
| Student loans | All designated as loans and receivables at amortised cost |
| Kiwibank mortgages | All designated as loans and receivables at amortised cost |
| Other advances | Generally designated as loans and receivables at amortised cost |
| IMF financial assets | All designated as loans and receivables at amortised cost |
| Share investments | Generally designated as fair value through the operating balance |
| Marketable securities | Generally designated as fair value through the operating balance |
| Long-term deposits | Generally designated as loans and receivables at amortised cost |

Loans and receivables are recognised initially at fair value plus transaction costs and subsequently measured at amortised cost using the effective interest method (refer interest revenue policy). Loans and receivables issued with durations of less than 12 months are recognised at their nominal value, unless the effect of discounting is material. Allowances for estimated irrecoverable amounts are recognised when there is objective evidence that the asset is impaired. Interest, impairment losses and foreign exchange gains and losses are recognised in the statement of financial performance.

Financial assets held-for-trading and financial assets designated at fair value through the operating balance are recorded at fair value with any realised and unrealised gains or losses recognised in the statement of financial performance.

A financial asset is designated at fair value through the operating balance if acquired principally for the purpose of trading in the short term. It may also be designated into this category if the accounting treatment results in more relevant information because it either significantly reduces an accounting mismatch with related liabilities or is part of a group of financial assets that is managed and evaluated on a fair value basis, such as with the NZ Superannuation Fund. Gains or losses from interest, foreign exchange and other fair value movements are separately reported in the statement of financial performance. Transaction costs are expensed as they are incurred.

Available-for-sale financial assets are initially recorded at fair value plus transaction costs. They are subsequently recorded at fair value with any resultant fair value gains or losses recognised in the statement of comprehensive revenue and expense, with some exceptions. Those exceptions are for impairment losses, any interest calculated using the effective interest method and, in the case of monetary items (such as debt securities), foreign exchange gains and losses resulting from translation differences due to changes in amortised cost of the asset. These latter items are recognised in the statement of financial performance. For non-monetary available-for-sale financial assets (eg, some unlisted equity instruments) the fair value movements recognised in the statement of comprehensive revenue and expense include any related foreign exchange component. At derecognition, the cumulative fair value gain or loss previously recognised in the statement of comprehensive revenue and expense, is recognised in the statement of financial performance.

Cash and cash equivalents include cash on hand, cash in transit, bank accounts and deposits with an original maturity of no more than three months.

Fair values of quoted investments are based on market prices. Regular way purchases and sales of all financial assets are accounted for at trade date. If the market for a financial asset is not active, fair values for initial recognition and, where appropriate, subsequent measurement are established by using valuation techniques, as set out in the notes to the financial statements. At each balance date an assessment is made whether there is objective evidence that a financial asset or group of financial assets is impaired.

*Non-derivative financial liabilities*

Financial liabilities are designated into the following categories: amortised cost, financial liabilities held-for-trading and financial liabilities designated as fair value through the operating balance. This designation is made by reference to the purpose of the financial instruments, policies and practices for their management, their relationship with other instruments and the reporting costs and benefits associated with each designation.

| Major Financial Liability Type | Designation |
|---|---|
| Accounts payable | All designated at amortised cost |
| Government stock | Generally designated at amortised cost |
| Treasury bills | Generally designated at amortised cost |
| Government retail stock | All designated at amortised cost |
| Settlement deposits with Reserve Bank | All designated at amortised cost |
| Issued currency | Not designated: Recognised at face value |

Financial liabilities held-for-trading and financial liabilities designated at fair value through the operating balance are recorded at fair value with any realised and unrealised gains or losses recognised in the statement of financial performance. A financial liability is designated at fair value through the operating balance if acquired principally for the purpose of trading in the short term. It may also be designated into this category if the accounting treatment results in more relevant information because it either eliminates or significantly reduces an accounting mismatch with related assets or is part of a group of financial liabilities that is managed and evaluated on a fair value basis. Gains or losses from interest, foreign exchange and other fair value movements are separately reported in the statement of financial performance. Transaction costs are expensed as they are incurred.

Other financial liabilities are recognised initially at fair value less transaction costs and are subsequently measured at amortised cost using the effective interest method. Financial liabilities entered into with durations of less than 12 months are recognised at their nominal value. Amortisation and, in the case of monetary items, foreign exchange gains and losses, are recognised in the statement of financial performance as is any gain or loss when the liability is derecognised.

Currency issued for circulation, including demonetised currency after 1 July 2004, is recognised at face value. Currency issued represents a liability in favour of the holder.

*Derivative financial instruments*

Derivative financial instruments are recognised both initially and subsequently at fair value. They are reported as either assets or liabilities depending on whether the derivative is in a net gain or net loss position respectively. Recognition of the movements in the value of derivatives depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged (see Hedging section below).

Derivatives that are not designated for hedge accounting are classified as held-for-trading financial instruments with fair value gains or losses recognised in the statement of financial performance. Such derivatives may be entered into for risk management purposes, although not formally designated for hedge accounting, or for tactical trading.

*Hedging*

Individual entities consolidated within the Government reporting entity apply hedge accounting after considering the costs and benefits of adopting hedge accounting, including:

- whether an economic hedge exists and the effectiveness of that hedge
- whether the hedge accounting qualifications could be met, and
- the extent to which it would improve the relevance of reported results.

### (a) Cash flow hedge

Where a derivative qualifies as a hedge of variability in asset or liability cash flows (cash flow hedge), the effective portion of any gain or loss on the derivative is recognised in the statement of comprehensive revenue and expense and the ineffective portion is recognised in the statement of financial performance. Where the hedge of a forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability (eg, where the hedge relates to the purchase of an asset in a foreign currency), the amount recognised in the statement of comprehensive revenue and expense is included in the initial cost of the asset or liability. Otherwise, gains or losses recognised in the statement of comprehensive revenue and expense transfer to the statement of financial performance in the same period as when the hedged item affects the statement of financial performance (eg, when the forecast sale occurs). Effective portions of the hedge are recognised in the same area of the statement of financial performance as the hedged item.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in net worth at that time remains in net worth and is recognised when the forecast transaction is ultimately recognised in the statement of financial performance. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in the statement of comprehensive revenue and expense is transferred to the statement of financial performance.

### (b) Fair value hedge

Where a derivative qualifies as a hedge of the exposure to changes in fair value of an asset or liability (fair value hedge) any gain or loss on the derivative is recognised in the statement of financial performance together with any changes in the fair value of the hedged asset or liability. The carrying amount of the hedged item is adjusted by the fair value gain or loss on the hedged item in respect of the risk being hedged.

*Inventories*

Inventories are recorded at the lower of cost (calculated using a weighted average method) and net realisable value. Inventories held for distribution for public benefit purposes are recorded at cost adjusted where applicable for any loss of service potential. Where inventories are acquired at no cost, or for nominal consideration, their cost is deemed to be fair value, usually determined through an assessment of current replacement cost at the date of acquisition.

Inventories include unissued currency and harvested agricultural produce (eg, logs, wool). The cost of harvested agricultural produce is measured at fair value less estimated costs to sell at the point of harvest.

### *Property, plant and equipment – forecasting policy*

Forecasts of the value of PPE (including state highways and rail infrastructure) use the valuations recorded in the *Financial Statements of the Government* for the prior year and any additional valuations that have occurred up to the forecast preparation date. As a consequence, no further realised or unrealised gains or losses are forecast for the entire forecast period.

### *Property, plant and equipment – accounting policies*

*Measurement on initial recognition*

Items of property, plant and equipment (PPE) are initially recorded at cost. Cost may include transfers from net worth of any gains or losses on qualifying cash flow hedges of foreign currency purchases of PPE. Where an asset is acquired for nil or nominal consideration the asset is recognised initially at fair value, where fair value can be reliably determined, as revenue in the statement of financial performance.

*Capitalisation of borrowing costs*

Generally, Government borrowings are not directly attributable to individual assets. Therefore, borrowing costs incurred during the period, including any that could be allocated as a cost of completing and preparing assets for their intended use are expensed rather than capitalised.

*Subsequent measurement*

Subsequent to initial recognition, classes of PPE are accounted for as set out below.

Revaluations are carried out for a number of classes of PPE to reflect the service potential or economic benefit obtained through control of the asset. Revaluation is based on the fair value of the asset, with changes reported by class of asset.

| Class of PPE | Accounting policy |
|---|---|
| Land and buildings | Land and buildings are recorded at fair value and, for buildings, less depreciation accumulated since the assets were last revalued.<br>Land associated with the rail network and state highways is valued using an estimate based on adjacent use, as an approximation to fair value.<br>Valuations undertaken in accordance with standards issued by the New Zealand Property Institute are used where applicable.<br>Otherwise, valuations conducted in accordance with the Rating Valuation Act 1998, may be used if they have been confirmed as appropriate by an independent valuer.<br>When revaluing buildings, there must be componentisation to the level required to ensure adequate representation of the material components of the buildings. At a minimum, this requires componentisation to three levels: structure, building services and fit-out. |
| Specialist military equipment | Specialist military equipment is recorded on a depreciated replacement cost basis less depreciation accumulated since the assets were last revalued.<br>Valuations are obtained through specialist assessment by New Zealand Defence Force advisers, and the basis for the valuation is confirmed as appropriate by an independent valuer. |
| State highways | State highways are recorded on a depreciated replacement cost basis less depreciation accumulated since the assets were last revalued. |
| Rail network | Rail infrastructure used for freight services (freight only and dual use lines required for freight operations) are recorded at fair value less depreciation accumulated since the assets were last revalued. Rail infrastructure not required for freight operations and used for metro services is recorded on a depreciated replacement cost basis less depreciation accumulated since the assets were last revalued. |
| Aircraft | Aircraft (excluding specialised military equipment) are recorded at fair value less depreciation accumulated since the assets were last revalued. |
| Electricity distribution | Electricity distribution network assets are recorded at cost, less depreciation and impairment losses accumulated since the assets were purchased. |
| Electricity generation | Electricity generation assets are recorded at fair value less depreciation accumulated since the assets were last revalued. |

| | |
|---|---|
| Specified cultural and heritage assets | Specified cultural and heritage assets comprise national parks, conservation areas and related recreational facilities, as well as National Archives holdings and the collections of the National Library, Parliamentary Library and Te Papa. Of these, non-land assets are recorded at fair value and, for non-land assets, less subsequent accumulated depreciation. Assets are not reported with a financial value in cases where they are not realistically able to be reproduced or replaced, and where no market exists to provide a valuation. For example, Crown research institutes own various collections, library resources and databases that are an integral part of the research work they undertake. These collections are highly specialised and there is no reliable basis for establishing a valuation. They have therefore not been valued for financial reporting purposes. |
| Other plant and equipment | Other plant and equipment, which includes motor vehicles and office equipment, are recorded at cost less depreciation and impairment losses accumulated since the assets were purchased. |

***Revaluation***

Classes of PPE that are revalued are revalued at least every five years or whenever the carrying amount differs materially to fair value.

Items of PPE are revalued to fair value for the highest and best use of the item on the basis of the market value of the item, or on the basis of market evidence, such as discounted cash flow calculations. If no market evidence of fair value exists, an optimised depreciated replacement cost approach is used as the best proxy for fair value. Where an item of PPE is recorded at its optimised depreciated replacement cost, this cost is based on the estimated present cost of constructing the existing item of PPE by the most appropriate method of construction, less allowances for physical deterioration and optimisation for obsolescence and relevant surplus capacity. Where an item of PPE is recorded at its optimised depreciated replacement cost, the cost does not include any borrowing costs.

Unrealised gains and losses arising from changes in the value of PPE are recognised as at balance date. To the extent that a gain reverses a loss previously charged to the statement of financial performance for the asset class, the gain is credited to the statement of financial performance. Otherwise, gains are added to an asset revaluation reserve for that class of asset. To the extent that there is a balance in the asset revaluation reserve for the asset class, any loss is deducted from that reserve. Otherwise, losses are reported in the statement of financial performance.

*Depreciation*

Depreciation is charged on a straight-line basis at rates calculated to allocate the cost or valuation of an item of PPE, less any estimated residual value, over its remaining useful life.

Typically, the estimated useful lives of different classes of PPE are as follows:

| Class of PPE | Estimated useful lives |
|---|---|
| Buildings | 25 to 150 years |
| Specialist military equipment (SME) | 5 to 55 years |
| State highways:<br>Pavement (surfacing)<br>Pavement (other)<br>Bridges | <br>7 years<br>50 years<br>70 to 105 years |
| Rail Network:<br>Track and ballast<br>Tunnels and bridges<br>Overhead traction and signalling | <br>25 to 40 years<br>60 to 100 years<br>10 to 40 years |
| Aircraft (excluding SME) | 10 to 20 years |
| Electricity distribution network | 2 to 80 years |
| Electricity generation assets | 25 to 100 years |
| Other plant and equipment | 3 to 30 years |

Specified heritage and cultural assets are generally not depreciated.

*Impairment*

For assets held at cost, where an asset's recoverable amount is less than its carrying amount, it is reported at its recoverable amount and an impairment loss is recognised. The main reason for holding some assets (for example, electricity generation assets) is to generate cash. For these assets the recoverable amount is the higher of the amount that could be recovered by sale (after deducting the costs of sale) or the amount that will be generated by using the asset through its useful life. Some assets do not generate cash (for example, state highways) and for those assets, depreciated replacement cost is used. Losses resulting from impairment are reported in the statement of financial performance, unless the asset is carried at a revalued amount in which case any impairment loss is treated as a revaluation decrease.

***Disposal***

Realised gains and losses arising from disposal of PPE are generally recognised in the statement of financial performance when the significant risks and rewards of ownership of the asset have transferred to the acquirer. Any balance attributable to the disposed asset in the asset revaluation reserve is transferred to taxpayer funds.

*Public private partnerships*

A public private partnership (also known as a service concession arrangement) is an arrangement between the Government and a private sector partner in which the private sector partner uses specified assets to supply a public service on behalf of the Government for a specified period of time and is compensated for its services over the period of the arrangement. The costs of the specified assets are financed by the private sector partner, except where existing assets of the Government (generally land) are allocated to the arrangement. Payments made by the Government to a private sector partner over the period of a service concession arrangement cover the costs of the provision of services, interest expenses and repayment of the liability incurred to acquire the specified assets.

The assets in a public private partnership are recognised as assets of the Government. If the assets are progressively constructed, the Government progressively recognises work-in-progress at cost and a financial liability of the same value is also recognised. When the assets are fully constructed, the total asset cost and the matching financial liability reflect the value of the future compensation to be provided to the private-sector partner for the assets.

Subsequent to initial recognition:

- the assets are accounted for in accordance with the accounting policy applicable to the classes of property, plant and equipment that the specified assets comprise, and
- the financial liabilities are measured at amortised cost.

*Equity accounted investments*

NZ GAAP determines the combination bases for entities that make up the Government reporting entity and is used by public benefit entities to determine whether they control another entity.

However, NZ GAAP is not clear about how the definitions of control and significant influence should be applied in some circumstances in the public sector, for example, where legislation provides public sector entities with statutory autonomy and independence, in particular with Tertiary Education Institutions. Treasury's view is that because the Government cannot determine their operating and financing policies, but does have a number of powers in relation to these entities, it is appropriate to treat them as associates.

*Biological assets*

Biological assets (eg, trees and sheep) managed for harvesting into agricultural produce (eg, logs and wool) or for transforming into additional biological assets are measured at fair value less estimated costs to sell, with any realised and unrealised gains or losses reported in the statement of financial performance. Where fair value cannot be reliably determined, the asset is recorded at cost less accumulated depreciation and accumulated impairment losses. For commercial forests, fair value takes into account age, quality of timber and the forest management plan.

Biological assets not managed for harvesting into agricultural produce, or being transformed into additional biological assets are reported as property, plant and equipment in accordance with the policies for property, plant and equipment.

*Intangible assets*

Intangible assets are initially recorded at cost.

The cost of an internally generated intangible asset represents expenditure incurred in the development phase of the asset only. The development phase occurs after the following can be demonstrated: technical feasibility; ability to complete the asset; intention and ability to sell or use; and development expenditure can be reliably measured. Research is "original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding". Expenditure incurred on the research phase of an internally generated intangible asset is expensed when it is incurred. Where the research phase cannot be distinguished from the development phase, the expenditure is expensed when incurred.

Where an intangible asset with a market value is internally generated for nil or nominal consideration it is initially reported at cost, which by definition is nil/nominal.

The Government's holdings of assigned amount units arising from the Kyoto protocol are reported at fair value. Other intangible assets with finite lives are subsequently recorded at cost less any amortisation and impairment losses. Amortisation is charged to the statement of financial performance on a straight-line basis over the useful life of the asset. Typically, the estimated useful life of computer software is three to five years.

Intangible assets with indefinite useful lives are not amortised, but are tested at least annually for impairment.

Realised gains and losses arising from disposal of intangible assets are recognised in the statement of financial performance when the significant risks and rewards of ownership have transferred to the acquirer.

Intangible assets with finite lives are reviewed at least annually to determine if there is any indication of impairment. Where an intangible asset's recoverable amount is less than its carrying amount, it is reported at its recoverable amount and an impairment loss is recognised. Losses resulting from impairment are reported in the statement of financial performance.

Goodwill is tested for impairment annually.

*Non-current assets held for sale and discontinued operations*

Non-current assets or disposal groups are separately classified where their carrying amount will be recovered through a sale transaction rather than continuing use; that is, where such assets are available for immediate sale and where sale is highly probable. Non-current assets held for sale, or disposal groups, are recorded at the lower of their carrying amount and fair value less costs to sell.

*Investment property*

Investment property is property held primarily to earn rentals or for capital appreciation or both. It does not include property held primarily for strategic purposes or to provide a social service (eg, affordable housing) even though such property may earn rentals or appreciate in value – such property is reported as property, plant and equipment.

Investment properties are measured at fair value. Gains or losses arising from fair value changes are included in the statement of financial performance. Valuations are undertaken in accordance with standards issued by the New Zealand Property Institute.

### *Employee benefits*

*Pension liabilities*

Obligations for contributions to defined contribution retirement plans are recognised in the statement of financial performance as they fall due. Obligations for defined benefit retirement plans are recorded at the latest actuarial value of the Crown liability. All movements in the liability, including actuarial gains and losses, are recognised in full in the statement of financial performance in the period in which they occur.

*Other employee entitlements*

Employee entitlements to salaries and wages, annual leave, long service leave, retiring leave and other similar benefits are recognised in the statement of financial performance when they accrue to employees. Employee entitlements to be settled within 12 months are reported at the amount expected to be paid. The liability for long-term employee entitlements is reported as the present value of the estimated future cash outflows.

*Termination benefits*

Termination benefits are recognised in the statement of financial performance only when there is a demonstrable commitment to either terminate employment prior to normal retirement date or to provide such benefits as a result of an offer to encourage voluntary redundancy. Termination benefits settled within 12 months are reported at the amount expected to be paid, otherwise they are reported as the present value of the estimated future cash outflows.

*Insurance contracts*

The future cost of outstanding insurance claims liabilities are valued based on the latest actuarial information. The estimate includes estimated payments associated with claims reported and accepted, claims incurred but not reported, claims that may be re-opened, and the costs of managing these claims. Movements of the claims liabilities are reflected in the statement of financial performance. Financial assets backing these liabilities are designated at fair value through the operating balance.

*Reinsurance*

Premiums paid to reinsurers are recognised as reinsurance expense in the statement of financial performance. Premiums are measured from the attachment date over the period of indemnity of the reinsurance contract, in accordance with the expected pattern of the incidence of risk. Prepaid reinsurance premiums are included in prepayments in the statement of financial position.

*Reinsurance and other recoveries receivable*

Reinsurance and other recoveries receivable on paid claims and outstanding claims, are recognised as revenue in the statement of financial performance.

Recoveries receivable are assessed in a manner similar to the assessment of outstanding claims and are measured as the present value of the expected future receipts.

*Leases*

Finance leases transfer, to the Crown as lessee, substantially all the risks and rewards incident on the ownership of a leased asset. Initial recognition of a finance lease results in an asset and liability being recognised at amounts equal to the lower of the fair value of the leased property or the present value of the minimum lease payments. The capitalised values are amortised over the period in which the Crown expects to receive benefits from their use.

Operating leases, where the lessor substantially retains the risks and rewards of ownership, are recognised in a systematic manner over the term of the lease. Leasehold improvements are capitalised and the cost is amortised over the unexpired period of the lease or the estimated useful life of the improvements, whichever is shorter. Lease incentives received are recognised evenly over the term of the lease as a reduction in rental expense.

*Other liabilities and provisions*

Other liabilities and provisions are recorded at the best estimate of the expenditure required to settle the obligation. Liabilities and provisions to be settled beyond 12 months are recorded at the present value of their estimated future cash outflows.

*Contingent liabilities and contingent assets*

Contingent liabilities and contingent assets are reported at the point at which the contingency is evident or when a present liability is unable to be measured with sufficient reliability to be recorded in the financial statements (unquantifiable liability). Contingent liabilities, including unquantifiable liabilities, are disclosed if the possibility that they will crystallise is more than remote. Contingent assets are disclosed if it is probable that the benefits will be realised.

*Commitments*

Commitments are future expenses and liabilities to be incurred on contracts that have been entered into at balance date.

Commitments are classified as:

- Capital commitments: aggregate amount of capital expenditure contracted for but not recognised as paid or provided for at balance date.
- Lease commitments: non-cancellable operating leases with a lease term exceeding one year.

Cancellable commitments that have penalty or exit costs explicit in the agreement on exercising the option to cancel are reported at the value of those penalty or exit costs (ie, the minimum future payments).

Interest commitments on debts, commitments for funding, and commitments relating to employment contracts are not separately reported as commitments.

*Comparatives*

When presentation or classification of items in the financial statements is amended or accounting policies are changed voluntarily, comparative figures have been restated to ensure consistency with the current period unless it is impracticable to do so.

Comparatives referred to as Previous Budget were forecasts published in the *2015 Budget Economic and Fiscal Update* adjusted for any PBE transition reclassifications.

*Segment analysis*

The Government reporting entity is not required to provide segment reporting as it is a public benefit entity. Nevertheless, information is presented for material institutional components and major economic activities within or undertaken by the Government reporting entity. The three major institutional components of the Crown are:

- Core Crown: This group, which includes Ministers, government departments, Offices of Parliament, the Reserve Bank of New Zealand and the New Zealand Superannuation Fund most closely represents the budget sector and provides information that is useful for fiscal analysis purposes. Investments in Crown entities and SOEs are reported at historic cost with no impairment. This ensures losses in those entities are reflected in the appropriate segment.
- Crown entities: This group includes entities governed by the Crown Entities Act 2004. These entities have separate legal form and specified governance frameworks (including the degree to which each Crown entity is required to give effect to, or be independent of, government policy).
- State-owned enterprises: This group includes entities governed by the State-owned Enterprises Act 1986, and (for the purposes of these statements) also includes Air New Zealand, Mighty River Power, Meridian Energy and Genesis Energy. This group represents entities that undertake commercial activity.

Functional analysis is also provided of a number of financial statements items. This functional analysis is drawn from the *Classification of the Functions of Government* as developed by the Organisation for Economic Co-operation and Development (OECD).