# 2

# Fiscal Outlook

## Key Points

- Tax revenue is forecast to grow at twice the rate of core Crown expenses as the economy grows and the Government continues to apply fiscal constraint.
- Operating deficits narrow over the next two years and return to surplus in 2014/15.
- Net core Crown debt peaks at 29.5% of GDP in 2014/15 and 2015/16.
- Operating surpluses begin to rebuild the fiscal buffer against future shocks.

***Table 2.1*** – Fiscal indicators

| Year ended 30 June | 2012 Actual | 2013 Forecast | 2014 Forecast | 2015 Forecast | 2016 Forecast | 2017 Forecast |
|---|---|---|---|---|---|---|
| **$billions** | | | | | | |
| Core Crown tax revenue | 55.1 | 57.4 | 61.9 | 65.6 | 68.9 | 71.9 |
| Core Crown expenses | 69.1 | 72.0 | 71.8 | 73.7 | 75.6 | 78.0 |
| Total Crown OBEGAL[1] | (9.2) | (7.3) | (2.0) | 0.1 | 1.4 | 2.0 |
| Total Crown OBEGAL (excluding earthquake expenses) | (7.3) | (6.0) | (2.1) | 0.2 | 1.4 | 2.1 |
| Total Crown operating balance | (14.9) | (3.3) | 0.0 | 2.1 | 3.6 | 4.4 |
| Core Crown residual cash | (10.6) | (9.8) | (6.9) | (4.6) | (3.3) | (2.9) |
| Net core Crown debt[2] | 50.7 | 60.0 | 66.7 | 70.7 | 73.5 | 75.9 |
| Gross debt[3] | 79.6 | 80.2 | 88.4 | 86.3 | 90.1 | 95.9 |
| Net worth attributable to the Crown | 59.3 | 56.3 | 56.5 | 58.8 | 62.6 | 67.0 |
| **% of GDP** | | | | | | |
| Core Crown tax revenue | 26.5 | 26.6 | 27.0 | 27.4 | 27.7 | 27.7 |
| Core Crown expenses | 33.2 | 33.3 | 31.4 | 30.8 | 30.3 | 30.1 |
| Total Crown OBEGAL[1] | (4.4) | (3.4) | (0.9) | 0.0 | 0.6 | 0.8 |
| Total Crown OBEGAL (excluding earthquake expenses) | (3.5) | (2.8) | (0.9) | 0.1 | 0.6 | 0.8 |
| Total Crown operating balance | (7.2) | (1.5) | 0.0 | 0.9 | 1.4 | 1.7 |
| Core Crown residual cash | (5.1) | (4.5) | (3.0) | (1.9) | (1.3) | (1.1) |
| Net core Crown debt[2] | 24.3 | 27.8 | 29.2 | 29.5 | 29.5 | 29.3 |
| Gross debt[3] | 38.2 | 37.1 | 38.7 | 36.0 | 36.2 | 37.0 |
| Net worth attributable to the Crown | 28.5 | 26.1 | 24.7 | 24.6 | 25.1 | 25.9 |

Notes: 1 Operating balance before gains and losses

2 Net core Crown debt excluding the New Zealand Superannuation Fund (NZS Fund) and advances

3 Gross sovereign-issued debt excluding Reserve Bank bills and settlement cash

A glossary and a longer time series for these indicators are provided on pages 120 and 126 respectively.

Source: The Treasury

# Overview

The fiscal outlook sees revenue growing at a slightly faster rate than the economy over the next five years, while expenses decline in comparison as fiscal constraint applied in recent Budgets is forecast to take effect. As a result, operating deficits narrow over the next two years before the Crown returns to surplus in 2014/15.

Compared to the *Budget Update,* a weaker economic outlook has resulted in reductions in tax revenue across the forecast period. However, lower inflation and interest rate forecasts have meant that benefit and finance costs are also expected to decline, partially offsetting the reduction in revenue. As a result, the fiscal outlook is broadly similar to that forecast at the *Budget Update*. More detailed information about the return to surplus can be found on page 32.

The Canterbury Earthquake Recovery Fund remains at $5.5 billion based on the current estimate of the Crown's share of the costs. Policy decisions to date are expected to fully utilise the Fund (refer page 30).

With a return to surplus forecast, net worth is expected to begin to recover but remains below the levels that existed prior to the global financial crisis.

Net debt continues to increase in nominal terms across the forecast period, but peaks as a percentage of GDP in 2014/15 and 2015/16 at 29.5%. While operating cash flows are expected to be positive by 2015/16, over the five-year forecast period cash deficits total $10.0 billion. When capital payments of $17.4 billion over the period to 2016/17 (eg, purchasing assets and issuing student loans) are included, residual cash deficits continue across all periods of the forecasts (Table 2.2).

There are risks to these forecasts, particularly in relation to the uncertainty of the economic outlook and the cost of the Canterbury rebuild to the Crown. Both the *Specific Fiscal Risks* and the *Risks and Scenarios* chapters discuss these risks.

***Table 2.2*** – Reconciliation between OBEGAL and net debt

| Year ended 30 June<br>$billions | 2012<br>Actual | 2013<br>Forecast | 2014<br>Forecast | 2015<br>Forecast | 2016<br>Forecast | 2017<br>Forecast |
|---|---|---|---|---|---|---|
| Core Crown revenue | 60.6 | 62.9 | 67.8 | 71.8 | 75.0 | 78.3 |
| Core Crown expenses | (69.1) | (72.0) | (71.8) | (73.7) | (75.6) | (78.0) |
| Net surpluses/(deficits) of SOEs and CEs | (0.7) | 1.8 | 2.0 | 2.0 | 2.0 | 1.7 |
| **Total Crown OBEGAL** | **(9.2)** | **(7.3)** | **(2.0)** | **0.1** | **1.4** | **2.0** |
| Net retained surpluses of SOEs, CEs and NZS Fund | 0.4 | (1.7) | (2.1) | (2.0) | (2.1) | (1.8) |
| Non-cash items and working capital movements | 1.6 | 1.9 | 0.6 | 0.7 | 1.0 | 1.3 |
| **Net core Crown cash flow from operations** | **(7.2)** | **(7.1)** | **(3.5)** | **(1.2)** | **0.3** | **1.5** |
| Net purchase of physical assets | (1.3) | (1.7) | (2.2) | (1.8) | (1.4) | (1.4) |
| Advances and capital injections | (2.1) | (2.3) | (2.0) | (2.2) | (2.9) | (2.0) |
| Forecast for future new capital spending | - | (0.2) | (0.7) | (0.9) | (0.8) | (1.0) |
| Proceeds from Government share offers | - | 1.5 | 1.5 | 1.5 | 1.5 | - |
| **Core Crown residual cash deficit** | **(10.6)** | **(9.8)** | **(6.9)** | **(4.6)** | **(3.3)** | **(2.9)** |
| Opening net debt | 40.1 | 50.7 | 60.0 | 66.7 | 70.7 | 73.5 |
| Core Crown residual cash deficit | 10.6 | 9.8 | 6.9 | 4.6 | 3.3 | 2.9 |
| Other valuation changes in financial assets and financial liabilities | - | (0.5) | (0.2) | (0.6) | (0.5) | (0.5) |
| **Closing net debt** | **50.7** | **60.0** | **66.7** | **70.7** | **73.5** | **75.9** |
| **As a percentage of GDP** | **24.3%** | **27.8%** | **29.2%** | **29.5%** | **29.5%** | **29.3%** |

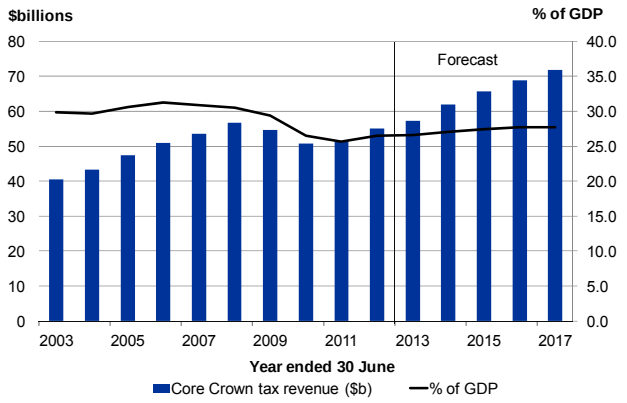
Source: The Treasury

# Core Crown Tax Revenue

***Tax revenue continues to recover and increase as a percentage of GDP...***

Core Crown tax revenue is forecast to increase by $14.5 billion over the next four years and grow at a faster rate than the economy, reaching $71.9 billion (27.7% of GDP) in 2016/17 as shown in Figure 2.1.

***Figure 2.1*** – Core Crown tax revenue



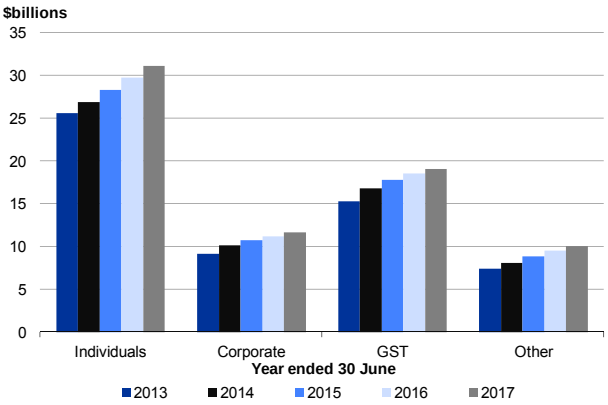

Source: The Treasury

Most of the increase in tax revenue is owing to growth in the economy, with nominal GDP forecast to grow by 24.5% (over the next five years), in part because of the rebuild of Canterbury. The increase in tax revenue over the forecast period mainly comes through four tax types:

- Earnings growth means that wages increase and, because of the progressive nature of the personal tax scale (ie, higher marginal tax rates at higher incomes), average personal income tax rates increase, adding about 0.4% of GDP to source deductions through pay as you earn tax (PAYE).

- Increasing interest rates add about 0.2% of GDP to resident withholding tax (RWT) as the key 90-day rate is forecast to rise from 2.6% to 4.7%.

***Figure 2.2*** – Core Crown tax revenue by type




Source: The Treasury

- An increase in the assumed effective tax rate on total entrepreneurial income, owing to a number of influences flowing on from changes made in Budget 2010 (including base-broadening depreciation measures and the effect of increased enforcement activity by the Inland Revenue [IRD]), adds about 0.2% of GDP to other persons tax.

- In addition to the impact of economic growth, the *Half Year Update* includes policy changes to fuel excise and road user charges, providing $1.1 billion of additional revenue (including 2016/17).

### *...but the tax forecasts have weakened since the last Budget Update*

Weaker economic forecasts have reduced tax revenue since the *Budget Update* by $7.9 billion for the four years to 2015/16, as shown in Table 2.3 below.

***Table 2.3*** – Movement in core Crown tax revenue forecasts since the *Budget Update*

| Affected tax type | Economic driver | 2013 Forecast | 2014 Forecast | 2015 Forecast | 2016 Forecast | Total impact |
|---|---|---|---|---|---|---|
| Source deductions | Employees' compensation | - | (0.3) | (0.6) | (0.9) | (1.8) |
| Other persons tax | Entrepreneurial income | (0.1) | (0.2) | (0.2) | (0.4) | (0.9) |
| Company tax | Operating surplus | (0.6) | (0.4) | (0.5) | (0.6) | (2.1) |
| Goods and services tax | Consumption and residential investment | (0.3) | (0.4) | (0.4) | (0.6) | (1.7) |
| RWT | Interest rates | (0.2) | (0.2) | (0.2) | (0.2) | (0.8) |
| All other taxes | Other | (0.1) | (0.1) | (0.2) | (0.2) | (0.6) |
| **Total macroeconomic effect** | | **(1.3)** | **(1.6)** | **(2.1)** | **(2.9)** | **(7.9)** |
| Tax forecasting changes | | 0.2 | 0.4 | 0.5 | 0.2 | 1.3 |
| Tax policy changes | | - | 0.2 | 0.3 | 0.4 | 0.9 |
| **Total changes in tax revenue since Budget 2012** | | **(1.1)** | **(1.0)** | **(1.3)** | **(2.3)** | **(5.7)** |

Source: The Treasury

The tax forecasting changes, which were not directly related to changes in the macroeconomic forecast, were positive in each year. These changes were mainly caused by increases in:

- the effective tax rate on other persons tax owing to changes made in Budget 2010, as discussed earlier, which has become apparent through recent tax outturns, and
- the assumed level of tax on investment income as a result of the increasing popularity of savings schemes such as KiwiSaver.

The tax policy changes to road user charges and fuel excise duty are new decisions since Budget.

### *Treasury and IRD forecasts*

In line with established practice, IRD has also prepared a set of tax forecasts which, like the Treasury's tax forecasts, is based on the Treasury's macroeconomic forecasts. In this *Half Year Update*, the two sets of tax forecasts are close to each other, with the largest difference in any one year being just over $300 million (around 0.5% of core Crown tax revenue). A full comparison of the Treasury and IRD forecasts can be found in the Additional Information on the Treasury website, at www.treasury.govt.nz/budget/forecasts/hyefu2012.

# Core Crown Expenses

***Core Crown expenses continue to increase over the forecast period but fall as a percentage of GDP...***

Core Crown expenses are expected to increase in nominal terms by $8.9 billion over the forecast period, from $69.1 billion in 2011/12 to $78.0 billion in 2016/17, as shown in Figure 2.3.

While expenses continue to increase, the growth is expected to be at a slower rate than economic growth. As a result, core Crown expenses fall as a percentage of GDP over the forecast period.

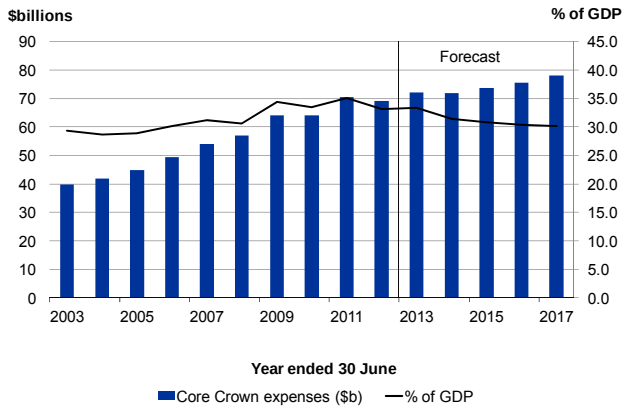
Figure 2.4 illustrates the slowing expense growth (excluding earthquake costs). Over the 10 years from 2002/03 through to 2011/12 the average annual increase in core Crown expenses was 6.1%, but over the next five years the average increase is forecast to halve to 3.0% per year. The fall in the growth rate is largely owing to fiscal constraint on spending in recent Budgets.

This fiscal constraint is projected to continue over the ten years following the forecast period and helps the Crown rebuild the fiscal buffer and resume contributions to the NZS Fund. See page 38 for details about the projection period.

While the rate of expense growth declines, the nominal increase in core Crown expenses is $8.9 billion from 2011/12 to the end of the forecast period, as detailed in Table 2.4.

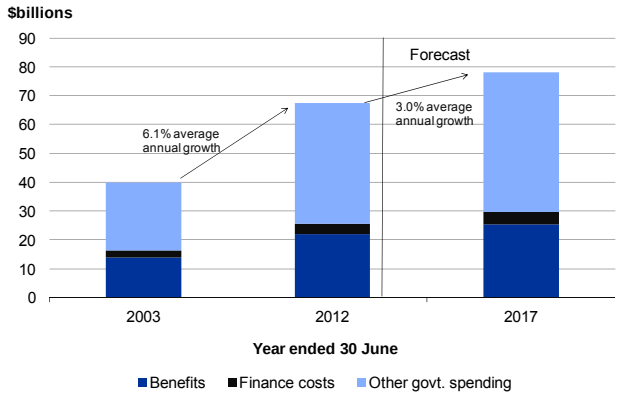
New operating initiatives are the largest component of the increase in core Crown expenses. Of the $5.0 billion of allowance increases, $0.6 billion relates to Budget 2012, with the remaining $4.4 billion relating to the next four Budgets, as shown in Figure 2.5.

***Figure 2.3*** – Core Crown expenses



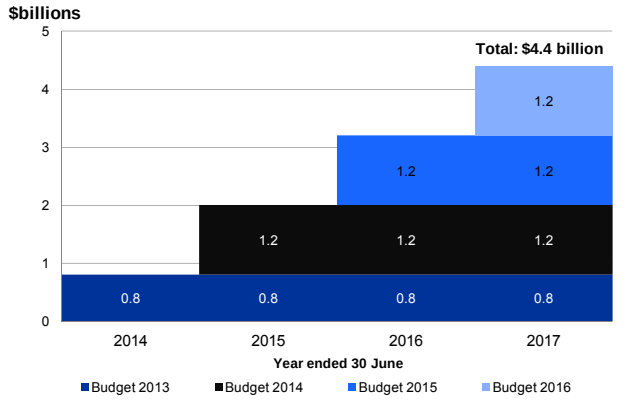

Source: The Treasury

***Figure 2.4*** – Core Crown expense growth (excluding earthquake costs)




Source: The Treasury

***Figure 2.5*** – Future budget allowances




Source: The Treasury

In addition to new spending, increases in benefit spending provide most of the remainder of expense growth. Social assistance benefits are expected to increase $3.4 billion over the next five years, with $3.1 billion of the increase related to New Zealand Superannuation payments (forecast to rise from $9.6 billion in 2011/12 to $12.7 billion by 2016/17). About two-thirds of the growth in superannuation payments is owing to an increase in recipient numbers, while the remaining third relates to payments rising with wage growth.

***Table 2.4*** – Growth in core Crown expenses

| **Year ended 30 June** | **$billions** |
|---|---|
| **Core Crown expenses 2011/12** | **69.1** |
| **Core Crown expenses 2016/17** | **78.0** |
| Increase in core Crown expenses | 8.9 |
| *New spending* | |
| Budget allowances | 5.0 |
| *Forecast changes* | |
| Social assistance | 3.4 |
| Emissions Trading Scheme | (0.3) |
| Finance costs | 0.8 |
| Debt impairments | 0.7 |
| *One-off costs* | |
| Weathertight homes | 0.3 |
| Earthquake expenses | (1.2) |
| Other movements | 0.2 |
| **Total change in expenses** | 8.9 |

Source: The Treasury

Finance costs are expected to increase by $0.8 billion over the next five years, largely reflecting the continued increases in gross debt and interest rates over the forecast period.

Debt impairments are expected to be $0.7 billion higher by 2016/17 than they were in 2011/12. The increase in these impairments is largely owing to the actual expense in 2011/12 being lower than expected, in part owing to one-off reductions to student loan impairments through policy changes to the level of repayments rising from 10% to 12%.

Offsetting these increases, costs of the Emissions Trading Scheme (ETS) are expected to be lower than in 2011/12 as the number of units issued and the costs of those units decrease across the forecast period.

There are some large “one-off” expenses that also contribute to the growth in expenses over the forecast period. The largest of these is a fall in earthquake costs, which are largely expected to be incurred in the first few years of the forecasts and fall to $0.1 billion in 2016/17; $1.2 billion lower than in 2011/12. Slightly offsetting the fall in earthquake costs was a one-off reduction in 2011/12 related to the weathertight homes provision to reflect the reduced take-up rates for the scheme.

***...but are forecast to increase at a slower rate than forecast in the Budget Update***

While core Crown expenses are forecast to rise over the next five years, they are less than those forecast at the *Budget Update*. For example, the forecast core Crown expenditure in the 2015/16 year was $77.3 billion in the *Budget Update* and this is now expected to be $75.6 billion in these forecasts (a $1.7 billion reduction).

The reduction in the expense forecasts is largely related to the weaker economic outlook, particularly in relation to inflation, wage growth and interest rates. In comparison to the *Budget Update*, with specific reference to the 2015/16 year, the two main reductions in core Crown expenses as a result of changes to the economic forecasts were:

- Social assistance benefits are $0.6 billion less as lower tracks for inflation and average wage growth flow through to lower benefit payments. The average payment rates for the Accommodation Supplement is the other main source of reductions in benefit expenses, which reflect recent data on rental costs and are now expected to increase at a slower rate than previously expected. Slightly offsetting these reductions, the *Half Year Update* includes higher recipient numbers in each year of the forecasts other than in 2012/13.
- The track for interest rates was also revised down in these forecasts, which meant that finance costs are $0.2 billion less than the *Budget Update* forecasts. The lower track for interest rates also impacts on the Government Superannuation Fund (GSF) expenses as the interest rate unwind of the long-term liability is expected to be lower.

In addition to the impact of economic forecasts, the cost of the ETS is expected to be $0.6 billion lower than was expected at Budget 2012. The reduction in the ETS costs was because the cost of units has decreased markedly since the Budget 2012 forecasts. However, while the expense forecasts are lower, these are largely offset by a reduction in revenue so there is minimal OBEGAL impact.

Overall, the lower expense forecasts compared to the *Budget Update* help contribute to the Government remaining on track to return to surplus in 2014/15, which is detailed on page 32.

## Cost of Canterbury Earthquakes to the Crown

The Government is making a significant contribution to the rebuild in Canterbury, with latest estimates for the total cost to the Crown at $13.1 billion.

While the Canterbury Earthquake Recovery Fund remains at $5.5 billion, total estimates of existing policies are now expected to fully utilise the Fund. Of the $5.5 billion, the expected costs of policy decisions total $4.7 billion and $0.8 billion is set aside as an estimation contingency to reflect the significant uncertainty.

With the Fund fully allocated, new policy decisions, or increases in costs above the estimation contingency that are not managed within existing budget allowances, will adversely affect the Crown's fiscal position.

There remains a significant risk that the final cost to the Crown will exceed the $13.1 billion cost estimate included in these forecasts. The *Specific Fiscal Risks* chapter includes discussion on the risks associated with the Canterbury earthquakes (page 61).

The tables below show the latest estimates of the net impact of the earthquakes included in these forecasts.

***Table 2.5*** – Net earthquake expenses

| Year ending 30 June<br>$millions | 2011<br>Actual | 2012<br>Actual | 2013<br>Forecast | 2014<br>Forecast | 2015<br>Forecast | 2016<br>Forecast | 2017<br>Forecast | Total<br>HYEFU | *Total*<br>*BEFU* |
|---|---|---|---|---|---|---|---|---|---|
| Local infrastructure | 160 | 721 | 214 | 152 | 152 | 100 | 50 | 1,549 | *1,643* |
| Welfare support | 220 | 23 | 35 | 23 | 6 | - | - | 307 | *233* |
| Southern Response support package | 355 | 156 | (98) | (41) | (33) | (37) | (2) | 300 | *148* |
| Land zoning | 653 | 258 | 199 | 10 | - | - | - | 1,120 | *1,067* |
| Other costs | 205 | 121 | 589 | 593 | (41) | (37) | 8 | 1,438 | *852* |
| Estimation contingency | - | - | 793 | - | - | - | - | 793 | - |
| Yet to be allocated | - | - | - | - | - | - | - | - | *1,564* |
| **Canterbury Earthquake Recovery Fund** | **1,593** | **1,279** | **1,732** | **737** | **84** | **26** | **56** | **5,507** | ***5,507*** |
| EQC | 7,471 | 662 | (164) | (255) | (68) | (114) | - | 7,532 | *7,445* |
| Other SOEs and CEs | 23 | (41) | 24 | (116) | 80 | 57 | 22 | 49 | *23* |
| **Total Crown** | **9,087** | **1,900** | **1,592** | **366** | **96** | **(31)** | **78** | **13,088** | ***12,975*** |

Source: The Treasury

***Table 2.6*** – Net cash payments

| Year ending 30 June<br>$millions | 2011<br>Actual | 2012<br>Actual | 2013<br>Forecast | 2014<br>Forecast | 2015<br>Forecast | 2016<br>Forecast | 2017<br>Forecast | Total<br>HYEFU | *Total*<br>*BEFU* |
|---|---|---|---|---|---|---|---|---|---|
| **Canterbury Earthquake Recovery Fund** | **508** | **1,312** | **1,399** | **1,027** | **488** | **602** | **171** | **5,507** | ***5,507*** |
| EQC | 1,178 | 2,231 | 817 | 1,729 | 1,006 | 571 | - | 7,532 | *7,445* |
| Other SOEs and CEs | 23 | (18) | (2) | (142) | 28 | 79 | 31 | (1) | *23* |
| **Total Crown** | **1,709** | **3,525** | **2,214** | **2,614** | **1,522** | **1,252** | **202** | **13,038** | ***12,975*** |

Source: The Treasury

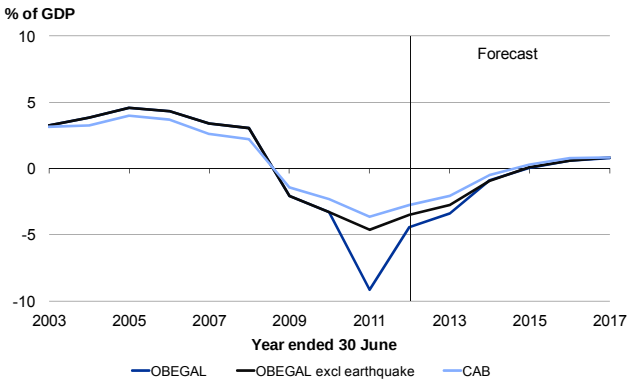
A discussion about the total economic impact of the Canterbury earthquakes can be found in the *Economic Outlook* chapter on page 13.

# Operating Surplus

***The Crown is forecast to return to surplus in 2014/15...***

Overall, the Crown is forecasting two years of declining deficits, with the OBEGAL expected to reach a surplus of $66 million in 2014/15. Surpluses are then forecast to continue across the projection period (see page 38) as the Crown starts to strengthen its fiscal position. The Crown begins to rebuild a fiscal buffer against future adverse shocks and cost pressures and contributions to the NZS Fund are expected to resume in 2018/19.

***Figure 2.6*** – Operating balance before gains and losses (OBEGAL)




Source: The Treasury

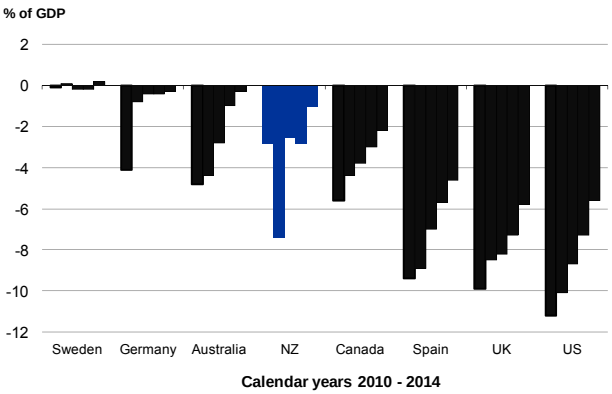
The main driver of the return to surplus is fiscal constraint, with core Crown expenses forecast to grow at half the rate of core Crown tax revenue over the forecast period. In addition, the State-Owned Enterprise (SOE) and Crown Entity (CE) sectors contribute between $1.7 billion and $2.0 billion to the OBEGAL in each year of the forecasts.

The underlying nature of the operating balance can be seen using the cyclically-adjusted balance (CAB), which adjusts for business cycles and significant one-off expenses. As shown in Figure 2.6, the recent operating deficits have been largely structural, primarily reflecting the changed view of the underlying size of the economy following the global financial crisis. The resulting smaller economy reduced the tax base, while, in contrast, expenses continued to grow. As the forecast for expense and revenue flows (described earlier) occur, the CAB is expected to move from deficit to surplus in 2014/15.[3]

***...and the recovery has a similar profile to other countries***

New Zealand's return to surplus track is similar to that of other countries, as shown in Figure 2.7. The fiscal balance[4] track shows the impact of the global financial crisis and that most other developed countries are also forecast to recover over the coming years. While New Zealand is forecast to return to surplus in 2014/15, some other countries were more severely affected by the global financial crisis and are forecast to face a period of longer deficits.

***Figure 2.7*** – Fiscal balance compared to other countries




Sources: IMF, the Treasury

3 For more details, see the *Additional Information* on the Treasury website.

4 To enable comparison between countries, New Zealand's generally accepted accounting practice (GAAP) based figures have been converted to a Government Financial Statistics (GFS) basis, therefore the fiscal balance differs from other indicators in this document. New Zealand data are for June year estimates of the central government, while the international comparators are for general government (includes local government). For more details about GFS, see the *Additional Information* on the Treasury website.

## Changes in OBEGAL Since Budget 2012

Changes in the economic forecasts since the *Budget Update* have worsened the fiscal outlook. However, the reductions in revenue were largely offset by reductions in expenses and tax policy changes that increased expected revenue. Refer to page 26 for discussion on changes in tax revenue and page 29 for discussion on the changes in core Crown expenses. Overall, the OBEGAL track is broadly in line with the forecasts from the *Budget Update*. A summary of the changes is shown in Table 2.7 below.

***Table 2.7*** – Changes in OBEGAL since Budget 2012

| Year ended 30 June<br>$billions | 2013<br>Forecast | 2014<br>Forecast | 2015<br>Forecast | 2016<br>Forecast |
|---|---|---|---|---|
| **OBEGAL - *Budget Update*** | **(7.9)** | **(2.0)** | **0.2** | **2.1** |
| *Changes in forecasts:* | | | | |
| Economic forecasts | | | | |
| Tax revenue | (1.3) | (1.6) | (2.1) | (2.9) |
| Benefit expenses | 0.3 | 0.2 | 0.5 | 0.6 |
| Net finance costs | - | 0.2 | 0.2 | 0.1 |
| GSF expenses | - | 0.1 | 0.1 | 0.1 |
| Policy changes: | | | | |
| Road user charges and fuel excise duty | - | 0.2 | 0.3 | 0.4 |
| Transport-related expenses | - | (0.1) | (0.1) | (0.2) |
| Timing differences: | | | | |
| Earthquake expenses | 0.7 | 0.3 | 0.1 | 0.1 |
| Change in top-down | 0.5 | 0.1 | 0.1 | 0.1 |
| Other changes: | | | | |
| Tax forecasting changes | 0.2 | 0.4 | 0.5 | 0.2 |
| ACC | (0.1) | 0.1 | 0.2 | 0.3 |
| Other | 0.3 | 0.1 | 0.1 | 0.5 |
| *Total changes since Budget Update* | *0.6* | *(0.0)* | *(0.1)* | *(0.7)* |
| **OBEGAL – *Half Year Update*** | **(7.3)** | **(2.0)** | **0.1** | **1.4** |

Source: The Treasury

### Economic forecasts:

The downward revision in nominal GDP reduced tax revenue forecasts, but the impact of these was partially offset by reductions in forecasts for benefits and finance costs as inflation and interest rates are now forecast to be lower than at the *Budget Update*.

### Policy changes:

Increases in road user charges and fuel excise are expected with the increase in revenue used to fund transport-related operating and capital costs.

### Timing differences:

While the earthquake costs are expected to be similar to those forecast at Budget 2012, the profile has changed, with costs now being recognised earlier. In addition, some costs are now capital in nature, reducing the impact on the OBEGAL.

The 2012/13 top-down adjustment[5] has been increased significantly from the *Budget Update* reflecting the large department underspends in 2011/12.

### Other changes:

Changes to assumptions for tax revenue forecasts were made to incorporate recent evidence which represents a structural change in tax revenue.

Recent improvements in rehabilitation rates for ACC recipients are now thought to be more structural than initially thought, and have reduced ACC insurance expense across the forecast period.

5 The top-down adjustment is a central adjustment to reduce department forecasts for spending, reflecting the fact that departments tend to forecast upper limits of spending rather than best estimates.

# Net Debt

***Operating deficits result in cash shortfalls...***

While the OBEGAL is expected to return to surplus in 2014/15, core Crown operating cash flows are expected to reach a small surplus one year later in 2015/16. Over the five-year forecast period, operating cash deficits total $10.0 billion.

In addition, the Crown is forecast to spend $23.4 billion on capital items, such as the purchase of physical assets and issuing student loans, over the next five years. When the estimated $6.0 billion of proceeds (see Table 2.11 on page 37) from the Government share offers are included, the net capital spend is $17.4 billion.

Combining the net operating results with the capital spend, residual cash remains in deficit across the forecast period and is the key driver for the increase in net debt, as shown in Table 2.8 below.

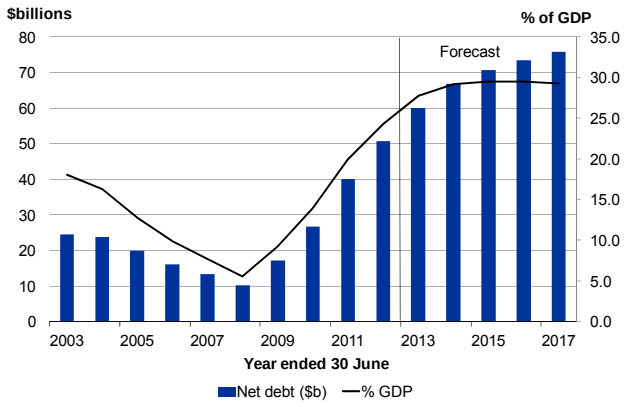
***Table 2.8*** – Movement in net core Crown debt

| Year ended 30 June<br>$billions | 2012<br>Actual | 2013<br>Forecast | 2014<br>Forecast | 2015<br>Forecast | 2016<br>Forecast | 2017<br>Forecast |
|---|---|---|---|---|---|---|
| Opening net debt | 40.1 | 50.7 | 60.0 | 66.7 | 70.7 | 73.5 |
| Core Crown residual cash deficit | 10.6 | 9.8 | 6.9 | 4.6 | 3.3 | 2.9 |
| Other valuation changes in financial assets and financial liabilities | - | (0.5) | (0.2) | (0.6) | (0.5) | (0.5) |
| **Closing net debt** | **50.7** | **60.0** | **66.7** | **70.7** | **73.5** | **75.9** |
| **As a percentage of GDP** | **24.3%** | **27.8%** | **29.2%** | **29.5%** | **29.5%** | **29.3%** |

Source: The Treasury

Therefore, despite a return to surplus, the continued capital spending sees net debt[6] increase in nominal terms over the forecast period. However, net debt is expected to peak as a share of the economy at 29.5% of GDP in 2014/15 and 2015/16, as shown in Figure 2.8.

***Figure 2.8*** – Net core Crown debt




Source: The Treasury

The increase in net debt over the forecast period has a negative impact on OBEGAL as net finance costs increase with the rising debt levels. However, the increase in finance costs is not as steep as the debt increase because interest rates are expected to remain at historically low levels across the forecast period.

6 Net debt is a core Crown measure excluding the NZS Fund and advances.

### *...which are mostly funded by issuing government bonds*

The residual cash deficit is mostly funded by raising debt, but can also be met by reducing financial assets. The New Zealand Debt Management Office (NZDMO) raises the Crown's debt through a number of programmes, the most significant being the domestic bond programme. Over the five-year forecast period, net issuance of government bonds is forecast to be $23.4 billion, with cash proceeds from the issuance being $48.4 billion (face value of $48.0 billion) and repayments of $25.0 billion ($22.8 billion of this from the market).

***Table 2.9*** – Net increase in government bonds

| **Year ending 30 June** | **2013** | **2014** | **2015** | **2016** | **2017** | **5-year** |
|---|---|---|---|---|---|---|
| **$billions** | **Forecast** | **Forecast** | **Forecast** | **Forecast** | **Forecast** | **Total** |
| Face value of government bonds issued (market) | 14.0 | 10.0 | 10.0 | 7.0 | 7.0 | 48.0 |
| **Cash proceeds** | | | | | | |
| Cash proceeds from issue of government bonds (market) | 15.8 | 10.4 | 9.7 | 6.3 | 6.2 | 48.4 |
| Repayment of government bonds (market) | (10.0) | - | (11.0) | (1.8) | - | (22.8) |
| Net increase in government bonds (market) | 5.8 | 10.4 | (1.3) | 4.5 | 6.2 | 25.6 |
| Cash proceeds from issue of government bonds (non-market) | - | - | - | - | - | - |
| Repayment of government bonds (non-market) | (0.5) | (1.5) | (0.2) | - | - | (2.2) |
| Net increase in government bonds (non-market) | (0.5) | (1.5) | (0.2) | - | - | (2.2) |
| **Net cash proceeds from bond issuance** | **5.3** | **8.9** | **(1.5)** | **4.5** | **6.2** | **23.4** |

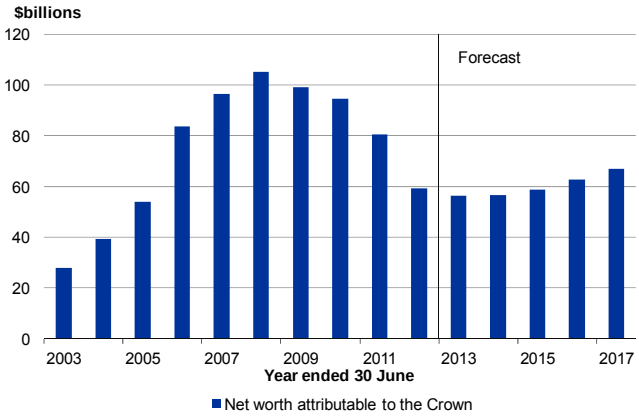
Source: The Treasury

# Total Crown Balance Sheet

***Net worth recovers over the forecast period and the fiscal buffer begins to rebuild***

Largely owing to the forecast return to surplus, net worth attributable to the Crown increases over the forecast period and reaches $67.0 billion by 2016/17, as shown in Figure 2.9. However, net worth remains below the levels that existed prior to the global financial crisis when net worth attributable to the Crown peaked at $105.1 billion in 2007/08.

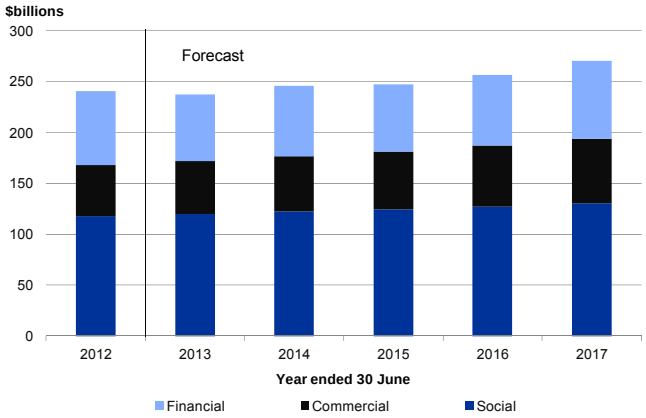
***Figure 2.9*** – Net worth attributable to the Crown




Source: The Treasury

By 2016/17, total Crown assets are forecast to increase by $31.9 billion to $272.2 billion, outpacing the growth in liabilities which are forecast to reach $199.0 billion by 2016/17 (an increase of $18.5 billion).

***Figure 2.10*** – Total Crown assets by portfolio




Source: The Treasury

***Assets are expected to increase...***

Total assets are expected to increase $31.9 billion in net terms over the next five years as all portfolios grow, as shown in Figure 2.10.

Both the commercial and social portfolios increase steadily over the forecast period ($13.3 billion and $11.3 billion respectively). However, the financial portfolio declines in the early years of the forecasts, largely owing to reductions in assets to repay debt and to meet claims from the Canterbury earthquakes, before recovering in the later years as investment growth in the Crown financial institutions (CFIs) recovers.

While net asset growth is forecast to be $31.9 billion, the total investment in capital is expected to be $81.6 billion, as detailed in Table 2.10.

***Table 2.10*** – Gross asset growth

| Year ending 30 June<br>$billions | 2012<br>Actual | 2013<br>Forecast | 2014<br>Forecast | 2015<br>Forecast | 2016<br>Forecast | 2017<br>Forecast | 5-year<br>Total |
|---|---|---|---|---|---|---|---|
| Opening total assets | 245.2 | 240.3 | 237.8 | 246.8 | 248.2 | 258.5 | |
| Increases in assets | | | | | | | |
| Physical asset additions | 6.5 | 7.5 | 7.7 | 7.0 | 6.8 | 7.1 | 36.1 |
| Student loans issuance | 1.6 | 1.6 | 1.7 | 1.7 | 1.7 | 1.8 | 8.5 |
| CFI asset investment growth | 3.9 | 6.2 | 3.7 | 4.4 | 4.7 | 5.1 | 24.1 |
| Kiwibank mortgages | 1.0 | 1.0 | 1.3 | 1.7 | 2.5 | 3.0 | 9.5 |
| Forecast new capital spending | - | 0.2 | 0.7 | 0.8 | 0.8 | 0.9 | 3.4 |
| **Total increase in assets** | **13.0** | **16.5** | **15.1** | **15.6** | **16.5** | **17.9** | **81.6** |
| Reductions in assets | | | | | | | |
| Depreciation on physical assets | (3.8) | (3.9) | (4.1) | (4.2) | (4.3) | (4.4) | (20.9) |
| Asset disposals | (0.3) | (0.6) | (0.7) | (0.8) | (0.6) | (0.7) | (3.4) |
| RBNZ and NZDMO activity | (4.2) | (9.2) | 1.6 | (6.8) | 0.9 | 3.4 | (10.1) |
| Student loans | (0.8) | (1.1) | (1.2) | (1.2) | (1.3) | (1.3) | (6.1) |
| National disaster fund | (2.1) | (3.0) | (2.6) | (1.3) | (0.3) | - | (7.2) |
| Other changes[1] | (6.7) | (1.2) | 0.9 | 0.1 | (0.6) | (1.2) | (2.0) |
| **Total reduction in assets** | **(17.9)** | **(19.0)** | **(6.1)** | **(14.2)** | **(6.2)** | **(4.2)** | **(49.7)** |
| **Net change in assets** | **(4.9)** | **(2.5)** | **9.0** | **1.4** | **10.3** | **13.7** | **31.9** |
| **Closing total assets** | **240.3** | **237.8** | **246.8** | **248.2** | **258.5** | **272.2** | |

Note 1 2011/12 includes asset valuations.

Source: The Treasury

The key areas of investment include:

- the replacement of $36.1 billion of physical assets, largely in the priority areas (eg, transport, health and education) within the social portfolio
- reinvestment of returns on financial assets by the NZS Fund and ACC totalling $24.1 billion, and
- new capital spending of $3.4 billion over the next five years, which will be funded by the Future Investment Fund (discussed in more detail below).

Most of this investment is in the social portfolio, where capital investment of $37.2 billion is expected over the next five years. The investment is largely made up of the replacement of physical assets and investment into new capital initiatives.

Investment in the commercial portfolio largely comes from the growth in Kiwibank's mortgages (which are offset by an increase in their deposits) and growth in the physical assets of SOEs.

Growth in the financial portfolio is largely made up of the reinvestment of returns made by ACC and the NZS Fund as mentioned above, offset by the reduction in assets held by the NZDMO and the Earthquake Commission (EQC) as assets are realised to repay debt and insurance claims are paid.

### *...partly funded by the Future Investment Fund*

Of the growth in social assets over the forecast period, $3.4 billion relates to new capital spending and is expected to be funded by the Future Investment Fund. The Fund is forecast to be built up from the proceeds of $6.0 billion from the Government share offers, which are forecast over the next four years as shown in Table 2.11. In Budget 2012, $0.5 billion of the Fund was pre-allocated, so together with the forecast spend of $3.4 billion the Fund is expected to hold $2.1 billion by the end of the forecast period, which will contribute towards capital spending after 2016/17.

***Table 2.11*** – Estimated fiscal impact of the Government share offers

| Year ending 30 June<br>$millions | 2013<br>Forecast | 2014<br>Forecast | 2015<br>Forecast | 2016<br>Forecast | 2017<br>Forecast | 5-year<br>Total |
|---|---|---|---|---|---|---|
| **Cash/Debt impact** | | | | | | |
| Forecast cash proceeds | 1,500 | 1,500 | 1,500 | 1,500 | - | 6,000 |
| Forecast forgone dividends | - | (100) | (150) | (200) | (250) | (700) |
| Estimated finance cost savings | 12 | 82 | 163 | 254 | 238 | 749 |
| Reduction in net debt | 1,512 | 1,482 | 1,513 | 1,554 | (12) | 6,049 |
| **Accrual impact** | | | | | | |
| Forecast forgone profits | (20) | (170) | (250) | (330) | (420) | (1,190) |
| Estimated finance cost savings | 12 | 82 | 163 | 254 | 238 | 749 |
| Net decrease in OBEGAL | (8) | (88) | (87) | (76) | (182) | (441) |
| Forecast gain on disposal recorded in taxpayers' funds | 175 | 175 | 175 | 175 | - | 700 |
| Increase in net worth attributable to the Crown | 167 | 87 | 88 | 99 | (182) | 259 |

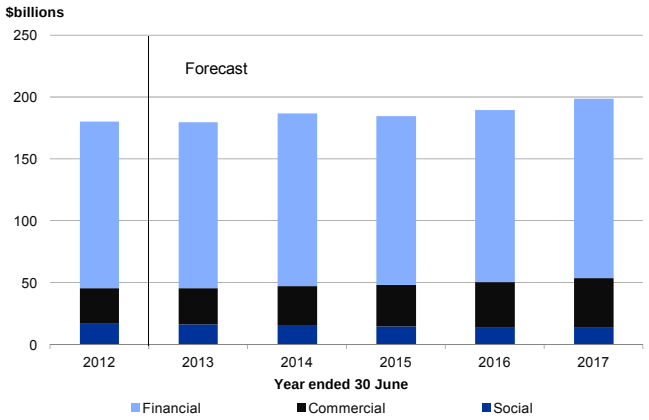
Source: The Treasury

The forecast fiscal impact of the Government share offers remains similar to the *Budget Update* despite the first sale now expected to occur between March and June 2013. As a result, the amount of foregone profits, dividends and finance cost savings has reduced in 2012/13. The other change from the *Budget Update* is that the forecast gain on disposal of the companies has reduced from $0.8 billion to $0.7 billion. While the forecast for cash proceeds has not changed, the book value of the companies has increased since the *Budget Update*, and so the expected gain on disposal recorded in taxpayers' funds has reduced. Further details about the assumptions surrounding the forecast for the Government share offers can be found in the assumptions note on page 40.

***Liabilities are expected to grow over the forecast period, but at a slower rate than assets***

The value of total Crown liabilities is forecast to increase over the next five years by $18.5 billion, from $180.5 billion at 30 June 2012 to $199.0 billion by the end of the forecast period, as shown in Figure 2.11.

***Figure 2.11*** – Total Crown liabilities by portfolio




Source: The Treasury

Most of the increase comes from the commercial portfolio, where liabilities increase $11.6 billion, from $28.1 billion to $39.7 billion. $9.5 billion is owing to growth in Kiwibank deposits (offset by an increase in their mortgages) with the remainder being an increase in SOE borrowings.

Liabilities in the financial portfolio are expected to increase $10.2 billion, largely owing to increased core Crown borrowing by the NZDMO, as discussed earlier. The increase in borrowings is offset by the reduction in insurance obligations in relation to the Canterbury earthquakes as claims are paid out.

Social liabilities are expected to reduce by $3.3 billion, from $17.5 billion to $14.2 billion. The reduction in these liabilities is largely owing to a reduction in earthquake related liabilities as the existing obligations are expected to be settled over the forecast period.

# Medium-term Projections

Medium-term fiscal projections cover the decade subsequent to the forecasts up to and including the year ending June 2027. While the forecasts are based on comprehensive modelling of economic and fiscal conditions, projections differ in that they are potential paths for the future, largely based on historical values and reflecting only existing policy settings.

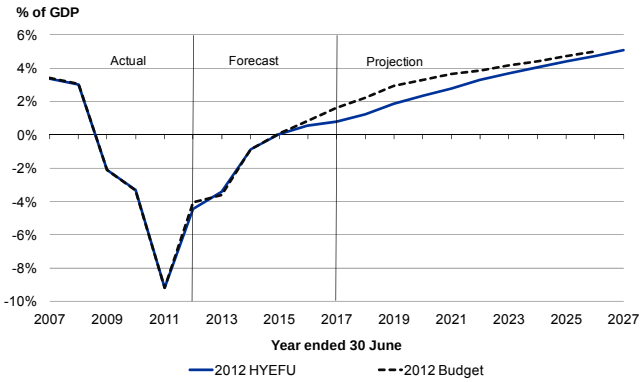
OBEGAL and net debt improve over the 10-year projection period, although to a lesser degree than in the *Budget Update*. Much of the change from the *Budget Update* arises from the fact that the latest projections start from a weaker forecast base. The increased levels of net debt over the forecast base translate to a higher net debt track over the projections. However, stronger labour force projections drive tax revenue growth at a faster rate than in the *Budget Update* and see the gap in the OBEGAL track nearly close by the end of the decade of projections.

### *OBEGAL*

Following on from the end of the forecast period, fiscal constraint continues into the projection period. As the level of growth of expenditure is lower than both historical averages and nominal GDP growth, this plays a large part in the continued improvement in OBEGAL.

In addition, in the first five years of the projections, tax revenue grows relatively strongly as the unemployment rate continues to fall and labour productivity growth is assumed to return to 1.5% per annum.

***Figure 2.12*** – OBEGAL projections



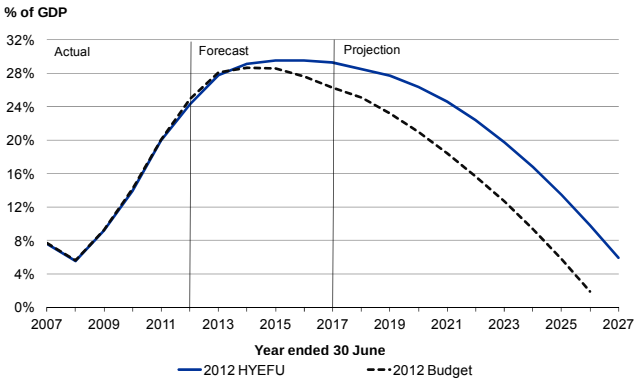

Source: The Treasury

As a result, the OBEGAL steadily increases, with contributions to the NZS Fund projected to resume in 2018/19 (at $2.1 billion) when the core Crown OBEGAL is at a sufficient level to fund contributions.

### *Net debt*

Overall, net debt is forecast to peak at 29.5% of GDP in 2014/15 and 2015/16 before steadily declining over the projection period, as shown in Figure 2.13. The improving track is largely owing to continued fiscal consolidation and the forecast return to surplus. The repayment of debt in turn helps surpluses to increase as debt financing costs fall.

***Figure 2.13*** – Net debt projections




Source: The Treasury

# Fiscal Forecast Assumptions

The fiscal forecasts are based on assumptions and judgements developed from the best information available on 26 November 2012, when the forecasts were finalised. Actual events are likely to differ from some of these assumptions and judgements. Furthermore, uncertainty around the forecast assumptions and judgements increases over the forecast period. The Canterbury earthquakes add further uncertainty to the economic and fiscal forecasts.

The fiscal forecasts are prepared on the basis of underlying economic forecasts. Such forecasts are critical for determining revenue and expense estimates. For example:

- A nominal GDP forecast is needed in order to forecast tax revenue.
- A forecast of CPI inflation is needed because social assistance benefits are generally indexed to inflation.
- Forecasts of interest rates are needed to forecast finance costs, interest income and discount rates.

A summary of the key economic forecasts that are particularly relevant to the fiscal forecasts is provided in the table below (on a June-year-end basis to align with the Government's balance date).

***Table 2.12*** – Summary of key economic forecasts used in fiscal forecasts

| **Year ending 30 June** | **2012 Actual** | **2013 Forecast** | **2014 Forecast** | **2015 Forecast** | **2016 Forecast** | **2017 Forecast** |
|---|---|---|---|---|---|---|
| Real GDP[1] (ann avg % chg) | 2.0 | 2.3 | 3.0 | 2.5 | 2.4 | 2.4 |
| Nominal GDP[2] ($m) | 208,219 | 216,048 | 228,797 | 239,279 | 249,023 | 259,149 |
| CPI (ann avg % chg) | 2.2 | 1.3 | 1.9 | 2.2 | 2.2 | 2.3 |
| Govt 10-year bonds (ann avg %) | 4.1 | 3.6 | 3.7 | 4.4 | 4.9 | 5.2 |
| 5-year bonds (ann avg %) | 3.5 | 3.0 | 3.5 | 4.3 | 4.9 | 5.1 |
| 90-day bill rate (ann avg %) | 2.7 | 2.7 | 3.0 | 3.9 | 4.5 | 4.8 |
| Unemployment rate (ann avg %) | 6.6 | 7.0 | 6.3 | 5.9 | 5.6 | 5.2 |
| Employment (ann avg % chg) | 1.0 | 0.2 | 2.0 | 1.8 | 1.4 | 1.5 |
| Current account (% of GDP) | (4.9) | (4.9) | (4.7) | (5.8) | (6.3) | (6.4) |

Notes: 1 Production measure
2 Expenditure measure

Source: The Treasury

In addition, there are a number of other key assumptions that are critical in the preparation of the fiscal forecasts.

| | |
|---|---|
| Government decisions | Incorporate government decisions and other circumstances known to the Government up to 26 November 2012. |
| Tax revenue | Tax policy changes enacted and announced by the Government will take place as planned and will affect tax revenue and receipts as calculated and agreed between IRD and the Treasury.<br>Nominal tax revenue will grow in line with growth in nominal GDP and its components. |
| Earthquake costs | Expenditure (accrual measure) is forecast based on estimates on when key decisions will be taken. The timing of cash payments is based on estimates of when actual spending will take place. Refer page 30 for further discussion. |
| Operating allowance | Net $800 million in Budget 2013.<br>Net $1.2 billion from Budget 2014 growing at a rate of 2% per annum for subsequent Budgets. |
| Provision for new capital spending | Net $4.9 billion over the next five Budgets with $1.6 billion in Budget 2013, $1.0 billion in Budget 2014, $0.7 billion in Budgets 2015 and 2016, and $0.9 billion in Budget 2017. For further details see note 8 of the *Forecast Financial Statements*. |
| Government share offers | Sale programme spread evenly across the four years from 2012/13 to 2015/16.<br>Net sale proceeds of $6 billion (based on a mid-point estimate of between $5 billion and $7 billion).<br>Net assets of the entities as at 30 June 2012 ($5.3 billion) were used to determine the gain on sale.<br>Forgone profits and dividends are based on an average of the fiscal forecasts provided by the companies for the *Half Year Update*. |
| Finance cost on new bond issuances | Based on 5-year rate from the main economic forecasts and adjusted for differing maturity. |
| Top-down adjustment | A top-down adjustment is made to compensate for departments that tend to forecast upper spending limits (appropriations) rather than best estimates.<br>Top-down adjustment to operating and capital as follows: |

| Year ending 30 June<br>$billions | 2013<br>Forecast | 2014<br>Forecast | 2015<br>Forecast | 2016<br>Forecast | 2017<br>Forecast |
|---|---|---|---|---|---|
| Operating | 1.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Capital | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 |

| | |
|---|---|
| Borrowing requirements | Forecast cash deficits will be met by reducing financial assets and issuing debt. |

| | |
|---|---|
| Property, plant and equipment | For the purposes of the forecast financial statements, no revaluations of property, plant and equipment are projected beyond the current year. Valuations as recorded for the 2012 annual financial statements and any additional valuations that have occurred up to 30 September 2012 are included in these forecasts. |
| Student loans | The carrying value of student loans is based on a valuation model adapted to reflect current student loans policy. As such, the carrying value over the forecast period is sensitive to changes in a number of underlying assumptions, including future income levels, repayment behaviour and macroeconomic factors such as inflation and discount rates used to determine the effective interest rate for new borrowers. Any change in these assumptions would affect the present fiscal forecast. |
| Investment rate of returns | Incorporate the actual results to 30 September 2012. Beyond this time, gains on financial instruments are based on long-term benchmark rates of return for each portfolio. |
| GSF and ACC liabilities | The GSF and ACC liabilities included in these forecasts have been valued as at 30 September 2012 and 30 June 2012 respectively. The ACC liability has been adjusted for the 30 September 2012 discount rate. Both liabilities are valued by projecting future cash payments, and discounting them to present value. These valuations rely on historical data to predict future trends and use economic assumptions such as inflation and discount rates. Any change in actual payments or economic assumptions would affect the present fiscal forecast. For example, if the discount rate decreases, the value of the liabilities would increase.<br>The GSF's assets are offset against the gross liability and have been updated to reflect market values. The value of assets over the forecast period reflects long-run rate of return assumptions appropriate to the forecast portfolio mix. |
| NZS Fund contributions | No contribution is assumed in the forecast period. |

# Projection Assumptions

The projection period begins in 2017/18 and is based on the long-run technical and policy assumptions outlined below.

***Table 2.13*** – Summary of key economic and demographic assumptions in projections[1]

| Year ending 30 June | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | ... | 2027 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Forecast | | | | | Projections | | | |
| Labour force | 0.6 | 1.3 | 1.4 | 1.1 | 1.0 | 1.1 | 1.1 | 1.0 | 1.0 | ... | 0.7 |
| Unemployment rate[2] | 7.0 | 6.3 | 5.9 | 5.6 | 5.2 | 5.1 | 5.0 | 4.9 | 4.8 | ... | 4.5 |
| Employment | 0.2 | 2.0 | 1.8 | 1.4 | 1.5 | 1.2 | 1.2 | 1.1 | 1.1 | ... | 0.7 |
| Labour productivity[3] | 2.1 | 1.0 | 1.0 | 1.1 | 0.9 | 1.2 | 1.3 | 1.5 | 1.5 | ... | 1.5 |
| Real GDP | 2.3 | 3.0 | 2.5 | 2.4 | 2.4 | 2.4 | 2.5 | 2.6 | 2.5 | ... | 2.3 |
| Consumers Price Index[4] | 1.5 | 2.1 | 2.2 | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | ... | 2.0 |
| Government 5-year bonds[5] | 3.0 | 3.5 | 4.3 | 4.9 | 5.1 | 5.2 | 5.3 | 5.4 | 5.5 | ... | 5.5 |
| Average hourly wage | 2.5 | 2.4 | 2.7 | 2.6 | 2.6 | 3.2 | 3.3 | 3.5 | 3.5 | ... | 3.5 |

Notes: 1 Figures are annual average percentage change unless otherwise stated
2 Household Labour Force Survey (HLFS) basis, annual average
3 Hours worked measure
4 Annual percentage change
5 Annual average

Source: The Treasury

### *Transition of economic variables from the end of forecast*

With the lingering impacts of the global financial crisis, Canterbury earthquakes and uncertainty around growth prospects for many of our major trading partners, many economic variables have not recovered to long-term, on-trend, stable values by the end of the five year forecast horizon. As a consequence, the first few years of projections involve a degree of transition for many of these variables to return them to this state.

Over the long term the unemployment rate is expected to be 4.5% of the labour force. By the last year of the forecasts, 2016/17, it is higher than this, at 5.2%. Over the early projected years it is lowered to 4.5%, reaching it by 2023/24.

Labour productivity annual growth ends the forecasts at 0.9% and is brought up to its long-run assumption of 1.5% per annum by 2019/20.

The Government 5-year bond rate has an end-of-forecast level of 5.1%. It is increased to 5.5% by 2020/21, where it stabilises for the rest of the projected decade.

By the final forecast year the Consumers Price Index (CPI) measure of inflation is close to the stable assumption of 2% per annum, and reaches this in the first projected year.

The total labour force is projected from the end of the forecasts using the growth of the aggregate labour force projections produced by Statistics New Zealand. Since the previous projections were published, for the *Budget Update*, Statistics New Zealand has produced updated labour force projections. These projections are stronger than those used for the *Budget Update*, especially in the early years, owing to both increased demographic growth and higher labour force participation rates. As a consequence, while the end-of-forecast labour force levels are not markedly different between the two forecasts, the growth rate over the projections is higher than the *Budget Update*.

Age groups over 50 in particular are expected to have higher rates of participation in the labour force than was the case in the *Budget Update* projections. As these workers tend to work fewer hours on average, the assumed long run value for the average number of hours worked per worker in a week has been reduced from 33.2 to 33.0. This level is reached in 2020/21. As the labour force is a driver of both real and nominal GDP in the projections, these variables also grow more quickly in the latest projections than they did for the *Budget Update*.

In addition, there are a number of other key assumptions that are critical in the preparation of the projections:

| | |
|---|---|
| Tax revenue | Linked to growth in nominal GDP. Source deductions (mainly PAYE tax on salary and wages) is grown using employment growth and nominal average hourly wage growth for the first five years of the projection period. The latter is multiplied by a fiscal drag elasticity of 1.35. Beyond the first five years of the projection period source deductions grow in line with GDP. The three other major tax categories (corporate tax, hypothecated transport taxes and other taxes, dominated by GST), are gradually returned to long-term constant ratios to GDP. The long-term ratios are based on historical data, taking into account tax rate and policy changes. Once the long-term ratios are reached' the tax types remain at these ratios in later projected years. |
| New Zealand Superannuation (NZS) | Demographically adjusted and linked to net (of tax) wage growth, as is prescribed by legislation relating the annual indexation of weekly NZS rates to net average weekly earnings. As tax on average weekly earnings, being a part of overall PAYE, increases owing to fiscal drag, the net average weekly earnings do not grow as quickly as the gross earnings in years where fiscal drag is assumed on PAYE growth. |
| Other benefits | Demographically adjusted and linked to inflation. |
| Finance costs | A function of debt levels and interest rates. |
| Core Crown expenditure (excluding benefits and finance costs) | Held constant at the end-of-forecast values, because growth is assumed to come from a share of the projected Operating Allowance annual increment. The exception is Transport spending, which grows in line with the hypothecated tax revenue dedicated to funding it. |
| Operating allowance | $1.26 billion in 2017/18. Operating Allowances for subsequent projected years grow at 2% per annum from this value. |
| Capital allowance | $0.936 billion in 2017/18. This is based on a track of $0.918 billion in Budget 2017 as the starting point, grown at 2% per annum. |
| NZS Fund | Contributions to the Fund suspended until 2017/18. Contributions begin again in 2018/19, and are consistent with the New Zealand Superannuation and Retirement Income Act 2001. |