THE TREASURY
Kaitohutohu Kaupapa Rawa

Half Year Economic *and* Fiscal Update

8 December 2016

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Contents

Half Year Economic and Fiscal Update

This *Update* includes Treasury's overall economic forecasts and the forecast financial statements of the Government, along with the implications of Government financial decisions and other information relevant to the fiscal and economic position.

Other Information

On the Treasury's website is a series of other information that provides users of the *Update* with further detail. This other information should be read in conjunction with the published document.

Additional *Update* 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 IRD's forecasts
- tax policy changes – there have been no changes to tax policy since the *Budget Update*
- 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. The published forecast financial statements only provide a summary.

This other information can be accessed at www.treasury.govt.nz/budget/forecasts/hyefu2016

Statement of Responsibility

On the basis of the economic and fiscal information available to it, the Treasury has used its best professional judgement in supplying the Minister of Finance with this *Economic and Fiscal Update*. The *Update* incorporates the fiscal and economic implications both of government decisions and other circumstances as at 21 November 2016 that were communicated to me by the Minister of Finance in accordance with the requirements of the Public Finance Act 1989 and of other economic and fiscal information available to the Treasury as at 21 November 2016. This *Update* does not incorporate any decisions, circumstances or statements that the Minister of Finance has determined, in accordance with section 26V of the Public Finance Act 1989, should not be incorporated in this *Update*.

Gabriel Makhlouf
Secretary to the Treasury

30 November 2016

To enable the Treasury to prepare this *Economic and Fiscal Update* I have ensured the Secretary to the Treasury has been advised, in accordance with the requirements of the Public Finance Act 1989, of all government decisions and other circumstances as at 21 November 2016 of which I was aware and that had material economic or fiscal implications.

I accept responsibility for the integrity of the disclosures contained in the *Update,* responsibility for the consistency and completeness of the *Update* information with the requirements of Part 2 (Fiscal responsibility) of the Public Finance Act 1989 and responsibility for any decisions, circumstances or statements not incorporated in this *Update*, in accordance with section 26V of the Public Finance Act 1989.

Hon Bill English
Minister of Finance

30 November 2016

Overview

The *Half Year Economic and Fiscal Update* (*Half Year Update*) 2016 provides the Treasury's latest economic forecasts, risk analysis and forecast financial statements of the Government, including the implications of Government financial decisions. The Treasury prepares this *Half Year Update* to the best of our ability to help the Government to make the most fully informed decisions about policies, and support the Government's fiscal objectives of paying down debt and increasing the surplus.

This *Half Year Update* examines recent developments and describes the current outlook for the New Zealand economy and Government's fiscal outlook. An important component of this analysis is also identifying potential risks that could affect the economic and fiscal outlook, especially given heightened uncertainty on both a global and local scale.

The New Zealand economy is currently performing well with sustained growth and an operating balance before gains and losses (OBEGAL) surplus expected for the year to June 2017. We expect this performance to be maintained despite the impact of the recent Kaikōura earthquakes (see page 6). We also expect the fiscal position to improve steadily. However, many factors could affect the outlook. Global volatility and a risk of lower trading partner growth could reduce forecast growth in the next four years, and higher net migration, domestic demand and more binding capacity constraints in the New Zealand economy could mean that inflationary pressure rises faster than expected.

The New Zealand economy

Growth in the New Zealand economy is being supported by an increasing number of people arriving in New Zealand, to live, work, study and visit. Combined with low interest rates, this is supporting consumer spending, housing construction, other building, and investment more broadly.

These forces, which are proving to be considerably stronger than anticipated at the time of the *Budget Update*, have combined with recent increases in dairy export prices to underpin forecast annual average growth of 3.6% over the current fiscal year and 3.5% in the following year.

This period of strong demand growth is expected to increase opportunities for people to work. At the same time, net migration inflows are assumed to subside from current levels as foreign labour markets improve, which means that growth will be less rapid in future. In combination, this is forecast to increase upwards pressure on wages and prices. In response to increasing price pressures, interest rates are forecast to begin rising in late 2018, which would contribute to slower demand growth and stabilise consumer price inflation at 2.0%. Real gross domestic product (GDP) growth is forecast to slow to 2.3% in 2020/21.

Growth in nominal GDP, which reflects growth in both real activity and prices and drives tax revenue, is expected to average 4.8% over the forecast period. Compared to the *Budget Update*, nominal GDP is cumulatively $23.7 billion higher over the four years ending June 2020, reflecting a higher starting point and stronger near-term outlook for prices and real activity.

Our place in the world

Given the importance of exports to New Zealand's economy, the performance of overseas economies can affect our growth. New Zealand's trading partners are not growing as strongly as before, and this is expected to keep global inflation and import prices low.

Future trading partner growth is expected to be lower until 2017, but then pick up from 2018, increasing opportunities to work in those countries. Growth in China is slowing at a steady pace, but if their economy was to slow down sharply, that would affect New Zealand as well as other trading partners. In addition, uncertainty around the outlook for the US economy is heightened following the election, as is uncertainty around the UK economic outlook after the vote to leave the European Union.

The international economy faces other risks, including persistently low global inflation, limited room for governments and central banks to stimulate growth, terrorism and military tensions, and a bigger debate in some countries about the value of free trade.

Government finances

The Crown's fiscal position has been improving over recent years with surpluses returning in 2014/15 and debt stabilising as a share of GDP. The fiscal outlook is expected to continue to steadily improve, reflecting a growing economy which will drive growth in tax revenue at a higher rate than government spending. By June 2021, OBEGAL surpluses are expected to rise to $8.5 billion, net debt to reduce to 18.8% of GDP and contributions to the New Zealand Superannuation Fund (NZS Fund) will resume. To support solid economic growth and delivering better public services, the Government has announced its intention to increase capital allowances from $0.9 billion to $3.0 billion in Budget 2017 and $2.0 billion from Budget 2018 onwards.

The Crown's forecast fiscal position will be subject to economic risks (noted below), market risks mainly associated with the Crown's balance sheet, and future policy decisions (discussed in the Specific Fiscal Risks chapter).

Preliminary estimates, based on available information about known damage, suggest that the direct costs of the Kaikōura earthquakes could be between $2 to $3 billion, including operating expenses (eg, Earthquake Commission (EQC) claims costs) and capital expenditure (eg, rebuilding state highways). We assume that some of these costs will be met from existing funding, and have added $1 billion of operating costs to the 2016/17 forecasts, representing the net costs of the earthquakes that are not expected to be funded from other sources (see page 6).

Preparing for risk

This *Half Year Update* looks at two alternative scenarios as examples of different ways in which the economic outlook could play out. In one scenario, an international event would lead to lower trading partner growth and increased volatility in global financial markets, which is associated with falls in export demand, asset prices, the terms of trade and investor and consumer confidence. In this scenario, nominal GDP, tax revenue and OBEGAL would be likely to turn out lower than in the main forecast.

The second scenario illustrates what might happen if the economy's capacity was tighter than expected. Inflation would be likely to rise more rapidly than in the main forecast as demand pushes up prices, while supply is slower to respond. Nominal GDP, tax revenue and OBEGAL would then likely be higher over the forecast period.

Table 1 – Summary of the Treasury's main economic and fiscal forecasts

	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Economic (June years, %)						
GDP (production measure)[1]	2.8	3.6	3.5	2.9	2.4	2.3
Unemployment rate[2]	5.0	4.8	4.6	4.2	4.3	4.3
CPI inflation[3]	0.4	1.5	2.0	2.1	2.0	2.1
Current account balance[4]	-2.9	-3.0	-3.8	-4.1	-4.4	-4.4
Fiscal (June years, % of GDP)						
Total Crown OBEGAL[5]	0.7	0.2	1.2	1.8	2.2	2.7
Net core Crown debt[6]	24.6	24.3	23.8	22.2	20.3	18.8
Net worth attributable to the Crown	35.5	35.1	35.5	36.6	38.4	40.7

Notes: 1 Real production GDP, annual average percentage change.
2 Percent of the labour force, June quarter, seasonally adjusted.
3 Consumer Price Index (CPI), annual percentage change.
4 Annual balances as % of GDP.
5 Total Crown operating balance before gains and losses (OBEGAL).
6 Net core Crown debt excluding the NZS Fund and advances.

Sources: Statistics New Zealand, the Treasury

Finalisation dates for the *Update*

Economic data	10 November
Economic forecasts	10 November
Tax revenue forecasts	15 November
Fiscal forecasts	21 November
Specific fiscal risks	21 November
Text finalised	1 December

Economic and fiscal impacts of the Kaikōura earthquakes

The Kaikōura earthquakes on 14 November and subsequent aftershocks were destructive, resulting in loss of life and turmoil for those involved. They also affect the economy and the Government's fiscal position, although there is uncertainty at this time over the magnitude and timing.

- While the earthquakes have significantly affected people in North Canterbury, they are expected to have a relatively minor impact on the New Zealand economy.
- The economic outlook in this *Update* does not include any adjustment for the earthquakes (which occurred just after the forecasts were finalised).
- Preliminary estimates suggest that direct fiscal costs of the earthquakes could be around $2 to $3 billion. However, some of this is expected to be funded by insurance proceeds or existing resources.
- The fiscal forecasts in this *Update* therefore only include an incremental net cost of $1 billion, which reduces OBEGAL and increases net debt.

Economic impacts

Information is still emerging. While the earthquakes are likely to have a significant effect on the North Canterbury region, they are expected to have a relatively minor impact at a national level. Given the likely magnitude of impacts on the national economy and uncertainty about these effects, the economic forecasts included in this *Update* do not include any adjustment for the earthquakes which occurred just after the forecasts were finalised.

While the impact of the earthquakes on the Kaikōura region is considerable, it accounts for a much smaller share of national output and employment than the parts of Canterbury that were affected by the 2010 and 2011 earthquakes. The areas most affected by the earthquakes – the Kaikōura and Hurunui districts – make up around 0.4% of all New Zealand households (whereas the areas most impacted by the Canterbury earthquakes accounted for around 10% of all households). The Kaikōura and Hurunui districts account for less than 1.0% of total tourist spending in New Zealand.

The industries most likely to be affected in the region are tourism (retail, hospitality and leisure) and primary production (seafood and dairy). There is expected to be short-term disruption to these industries as key infrastructure was damaged and access to and from the region has been disrupted. The earthquakes also caused damage in Wellington, with some commercial buildings in the city centre and part of the port damaged.

Some effects are expected to be felt further afield as well. The extensive damage to the road and rail network in the north-east of the South Island will affect not only that region but also the transport of people and freight between much of the rest of the South Island and the North Island. The disruption of transport links through the Kaikōura region is expected to add costs to freight and travel to and through the region.

There may also be wider impacts on tourism elsewhere in New Zealand should people cancel or postpone trips, or redirect trips within New Zealand, because of the disruption or the risk of more earthquakes. At this stage, this effect is thought to be relatively small and the overall impact on tourism will be less than the Canterbury earthquakes.

Over time, the negative impacts of the earthquakes on economic activity are expected to be offset by repair and reconstruction activity. To some extent, reconstruction work is likely to be at the expense of other work in the construction sector or it may lead to higher costs (eg, local wages and/or materials).

Any further evidence and quantification of impacts will be incorporated into the 2017 *Budget Economic and Fiscal Update*.

Fiscal impacts

The earthquakes will result in additional costs to government. Similar to the Canterbury earthquakes, spending is likely to include providing short-term support and recovery assistance, contributing to the reconstruction of infrastructure, repairing government-owned property, as well as meeting the costs of claims to EQC for residential property damage assuming the Crown guarantee is called. The nature of the damage is different from the Canterbury earthquakes, with significant costs expected in relation to the transport network throughout the region (both road and rail). There are also expected to be costs associated with damage sustained in Wellington.

Preliminary estimates, based on available information, suggest that direct fiscal costs of damage caused by the earthquakes could be in the range of $2 to $3 billion. These costs are a mixture of operating expenses (eg, EQC claims costs) and capital expenditure (eg, rebuilding state highways). Timing of these costs is uncertain. This estimate excludes future decisions the Government may make about the nature of the recovery and rebuild.

Table 2 – Initial estimates of government earthquake costs

	Estimate range
Transport infrastructure (roads and rail)	$1.5 to $2.0 billion
EQC claims costs for damage to residential property	$0.5 to $0.7 billion
Non-transport infrastructure costs	Up to $0.1 billion
Other costs	Up to $0.2 billion
Total	**$2.0 to $3.0 billion**

Source: The Treasury

While the $2 to $3 billion estimate represents the gross direct costs associated with the earthquakes, there is an expectation, as happened with the Canterbury recovery, that some of these costs will be met from existing resources, insurance proceeds, existing budget allowances or existing funds such as the National Land Transport Fund. Not all costs will result in increased spending by the Government. As a result, these forecasts have assumed that only a portion of the costs ($1 billion) impact OBEGAL in 2016/17 and net debt, on top of existing spending. This additional cost of $1 billion represents the net costs of the earthquakes that are not expected to be funded from other sources.

The tax forecasts included in this *Update* do not include any adjustment for the Kaikōura earthquakes. The impact on tax revenue will reflect the economic effects of the earthquakes. There are expected to be some short-term falls in GST, PAYE and possibly corporate and other persons' tax from the affected region, but the impact is expected to be relatively small and offset by other activity (displacement, and rebuilding and reconstruction work). This will also be offset somewhat by increased GST refund claims by insurers, as was the case in the aftermath of the Canterbury earthquakes.

Risks and uncertainty

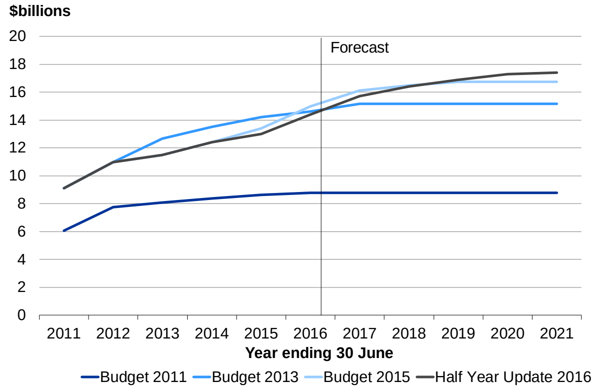
There is a high level of uncertainty surrounding both the economic and fiscal impacts. In terms of impact on the economy, the main factor is the quantum and timing of reconstruction activity. For example, estimates of the quantum and timing of reconstruction activity following the Canterbury earthquakes changed over time – most notably the size of the rebuild was revised up early on and then the timing pushed out in subsequent revisions.

The earthquakes occurred one week before the fiscal forecasts were finalised. There was limited information available regarding expected loss and recovery plans. The limited period of time adds a significant amount of uncertainty to the estimates included in these forecasts. The fiscal forecasts capture initial estimates of costs. Experience with the Canterbury earthquakes suggests that as more information comes to hand and the recovery plan becomes clearer, additional damage may be uncovered and subsequent aftershocks may cause further damage or delay the recovery. Where this occurs, cost estimates may rise over time.

For example, as Figure 1 shows, following the Canterbury earthquakes the initial estimate in Budget 2011 of the total fiscal cost was $8.8 billion, around half of the current estimate of $17.5 billion. This increase was a mixture of new damage from aftershocks, subsequent government decisions (eg, red zone offers), and re-estimations of initial damage.

Every additional $1 billion of spending by government would increase net debt by just under 0.4% of GDP.

Figure 1 – Estimates of the cumulative fiscal cost of the Canterbury earthquakes



Source: The Treasury

Risks to the current estimates include:

- potential damage from significant aftershocks
- capacity to reprioritise spending to fund the recovery
- the level of government contribution to the rebuild of local infrastructure
- the extent to which assets are replaced or upgraded, and
- additional damage discovered as debris is cleared from sites.

Further commentary on risks and uncertainty can be found in the Risks and Scenarios and Specific Fiscal Risks chapters.

1

Economic Outlook

Overview

- Growth in the New Zealand economy over the first half of 2016 was stronger than expected in the *Budget Update* as high net migration inflows, elevated tourist arrivals and low interest rates supported residential construction, services exports, market investment and private consumption. Annual average real gross domestic product (GDP) growth is forecast to accelerate from 2.8% in June 2016 to a peak of 3.6% in 2017 as these factors persist.
- Over the medium term, real GDP growth moderates to 2.3% by 2021 as space capacity is exhausted and interest rates rise. Growth in the labour supply slows as net migration inflows subside, leading to higher wage and price pressures.
- Trading partner growth eased in the first half of 2016 largely reflecting slower growth in the US. The outlook for trading partner growth is weaker than in the *Budget Update,* as a result of the impact of Brexit and lower long-term growth in the US.
- The recovery in global dairy prices over the second half of 2016 is expected to lead to a higher terms of trade in the near term. Over the medium term, ongoing moderation in global milk production helps drive a gradual rise in dairy prices. Weak global inflation keeps import prices muted, supporting the terms of trade.
- Nominal GDP growth is expected to pick up in the near term, supported by solid real GDP growth and the terms of trade. Over the forecast period, nominal GDP growth averages 4.8% per year and is cumulatively $23.7 billion higher than in the *Budget Update* in the four years to June 2020, reflecting a higher starting point (first half of 2016) and a stronger near-term outlook for prices and real activity.
- The outlook is subject to a range of risks and uncertainties. As outlined in the Risks and Scenarios chapter, global risks are skewed to the downside while domestic risks are more balanced.
- The 7.8 magnitude earthquake that struck the Kaikōura region on 14 November occurred after the economic forecasts were finalised – see *Economic and fiscal impacts of the Kaikōura earthquakes* on page 6 for discussion of the economic and fiscal impacts.

Table 1.1 – Economic forecasts (June years)[1]

(Annual average % change, June years)	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Private consumption	2.7	4.0	3.7	3.3	2.8	2.2
Public consumption	1.7	2.6	1.5	1.0	1.1	1.0
Total consumption	**2.4**	**3.7**	**3.2**	**2.7**	**2.4**	**1.9**
Residential investment	8.2	14.3	7.8	2.1	-1.7	-0.2
Market investment	0.6	9.3	6.7	6.2	3.9	2.3
Non-market investment	12.8	2.1	3.4	-4.9	0.2	2.4
Total investment	**3.1**	**10.0**	**6.8**	**4.3**	**2.1**	**1.6**
Stock change[2]	-0.4	-0.2	0.3	0.2	0.2	0.1
Gross national expenditure	**2.3**	**5.1**	**4.4**	**3.3**	**2.5**	**1.9**
Exports	5.1	1.4	1.9	3.0	2.7	3.2
Imports	1.2	5.7	5.0	4.0	2.8	1.9
GDP (expenditure measure)	**3.3**	**3.7**	**3.5**	**3.0**	**2.4**	**2.3**
GDP (production measure)	**2.8**	**3.6**	**3.5**	**2.9**	**2.4**	**2.3**
Real GDP per capita	0.7	1.5	1.7	1.5	1.2	1.1
Nominal GDP (expenditure measure)	4.2	5.2	5.6	5.0	4.1	3.9
GDP deflator	0.9	1.4	2.0	2.0	1.7	1.6
Potential GDP	3.1	3.1	2.8	2.7	2.6	2.5
Output gap (% deviation, June quarter)[3]	-0.9	-0.4	0.4	0.4	0.1	0.0
Employment	2.3	4.8	1.6	1.5	1.1	0.9
Unemployment rate[4]	5.0	4.8	4.6	4.2	4.3	4.3
Participation rate[5]	69.7	69.9	69.6	69.4	69.2	69.0
Nominal wages[6]	2.1	1.6	2.2	2.8	3.1	3.0
CPI inflation[7]	0.4	1.5	2.0	2.1	2.0	2.1
Terms of trade[8]	-2.4	1.8	1.7	1.0	0.4	0.3
House prices[9]	13.5	9.3	6.1	3.8	3.1	2.0
Current account balance						
$billions	-7.3	-8.1	-10.7	-12.1	-13.5	-13.9
% of GDP	-2.9	-3.0	-3.8	-4.1	-4.4	-4.4
Net International Investment Position (% of GDP)	-64.9	-64.7	-65.2	-66.2	-68.0	-69.8
Household saving ratio (% of HHDI)[10]	0.5	2.2	1.6	0.8	0.3	-0.1
TWI[11]	73.6	76.5	74.9	75.0	74.5	72.6
90-day bank bill rate[11]	2.4	1.9	1.9	2.3	3.2	3.9
10-year bond rate[11]	2.7	2.9	3.3	3.9	4.2	4.3

Economic forecasts are presented on a June year basis for consistency with the fiscal forecasts. Longer time series for these variables are provided on page 142**.**

Notes:
1 Forecasts finalised 10 November 2016.
2 Contribution to GDP growth.
3 Estimated as the percentage difference between actual real GDP and potential real GDP.
4 Percent of the labour force, June quarter, seasonally adjusted.
5 Percent of the working-age population, June quarter, seasonally adjusted.
6 Quarterly Employment Survey, average ordinary-time hourly earnings, annual percentage change.
7 Annual percentage change.
8 System of National Accounts (SNA) and merchandise basis.
9 Quotable Value New Zealand (QVNZ) House Price Index, annual percentage change.
10 Percent of household disposable income (HHDI), March years.
11 Average for the June quarter.

Key economic forecast judgements and assumptions

- The Kaikōura earthquakes occurred after the economic forecasts were finalised. In the short term there are likely to be both positive and negative impacts on economic activity. The Treasury's initial assessment is that the magnitude of these impacts is likely to be small at the national level and as such we have not made any adjustments to the economic forecasts for the impact of these events. *Economic and fiscal impacts of the Kaikōura earthquakes* on page 6 provides further information on the potential impact of the earthquakes.
- Trading partner growth is expected to ease slightly in 2016, as growth has slowed in China and was weak in the first half of 2016 in the US. Growth in the UK has been revised lower both in the near term and the medium term as a result of the vote to leave the European Union (Brexit).
- Dairy prices are projected to recover at a modest pace over the medium term, broadly consistent with Organisation for Economic Co-operation and Development - Food and Agriculture Organisation (OECD-FAO) forecasts.
- West Texas Intermediate (WTI) oil prices are assumed to rise from around US$45 per barrel in the September 2016 quarter to US$63 in the June 2021 quarter.
- Net permanent and long-term migration inflows are assumed to decline gradually from around 70,000 in the year ended September 2016 to Statistics New Zealand's revised long-run assumption of 15,000 per year in 2022, outside of the forecast period. See *Migration, population growth and potential output* on page 22 for further detail.
- Annual growth in the working-age population is assumed to average 1.7% per year over the forecast period, including the contribution of net migration.
- Economy-wide multifactor productivity growth is assumed to average 0.3% per year over the forecast period.
- Economy-wide labour productivity growth is assumed to average 0.8% per year over the forecast period. See *Implications of changes to the Household Labour Force Survey* on page 15 for further detail.
- Annual average growth in potential output is projected to average 2.8% over the forecast period.
- Non-tradables inflation is assumed to respond to both increasing capacity pressures and inflation expectations. Inflation expectations are assumed to be influenced significantly by recent low inflation, but will pick up as it increases.
- The assumed neutral level of the 90-day interest rate is around 4.5% by the end of the forecast period.
- The non-accelerating inflation rate of unemployment (NAIRU) is assumed to be around 4.25% at the end of the forecast period. See *Implications of changes to the Household Labour Force Survey* on page 15 for further detail.
- Increases in the tobacco excise tax in the March quarter each year are estimated to contribute 0.2 percentage points to annual consumers price index (CPI) inflation for each of the next four years.

Recent Developments and Near-term Outlook

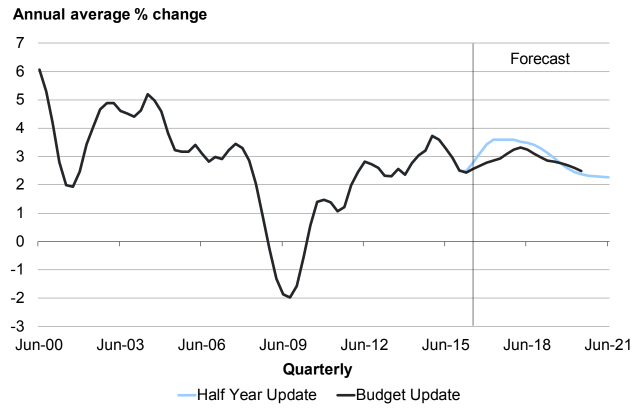
Economic expansion has continued at a solid pace…

Strength in domestic activity in the latter part of 2015 continued into the first half of 2016, with real GDP growth of 0.9% in each of the March and June quarters, faster than 0.6% expected in the *Budget Update.* Low interest rates and high levels of inward migration have continued to support private consumption, construction activity and construction-related services. Services exports (chiefly tourism) have remained buoyant despite some moderation in trading partner growth and goods export volumes held up higher than expected in the *Budget Update*, particularly for dairy, following a less severe impact from drought in 2015.

…with momentum expected to be maintained in the near term…

On a quarterly basis, real GDP growth is forecast to remain around 0.9% in the near term, with annual average growth expected to accelerate, peaking at 3.6% in 2017, faster and sooner than expected in the *Budget Update* (Figure 1.1). Stronger growth is largely owing to an upgrade to the domestic outlook, and with tourism remaining buoyant. Solid growth in private consumption, market investment and residential investment in the near term will remain supported by low interest rates and high net migration. Public consumption growth is expected to remain moderate in the near term. While government spending on infrastructure and private residential investment may be higher in the aftermath of the recent earthquakes in the Kaikōura region, the impact on the economy is expected to be small at the national level (see *Economic and fiscal impacts of the Kaikōura earthquakes* on page 6 for further detail). Increased cull in the dairy herd is expected to reduce export volumes in the near term, but with a partial offset from solid growth in other goods exports, including horticulture and wine. Growth among our key trading partners is expected to slow slightly in the near term, with low global inflation and interest rates expected to persist.

Figure 1.1 – Real GDP growth



Sources: Statistics New Zealand, the Treasury

…underpinned by high inward migration…

Annual net inward migration rose to around 70,000 in the year to September 2016 which is assumed to represent the peak in the current cycle, broadly consistent with the *Budget Update*. However, migration is assumed to decline from its peak more gradually than in previous forecasts, with the annual inflow in June 2018 around 26,000 higher than forecast in the *Budget Update*. *Migration, population growth and potential output* on page 22 provides detail on this assumption change, along with key drivers of migration, such as economic and labour market conditions in Australia relative to New Zealand. High migration and consequent population growth will remain a driver of growth in the near term, supporting private consumption and residential investment.

Real GDP per capita rose 0.7% in the year ended June 2016, up from 0.5% in the previous quarter, but below the average of 1.5% for the past five years. GDP per capita is expected to rise to 1.7% in the year ended June 2018, reflecting the solid pace of expansion in the economy.

…and low interest rates…

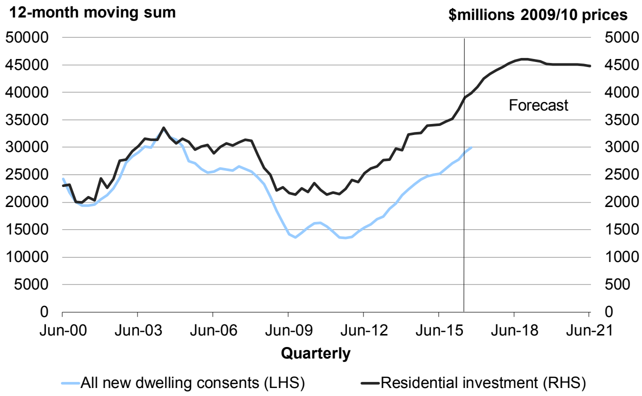
Accommodative monetary policy has continued to support demand, with the Reserve Bank reducing the Official Cash Rate (OCR) a further 25 basis points (bps) to 1.75% in November. Since June 2015, the OCR has been reduced a total of 175 bps, leading to a similar decline in short-term interest rates. Floating mortgage rates have come down around 100 bps, as offshore credit conditions have tightened and increased competition for deposits has driven up commercial banks' funding costs.

In its November 2016 Statement, the Reserve Bank stated that current monetary policy settings are sufficient to return inflation to the middle of the target band by late 2018. These forecasts also assume no further easing in the near term, although a number of risks remain that could lead to further easing. Scenario One in the Risks and Scenarios chapter provides an example where such risks eventuate and the OCR is reduced further.

…which drive housing demand and construction activity…

Strong house price growth resumed in 2016 following a brief slowdown in late 2015 (owing to tighter lending conditions for investors)[1] as solid demand for housing, driven by population growth and low mortgage rates, has continued against the backdrop of a shortage in supply. House price growth has increasingly been driven by regions outside Auckland, as buyers look for more affordable options outside the city and where lending conditions for investors had not been tightened as much. In response to high demand for housing, residential investment grew 8.2% in the year to June 2016, significantly stronger than expected in the *Budget Update* and led by strong activity in Auckland. Strong consents issuance in recent months suggests that activity will increase further (Figure 1.2). Annual residential investment growth rises to a peak of 15.3% in the March quarter 2017 and moderates thereafter.

Figure 1.2 – Real residential investment and dwelling consents



Sources: Statistics New Zealand, the Treasury

In Auckland there is scope for building consents issuance to rise further as the Auckland Unitary Plan (AUP) takes effect and loosens regulatory constraints on development and, in the longer term, increases the availability of residential land. However, the AUP still faces significant challenges in its implementation and is not expected to have a significant impact on residential development in the near term.

1 The Reserve Bank increased loan-to-valuation ratio restrictions for loans secured by investment property in Auckland to 60% in November 2015. In October 2016 this was extended nationwide, reducing investor housing demand in the September quarter as the restrictions were applied in advance. For further detail, see http://www.rbnz.govt.nz/financial-stability/loan-to-valuation-ratio-restrictions

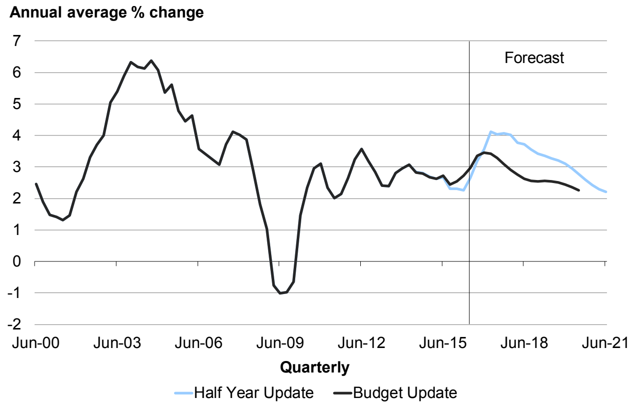
Strong activity in housing has been reflected in growing household debt, which has reached 165% of household disposable income. If income growth were to slow significantly or if interest rates were to rise sharply, debt servicing could become difficult for some households. This has the potential to constrain GDP growth as households adjust by reducing consumption and residential investment. See the Risks and Scenarios chapter for further discussion.

Market investment grew strongly in the June 2016 quarter as strength in the construction sector was complemented by a broader pick-up in business confidence and lower interest rates. However, lower investment in mining and oil exploration provided some offset. Real market investment is expected to remain solid in the near term, reflecting the large programme of construction work.

…supporting employment growth and private consumption

Strong construction and tourism activity has continued to drive growth in employment. Even with net migration inflows and the participation rate at record highs, labour demand has kept pace with supply and the unemployment rate has been broadly stable at around 5%.[2] Nominal wage growth has been muted, reflecting ample labour supply growth and employment growth concentrated in less productive sectors. However, with slow growth in consumer prices, real wages have continued to grow at a steady pace. That said, aggregate nominal income growth has been solid as total hours worked have increased strongly. More people active in the labour market and earning higher incomes has translated into strong private consumption growth.

Figure 1.3 – Real private consumption



Sources: Statistics New Zealand, the Treasury

These factors are expected to persist in the near term, with private consumption stronger than in the *Budget Update* (Figure 1.3). In addition, solid consumption growth will be supported by low interest rates and increased spending on durable goods, reflecting the strong outlook for residential investment.

The Government's fiscal strategy of restrained public spending growth and reducing debt means growth in public consumption will remain modest in the near term. Accordingly, government spending is estimated to have a mildly stimulatory impact on aggregate demand over the next two years, but is broadly neutral over the forecast period on average.[3] In addition, fiscal spending associated with the recent earthquakes (discussed on page 6) is expected to have a relatively small impact on aggregate demand.

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2 Recent changes to the Household Labour Force Survey make interpretation of employment data less clear. See *Implications of changes to the Household Labour Force Survey* on page 15 for further details.

3 The fiscal impulse, a measure of the impact of fiscal settings on demand, is discussed in *Structural fiscal balance indicators* on page 40.

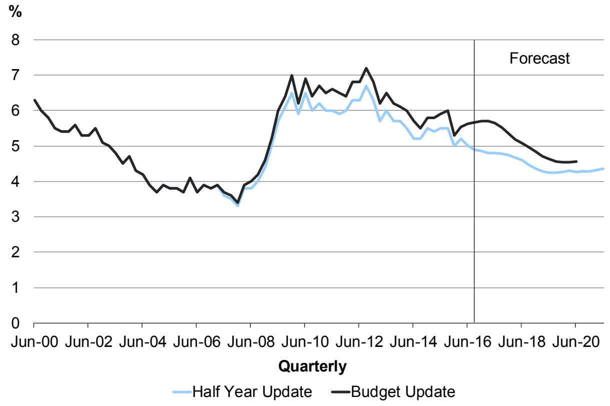
Implications of changes to the Household Labour Force Survey

In the June quarter 2016, Statistics New Zealand made a number of changes to the Household Labour Force Survey (HLFS) resulting in changes to some of the key measures.

Unemployment

One of the key changes to the HLFS methodology is the treatment of internet job search, which has been reclassified from active to passive job search, and thus does not meet the twin criteria for being unemployed – actively seeking and available for work.[4] Consequently the number of unemployed and the unemployment rate have been revised lower, dating back to 2007 (Figure 1.4).

Figure 1.4 – Unemployment rate



Sources: Statistics New Zealand, the Treasury

The revisions to the unemployment rate mean that the NAIRU estimate also needs to be revised. A purely mechanical revision based on changes to recent years (which average around 0.5 percentage points) suggests that the NAIRU estimate should be lowered from 4.5% to 4.0%. However, over the longer term, the unemployment rate is unchanged. We have taken the mid-point between the short- and long-term change as a conservative estimate and now assume the NAIRU to be 4.25% by the end of the forecast period.

Employment, participation and the labour force

Other changes to the HLFS design in the 2016 June quarter have not been backdated, making interpretation of employment, hours worked, participation and labour force data unclear. Surveyed employment increased significantly in the June quarter but it is unclear how much of the increase was from the change in the survey design as opposed to actual employment growth. There is a similar issue for hours worked, the labour force and participation rate. The Quarterly Employment Survey (QES) measures of filled jobs and full-time equivalent employees are perhaps better indicators of underlying annual employment growth at present (both running around 3%).

The change in the HLFS series has implications for a number of other economic variables, in particular labour productivity and compensation of employees, the latter of which is used to estimate tax revenues from source deductions. For example, at face value the HLFS data implied a sharp increase in compensation of employees that did not match year-to-date tax revenue. The forecasts adopt the official HLFS data as published with adjustments made to related series such as compensation of employees to account for the change.

One implication of the increase in hours worked is, naturally, a decrease in the level of measured economy-wide productivity, given other economic variables such as GDP and the capital stock have not changed. As a result, labour productivity falls 2.0% in the March 2017 year, down from growth of 0.6% in 2016. Measures such as capital-to-labour ratios are also materially affected. As a result, productivity estimates using the new HLFS measures should be interpreted with caution.

4 For further details see the MEI special topic for July 2016: http://www.treasury.govt.nz/economy/mei/jul16

Growth among New Zealand's key trading partners remains soft…

Trading partner growth continued to slow in 2016 and is expected to remain steady at around 3.4% in 2017 (Table 1.2), slightly weaker than in the *Budget Update*.

The weaker growth outlook is driven partially by the UK following the vote in favour of an exit from the European Union (Brexit) in June 2016. The immediate impact of Brexit on financial markets was large with the pound depreciating more than 10%, making UK exports more competitive but also increasing input costs for producers and eroding consumers' purchasing power through higher inflation. The longer-term implications of Brexit are uncertain and this uncertainty itself is expected to result in slower growth, by delaying investment decisions and deferring consumption. Less favourable trade access to Europe is also expected to reduce the UK's potential growth rate, although there may be some pick-up in growth towards the end of the forecast period as new trade arrangements become established.

Table 1.2 – Trading partner growth (annual % change)

Calendar years	2016 weights	2015 Actual	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
China	*24%*	6.9	6.6	6.3	6.2	6.1	6.0	5.8
Australia	*22%*	2.4	3.0	2.7	2.8	2.8	2.8	2.8
United States	*13%*	2.6	1.5	2.1	1.8	1.8	1.8	1.8
Newly Industrialised Economies*	*11%*	2.0	1.9	2.3	2.6	2.8	2.8	2.9
ASEAN-4^	*8%*	4.6	4.7	4.7	4.9	4.9	4.8	4.8
Euro area	*7%*	1.9	1.6	1.3	1.4	1.5	1.5	1.5
Japan	*7%*	0.6	0.6	0.8	0.8	0.8	0.1	1.0
United Kingdom	*4%*	2.2	2.0	1.2	1.6	1.6	1.7	1.8
Canada	*2%*	1.1	1.9	2.0	2.0	2.0	2.0	2.0
India	*2%*	7.2	7.4	7.5	7.5	7.5	7.5	7.5
Trading partner growth (TPG)	**100%**	**3.6**	**3.4**	**3.4**	**3.6**	**3.6**	**3.6**	**3.6**
TPG - Consensus (October 2016)		3.6	3.4	3.4	3.5	3.5	3.6	3.6
TPG - IMF WEO (October 2016)		3.6	3.4	3.4	3.6	3.7	3.7	3.6
TPG - The Treasury (2016 *Budget Update*)		3.5	3.4	3.5	3.7	3.8	3.8	

* South Korea, Singapore, Taiwan, Hong Kong

^ Malaysia, Indonesia, Thailand, Philippines

Sources: IMF, Consensus *Forecasts*, the Treasury

The US economy had a weak first half of 2016, as low oil prices took their toll on investment in exploration and the higher US dollar constrained growth in manufacturing. Growth is expected to pick up in the second half of 2016 as consumer spending remains robust and the labour market continues to steadily improve. Evidence that inflationary pressures are building means interest rates are expected to rise in the near term. However, in the longer term, trend growth in the US economy is expected to be lower than previously forecast, reflecting the downward revision of potential growth estimates by the Federal Reserve.

The implications of the US election, which occurred just before these economic forecasts were finalised, are uncertain at this stage. So far, financial markets have focused on the fiscal stimulus which has been foreshadowed under the new administration, particularly the increased investment in infrastructure. Stock prices have increased, particularly in industries likely to benefit from additional stimulus, long-term bond rates have increased in anticipation of an increase in government debt and higher inflation, and the US dollar has strengthened. These responses have been reflected in New Zealand financial markets with an increase in bond yields and a fall in the New Zealand dollar against the US dollar.

However, at this stage it is uncertain what policies will be enacted by the new administration and whether more restrictive trade policies will have an offsetting impact. Accordingly, no changes have been made to these forecasts in the light of the election.

Growth in China has slowed as the economy continues its transition from investment-led growth to more moderate growth led by consumption. In addition, China's trade with other countries has been soft as slowing growth in advanced economies has reduced demand for its exports, thereby reducing import demand for inputs which has had flow-on effects to some of New Zealand's other trading partners in Asia. Slowing growth in China has been addressed with renewed stimulus by authorities, but possibly at the expense of structural reform to support growth longer term. Risks around increased capital outflows and devaluation of the renminbi, China's overheated housing market and high debt levels held by local government have been reflected in financial markets, with periods of elevated market volatility over the past year. The ongoing trend of slowing growth and transition in the drivers of growth, alongside periods of elevated financial market volatility, are expected to continue in the near term.

The Australian economy has continued to transition from mining to non-mining investment, with growth around trend. The labour market has been soft as employment growth has been concentrated in part-time jobs and unemployment has remained steady at around 5.7%. However, underemployment remains high. Developments in China have continued to heavily influence prices for Australian exports. Slowing Chinese investment and demand for iron ore have driven the decline in the terms of trade from 2011. However, more recently coal and iron ore prices have spiked from low levels owing to production restrictions for coal in China and renewed stimulus. Over the near term, the Australian economy is expected to continue its gradual rebalancing in investment from mining to other sectors, with growth in consumption, residential investment and exports (as new resource projects enter production), supported by low interest rates.

In Japan and the euro area, growth has been subdued and is expected to remain so in the near term as these economies continue to experience weak demand, with limited room for further monetary or fiscal stimulus.

…with persistently low global interest rates and inflation…

Muted growth in the global economy means the recent pattern of persistently low inflation and interest rates is expected to continue in the near term. Central banks in the euro area and Japan are expected to maintain their large-scale asset purchase programmes for some time, while the US Federal Reserve is expected to increase the Federal Funds Rate in December, which is a slower pace than previously indicated.

Risks to global growth and inflation remain skewed to the downside. The risks with the largest potential impact on the New Zealand economy include a sharp slowing of growth in China, which would also impact other trading partners, changes in the timing and extent of the US economic recovery and monetary tightening cycle, the nature and timing of the UK exit from the European Union and future US trade and fiscal policy. A further moderation of growth in advanced economies may lead to a more prolonged period of low global inflation and commodity price weakness. The realisation of any of these risks would weigh on demand and inflation in New Zealand. Scenario One in the Risks and Scenarios chapter shows how a weaker global growth environment could impact on the New Zealand economy.

Despite low domestic interest rates, the exchange rate has remained elevated with the TWI-17 averaging 77.0 in the 2016 September quarter, stronger than the 72.0 expected in the *Budget Update*. Strength in the New Zealand dollar reflects three key factors: the

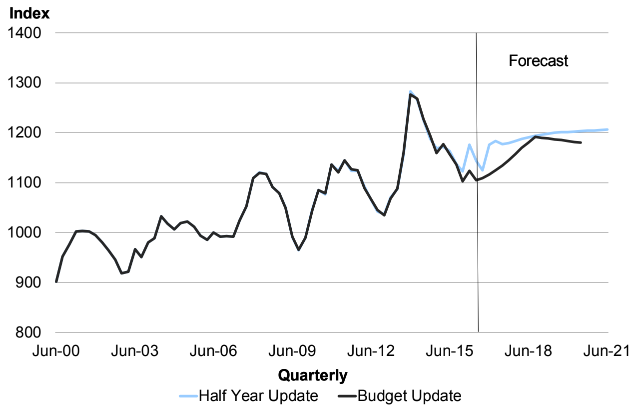
New Zealand economy has continued to expand at a solid pace relative to other advanced economies; New Zealand interest rates are high compared to other advanced economies; and the terms of trade are elevated relative to historical averages. The New Zealand dollar is assumed to depreciate over the forecast period as trading partner growth, global inflation and interest rates pick up.

…suppressing import prices as dairy prices gain on falling global supply…

The weak global inflation environment has translated into weakness in world prices for imported goods, which were 2.9% lower in the 2016 June quarter than a year ago. Low crude oil prices have contributed, averaging around US$45/barrel in the September 2016 quarter. However, oil prices have recovered from US$33/barrel in March, their lowest level since 2004, as production has moderated in response to low prices and as the Organisation of Petroleum Exporting Countries (OPEC) signalled possible production cuts. Overall, in line with the low global inflation outlook, import prices are expected to remain subdued in the near term. Oil prices are also expected to remain low owing to high global supply capacity which could limit the impact OPEC production cuts have on prices.

Overall, world prices for New Zealand's exports have been subdued because of muted global demand and excess supply, particularly for dairy. However, the terms of trade have held up higher than expected in the *Budget Update* (Figure 1.5) as a larger-than-expected fall in import prices in the first half of 2016 more than offset a larger-than-expected fall in export prices.

Figure 1.5 – Goods terms of trade (SNA basis)



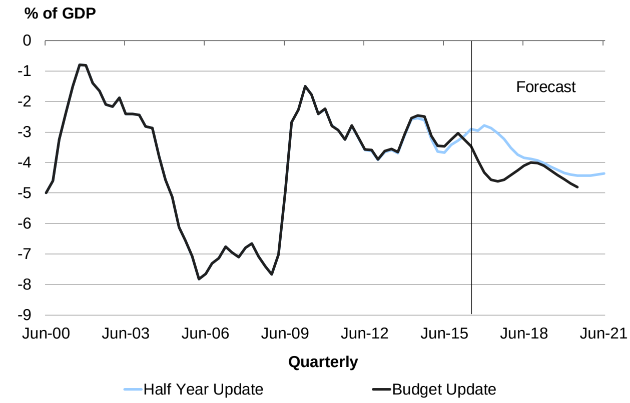
Sources: Statistics New Zealand, the Treasury

The terms of trade are expected to increase in the near term, owing largely to recent gains in global dairy prices, while import prices remain weak. Prices for whole milk powder on the GlobalDairyTrade platform increased around 30% in the September quarter reflecting moderating global milk supply and high seasonal demand. Prices have continued to rise into the December quarter as auction offerings were reduced following lower-than-expected milk collection at the peak of the season. However, there is a risk of some retracement as seasonal demand from China winds down and global supply remains high overall. The recent increase in dairy prices should flow through to the terms of trade from the end of 2016 as product from September is shipped. Thereafter, dairy prices, and the terms of trade, are expected to rise gradually as steady demand is met with ongoing moderation in global supply.

Price gains over the September quarter and in the December quarter have led to Fonterra revising up its forecast farm-gate price to $6.00/kg of milk solids (MS) in the current season, following $3.90/kg MS last season. While the increased price outlook will provide some support to farmers, a strong New Zealand dollar and wet weather, which has reduced production this season, will remain headwinds to the sector as a whole. Furthermore, higher farm-gate prices will take time to fully flow through to farm incomes. Farmers are therefore likely to continue to limit expenditure in the near term (including on investment).

…with buoyant tourism contributing to sub-3% current account deficits

Figure 1.6 – Current account

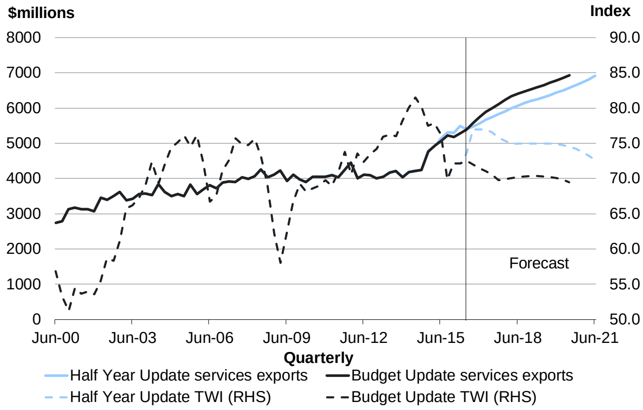


Sources: Statistics New Zealand, the Treasury

Supported by resilience in exported goods volumes, elevated services exports and low global interest rates, the annual current account deficit narrowed to 2.9% of GDP in the 2016 June quarter, much smaller than the 3.5% expected in the *Budget Update* (Figure 1.6). The smaller deficit reflects larger-than-expected export goods volumes, for dairy in particular, following a less severe impact on milk production from drought in 2015. That said, lower milk production this season, owing largely to the increased cull in the dairy herd (but also adverse weather), is expected to reduce export volumes in the near term. However, higher dairy prices will broadly offset the impact of lower production on export values. Solid growth in other goods exports, including horticulture and wine, are expected to provide a partial offset to lower dairy export volumes. On the import side, low global inflation has kept world prices muted. This, along with an elevated New Zealand dollar, will support growth in import volumes.

In annual average terms, nominal services exports rose 12.7% in June 2016, driven by elevated tourist arrivals, with overseas visitor arrivals up 11.7% in the year to October 2016. Visitors from Asia – particularly China – and Australia have continued to drive strong growth in tourism, which is owing to a number of factors including: an easing of travel restrictions in China; continued income growth across emerging Asian economies; growth in the number of airlines flying to New Zealand, particularly from Asia; and low transportation costs, owing to growing competition and low oil prices.

Figure 1.7 – Nominal services exports and TWI-17



Sources: Statistics New Zealand, Reserve Bank, the Treasury

Given that these drivers of tourism growth are expected to persist, services exports are expected to remain buoyant, with real services exports growth of over 1% per quarter on average in the near term. Tourist spending is expected to support construction activity in the near term, along with employment in this sector, as infrastructure and accommodation is expanded to cater for more overseas visitors. However, relative to the *Budget Update*, the stronger dollar will dampen services exports to some degree (Figure 1.7) and the recent earthquakes in the Kaikōura region will likely divert tourism from the region while infrastructure and capacity to host visitors is restored. For further discussion, see *Economic and fiscal impacts of the Kaikōura earthquakes* on page 6.

Strong services exports and higher export prices are expected to contribute to annual current account deficits of around 3.0% of GDP, or slightly below, over the year ahead. The current account deficit is then expected to widen to 3.8% of GDP by June 2018 as both the goods and income deficits widen, the latter reflecting rising global interest rates.

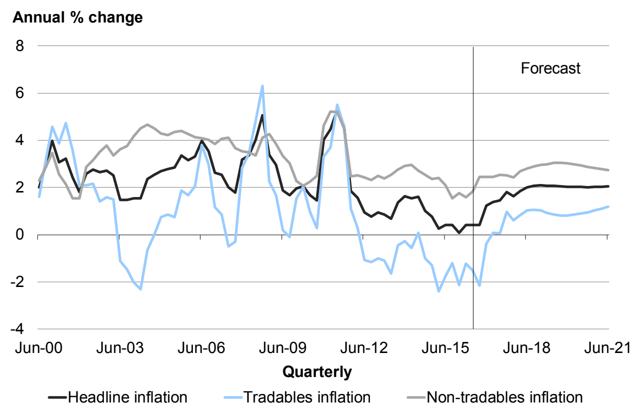
With the exception of housing, inflationary pressures are subdued…

Annual inflation remained low at 0.4% in the September quarter 2016. Annual tradables inflation was weak at -2.1% as it continued to be constrained by weak world prices, particularly oil, and the strong New Zealand dollar. Annual non-tradables inflation was also relatively low at 2.4%.

Non-tradables inflation is assumed to respond to both increasing capacity pressures and inflation expectations. However, low inflation has reduced households' and firms' expectations of future inflation, which is assumed to dampen the rate at which inflation returns to 2% over the medium term. Increases in the tobacco excise tax in the March quarter each year are estimated to contribute 0.2 percentage points to annual CPI inflation for each of the next four years.

Housing and household utilities (which excludes existing house prices) is one area where capacity constraints are translating into rising price pressures. Within this area, the cost of purchasing new housing increased 6.3% in the year to September 2016, its fastest annual increase since the mid-2000s. Annual inflation excluding housing and household utilities has been negative since the 2014 December quarter.

Figure 1.8 – Consumer price inflation



Sources: Statistics New Zealand, the Treasury

As previous oil price falls drop out of the annual calculation in early 2017 (leading to higher tradables inflation) and spare capacity in the economy diminishes (leading to higher non-tradables inflation), annual headline inflation is expected to rise in the near term. Inflation is expected to rise within the Reserve Bank's 1% to 3% target band by the December 2016 quarter and lift to 2.0% by June 2018 (Figure 1.8).

…but nominal GDP growth picks up

Nominal GDP increased 4.2% to more than $250 billion in the year to June 2016, stronger than expected in the *Budget Update*, largely because the terms of trade and inflation have held up higher than expected. Nominal GDP growth is expected to accelerate to over 5% in the near term, reflecting rising real GDP growth, inflation and the terms of trade.

Consistent with higher-than-expected nominal GDP, tax revenue has also been higher than forecast in the *Budget Update*, particularly source deductions, owing to faster-than-expected employment growth, and goods and services tax, owing to stronger inbound tourism spending and residential investment. Strong growth in these tax types is expected to continue. See the Fiscal Outlook chapter for details of tax revenue forecasts.

Medium-term Outlook

Growth projected to moderate to a more sustainable pace over the medium term…

From a peak of 3.6% in 2017, annual average real production GDP growth moderates to 2.3% by 2021, as the factors underpinning growth in the near term transition to their long-term trends. Growth in aggregate supply slows as net migration inflows ease, and as market investment growth moderates. Lower net migration inflows and rising interest rates drive moderation on the demand side, with real private consumption growth slowing to 2.2% in 2021. However, residential investment is projected to remain elevated over the medium term, reflecting pent-up demand for housing and past under-investment.

Per capita GDP growth slows from a peak of 1.7% in 2018 to 1.1% in 2021, as easing migration inflows and declining labour participation lead to slower growth in labour inputs. Recent changes in the HLFS lower our estimates of economy-wide productivity growth in the year ended March 2017, but thereafter labour productivity growth averages 1.5% per year. The capital stock grows relatively strongly as firms and households catch up to the high rates of labour input growth in preceding years. However, multifactor productivity growth remains subdued.

Annual trading partner growth is projected to remain steady at 3.6% over the medium term, weaker than in the *Budget Update*, reflecting slower growth in the UK as a result of Brexit and a downward revision of trend growth in the US owing to lower productivity growth. Growth in China is projected to moderate to below 6% in 2021 as it continues to transition from investment to consumption as the main driver of growth. The Australian economy is projected to continue its transition from mining investment to other sources of demand, with growth around trend (2.8%) over the medium term.

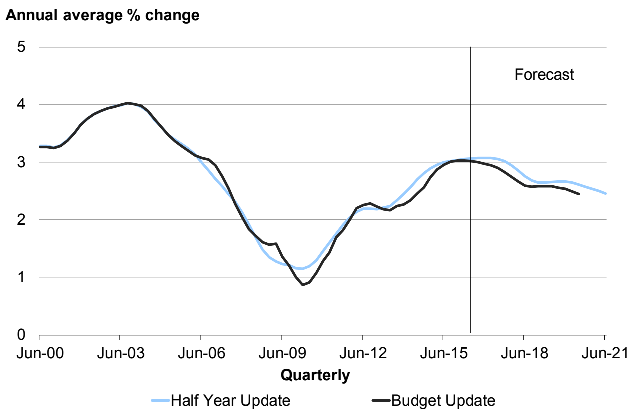
Goods export volumes grow modestly over the medium term as trading partner growth remains steady and as growth in global milk production eases, supporting export prices. Weak global inflation is expected to keep import prices subdued, supporting a gradual rise in the terms of trade over the medium term. Ongoing strength in tourism keeps services exports and the services surplus buoyant, while rising global interest rates drive a widening of the income deficit and a widening of the current account deficit to 4.4% of GDP by 2020.

…as net migration inflows ease and potential growth slows…

Annual net migration is assumed to steadily decline from around 70,000 in 2016 to around 20,000 by 2021. Compared to the *Budget Update,* net migration is higher, owing to a more gradual adjustment path over the forecast period. Further details on the migration assumption are provided in *Migration, population growth and potential output* on page 22.

Growth in potential output declines over the medium term, driven by slower growth in the labour force as net migration inflows ease. In annual

Figure 1.9 – Potential output



Source: The Treasury

average terms, potential output growth slows from 3.1% in the near term to 2.5% by 2021, but is higher than in the *Budget Update* given the larger labour force. Growth in measured labour productivity is slightly below its historical average, although changes to the HLFS mean productivity comparisons need to be treated with caution (see *Implications of changes to the Household Labour Force Survey* on page 15).

Migration, population growth and potential output

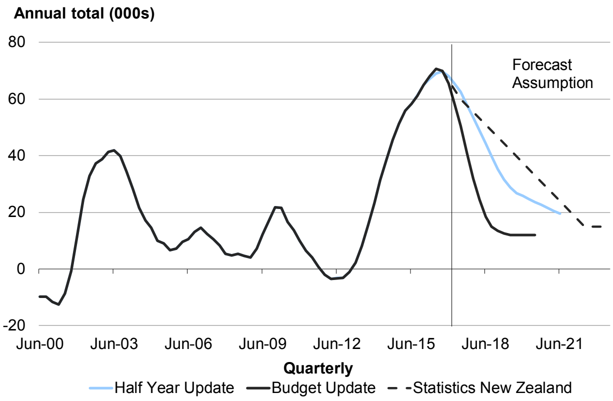
Net migration has shifted from a net outflow of 3,200 in the year to September 2012 to a net inflow of 70,000 in the year to September 2016, adding 192,000 people to the population over four years. The current cycle is characterised by large inflows of non-New Zealand and non-Australian citizens, including a large increase in the number of foreign students following the increase in student work rights in late 2013, and the typically large net outflow of New Zealand and Australian citizens shifting to a small net inflow, chiefly on fewer departures from New Zealand.

Net migration is influenced by both cyclical and structural drivers. For flows of New Zealand and Australian citizens, the main cyclical driver is economic and labour market conditions in New Zealand relative to the rest of the world, particularly Australia. At present, New Zealand's labour market is performing more strongly than Australia's. However, over the medium term, the Australian labour market is expected to strengthen as the economy grows at around trend. The key structural factor is the approximately 30% real wage differential with Australia. For the *Half Year Update* forecasts, net flows of New Zealand and Australian citizens are assumed to revert to their long-run trend of a sizeable outflow.

Flows of other citizens are dependent on economic conditions in New Zealand, immigration policy settings and the attractiveness of the international education sector. On the latter, while policy settings have not changed, tougher enforcement of existing policy has led to a decline in the number of migrants arriving on student visas as it becomes a less attractive path to residency for some groups. Immigration policy settings have also been tightened recently, with fewer permanent residency visas available. Finally, departures are expected to increase in the short term, the lagged effect of the large increase in arrivals over the past two years (for example, students leaving after completing a two- to three-year course). Putting these factors together, net inflows of other citizens are assumed to ease in the short term before picking up again in the medium term in line with long-run trends.

Overall, net migration is assumed to decline at a slower rate than in the *Budget Update,* resulting in 66,000 more people in the four years to 2020. By 2021, annual net immigration is assumed to fall to 20,000 and is on a path to reach Statistics New Zealand's long-run median population migration assumption of 15,000 in 2022 (Figure 1.10). Over the five-year forecast period, net migration adds 179,000 people to the economy, with 148,000 of those of working age. The natural increase in the population of 160,000 is also slightly larger than in the *Budget Update,* chiefly on a higher

Figure 1.10 – Net permanent and long-term (PLT) migration



Sources: Statistics New Zealand, the Treasury

number of births projected by Statistics New Zealand. Taken together, migration and the natural increase see the total population reach 5 million in 2020, while growth in the working-age population remains above trend through to 2019.

A larger working-age population over the forecast period lifts the level of productive capacity in the economy compared to the *Budget Update*. This in turn allows a higher level of aggregate real output to be achieved, supporting higher tax revenues (see *Fiscal impact of migration and population growth* on page 35 for the fiscal implications of migration). Based on the composition of the current migration cycle, which is characterised by a higher share of migrants in the 15–29 year-old cohort than in previous cycles (including large numbers of students), the boost to capacity is a little less than if the age composition matched the broader population. This effect is because the younger age group tends to have lower labour force participation and lower productivity than older cohorts. The composition also reduces the impact of migration on consumption because of the lower wages typically earned by this age group. Risks to the migration assumption are discussed in the Risks and Scenarios chapter.

…with pent-up demand for housing…

The level of residential investment is projected to be significantly higher in the medium term than in the *Budget Update*, reflecting a higher starting point, stronger growth in the near term, stronger demand from higher net migration and monetary policy being more accommodative. However, growth in residential investment slows over the medium term as declines in net migration inflows and eventual interest rate rises lead to slower growth in housing demand. Overall, supply constraints in the construction sector are expected to remain elevated, but ease slightly over the medium term, particularly in Auckland as the regulatory environment for dwelling construction is eased by the AUP.

House prices are projected to continue rising over the medium term, but at a slower pace than recently. House price growth in Auckland is expected to continue moderating over the medium term, given its already high level and improving supply conditions. In the regions outside of Auckland, price growth is expected to remain solid as demand continues to shift to where houses are more affordable. In Canterbury, house prices are expected to remain broadly stable as the residential rebuild continues to increase housing supply. If demand for housing holds up higher than expected, or supply constraints are more binding than anticipated, construction costs and house price growth could remain higher for longer.

Annual average growth in market investment moderates from 9.3% in June 2017 to 2.3% by June 2021 as projects in the construction pipeline are completed and interest rates begin to rise. Likewise, private consumption growth moderates from 4.0% in June 2017 to 2.2% in June 2021, reflecting slower population growth.

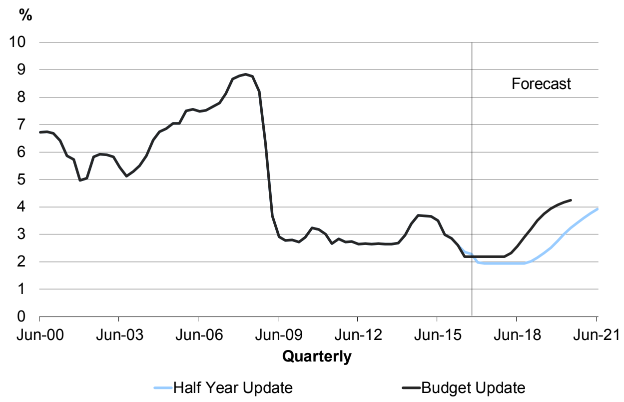
…supporting aggregate demand and inflation, leading to higher interest rates…

Aggregate supply and demand in the economy are projected to come into balance in the medium term, with the output gap turning positive in 2018.

Annual inflation returns to 2.0% by June 2018, driven by a rebound in tradables inflation and steady increases in non-tradables inflation. Annual tradables inflation is expected to rise to 1.0% in June 2018, and remain around this level over the medium term as world prices, including oil prices, steadily increase. Annual non-tradables inflation is expected to rise at a steady pace of around 3% over the medium term as capacity pressures in the economy and wage growth pick up. However, the possibility of low global growth and inflation over the medium term presents downside risks to tradables inflation, particularly given limited scope for monetary policy to respond to negative shocks in many advanced economies. The fall in inflation expectations in early 2016 suggests that low inflation outturns have reduced expectations of future inflation, which is assumed to dampen price- and wage-setting across the economy, slowing the pass-through to non-tradables inflation from capacity pressures.

With rising inflation, the Reserve Bank is expected to begin increasing the OCR from late 2018, with short-term interest rates gradually lifting to 3.9% by June 2021 (Figure 1.11), which is still below their assumed long-run level of around 4.5%. Long-term interest rates are expected to rise gradually to 4.3% by 2021 as inflation in advanced economies begins to rise and global monetary policy settings are tightened, particularly in the US.

Figure 1.11 – 90-day interest rate



Sources: Reserve Bank, the Treasury

Growth in government consumption remains moderate over the medium term. As indicated by the fiscal impulse, the impact of discretionary fiscal policy on demand is estimated to be mildly contractionary over the medium term, meaning government spending is not expected to add to aggregate demand in the economy (see *Structural fiscal balance indicators* on page 40 for further detail).

The positive output gap is reflected in a decline in the unemployment rate, which averages around 4.3% over the medium term as sustained employment growth absorbs expansion of the labour force. The participation rate moderates over the medium term, but is higher than in the *Budget Update,* reflecting the stronger growth outlook and changes to the HLFS (discussed on page 15). Annual wage growth increases to around 3.0% over the medium term.

…as global interest rates rise and the current account deficit widens

Global interest rates, particularly in the US, are projected to rise over the medium term as growth picks up and inflationary pressures re-emerge. The recent increase in long-term bond yields has not been incorporated in the forecasts as it is not clear whether it will be sustained.

With global interest rates rising and growth moderating in New Zealand, the New Zealand dollar depreciates over the medium term, but remains higher throughout the forecast period compared to the *Budget Update*. The lower dollar later in the forecast period is expected to support farm incomes and services exports.

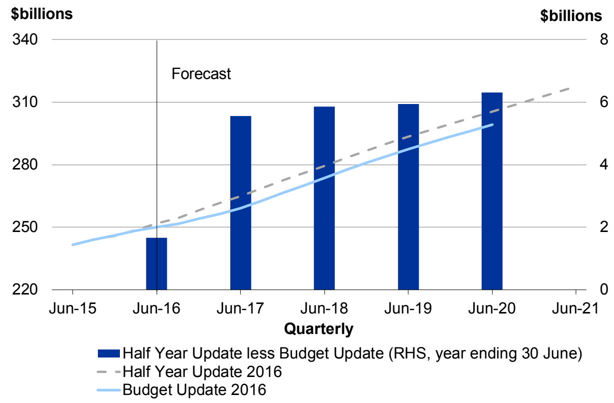
The goods terms of trade gradually rise over the medium term, as commodity export prices continue to lift, particularly for dairy as growth in global supply slows, alongside moderate growth in global demand. On the other hand, import prices are expected to rise more modestly than export prices. This is partly owing to constrained growth in crude oil prices, given the significant increase in production capacity over the past few years on the back of strong investment in exploration and technological advancements. Oil prices are assumed to slowly trend higher, reaching US$63/barrel by June 2021.

The current account deficit gradually widens to 4.4% of GDP by early 2020 and remains steady thereafter, with the goods deficit averaging 1.8% of GDP over the medium term. Rising global interest rates lead to a widening of the primary income deficit, from 3.2% of GDP in 2017 to 4.2% in 2021. The services surplus is expected to remain buoyant at 1.7% of GDP. Successive current account deficits lead to the net international liability position deteriorating from 65% of GDP at present to around 70% in 2021.

***Overall, a larger population, higher terms of trade and faster real growth translate into higher nominal GDP than expected in the* Budget Update**

Annual average growth in nominal GDP peaks at 5.6% in June 2018, before steadily declining to 3.9% by June 2021. Nominal GDP growth is supported by the strong cyclical upswing in real GDP in the near term, and ongoing increases in the terms of trade and inflation over the medium term. Compared to the *Budget Update*, nominal GDP is cumulatively higher by around $23.7 billion over the four fiscal years to June 2020. Higher nominal GDP increases projected tax revenue over the forecast period from the *Budget Update*, which is discussed in greater detail in the Fiscal Outlook chapter.

Figure 1.12 – Nominal GDP



Sources: Statistics New Zealand, the Treasury

2

Fiscal Outlook

Overview

- The Crown's fiscal outlook has improved over the past five years with an OBEGAL surplus being recorded in both the 2014/15 and 2015/16 fiscal years. The current year's results to 31 October continue to be ahead of previous forecast levels as tax revenue continues to be higher than expected in the *Budget Update*.
- This steadily improving fiscal outlook is expected to continue reflecting a growing nominal economy which is forecast to drive growth in tax revenue at a rate higher than the expected growth in expenses.
- Future operating allowances are set to remain at $1.5 billion for Budgets 2017 onwards. However, future capital allowances have been increased from the net $1.4 billion in Budget 2016 (gross $2.6 billion) to $3.0 billion in Budget 2017, and to $2.0 billion in future Budgets.
- OBEGAL is expected to reduce from $1.8 billion in 2015/16 to $0.5 billion in the current financial year, in part owing to Kaikōura earthquake costs recognised in 2016/17 and higher Accident Compensation Corporation (ACC) insurance costs reflecting recent claims experience (including the economic growth impact on claim volumes). In addition, the 2015/16 result was higher than expected due in part to some reversals of previous impairment expenses, which increased OBEGAL in that year. After 2016/17, surpluses are forecast to continue to rise across the forecast period, reaching $8.5 billion by 2020/21 (2.7% of GDP).
- Core Crown expenditure as a percentage of GDP is expected to be 29.6% in 2016/17 (similar to 2015/16), before falling across the forecast period to be 27.7% in 2020/21.
- Based on our current estimation the known direct (gross) fiscal costs to the Government caused by the Kaikōura earthquakes is in the range of $2 billion to $3 billion. These costs are a mixture of operating expenses (eg, EQC claims costs) and capital expenditure (eg, rebuilding state highways) (refer page 6 for more discussion on the earthquakes). Some of these costs are assumed to be met from existing baselines, insurance proceeds, existing budget allowances or existing funds such as the National Land Transport Fund. An incremental $1.0 billion has been added to the forecasts to recognise operating costs not expected to be met from other sources.

- Contributions to the New Zealand Superannuation Fund (NZS Fund) are forecast to resume in 2020/21 when net debt is forecast to fall below 20% of GDP, with $3.1 billion expected to be contributed in that year.
- Capital spending (including contributions to the NZS Fund) by the core Crown is estimated to be $32.1 billion over the forecast period. This compares to capital spending of $18.4 billion in the previous five years, largely reflecting the increase in capital allowances, resumption of NZSF contributions, and increased capital spending on education and defence assets.
- Net core Crown debt is expected to decline over the forecast period as a percentage of nominal GDP to stand at 18.8% by 2020/21, as operating cash flows are expected to rise and fund the growing capital spend. In nominal terms it is expected to increase in the first two years before beginning to decline to be $59.6 billion by 2020/21.
- The Crown's net worth is expected to increase over the forecast period, reaching $129.3 billion by 2020/21, surpassing the pre-2009 nominal levels. This growth is the result of continued forecast surpluses across the forecast period. While as a percentage of nominal GDP net worth also rises, it is not yet expected to regain its peak of 55.6% in 2007/08 by the end of the forecast period.
- Total assets are forecast to grow by $35.9 billion to stand at $328.6 billion by 2020/21. Of this, social assets have the largest growth, increasing $21.5 billion to stand at $170.9 billion by 2020/21. Liabilities fall in nominal terms, with borrowings decreasing in the later part of the forecast period. Total liabilities are expected to stand at $193.8 billion at the end of 2020/21, with borrowings making up $107.9 billion of that balance.
- OBEGAL is expected to be slightly higher in most years than the recent *Budget Update* with tax revenue expected to be stronger than previously forecast, offsetting increases in operating expenses. The higher tax take means the net debt forecasts have improved, despite the increasing capital spend ($4.4 billion more than previously forecast). Page 48 provides more detailed discussion on the comparison to the *Budget Update.*
- These forecasts are sensitive to a number of assumptions and should be read in conjunction with the Risks and Scenarios and Specific Fiscal Risks chapters.

Table 2.1 – Fiscal indicators

Year ending 30 June	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
$billions						
Total Crown OBEGAL[1]	1.8	0.5	3.3	5.4	6.8	8.5
Core Crown residual cash	(1.3)	(2.2)	(2.1)	1.4	3.0	2.6
Net core Crown debt[2]	61.9	64.4	66.4	65.0	62.1	59.6
Net worth attributable to the Crown	89.4	93.0	99.1	107.4	117.3	129.3
% of GDP						
Total Crown OBEGAL[1]	0.7	0.2	1.2	1.8	2.2	2.7
Core Crown residual cash	(0.5)	(0.8)	(0.7)	0.5	1.0	0.8
Net core Crown debt[2]	24.6	24.3	23.8	22.2	20.3	18.8
Net worth attributable to the Crown	35.5	35.1	35.5	36.6	38.4	40.7

Notes: 1 Operating balance before gains and losses.

2 Net core Crown debt excluding the NZS Fund and advances.

Source: The Treasury

Key judgements and assumptions

The fiscal forecasts are based on assumptions and judgements developed from the best information available at the time they were prepared. Actual events are likely to differ from these assumptions and judgements. Uncertainty around the forecast assumptions and judgements increases over the forecast period.

The forecasts incorporate government decisions and other circumstances known to the Government and advised to the Treasury up to 21 November 2016.

In addition to the key assumptions underpinning the economic forecasts (refer page 11), the following key judgements and assumptions supporting the fiscal forecasts were made:

- Tax policy changes enacted and announced by the Government will take place as planned and will affect tax revenue and receipts.
- Any future new spending or revenue reductions will be limited to the operating and capital allowances set by the Government. For further details of these allowances, see note 9 of the Forecast Financial Statements.
- Kaikōura earthquakes will result in additional costs to the Government. Early estimates of known costs are in the range of $2 to $3 billion and will comprise a mix of operating and capital costs. There is an expectation (similar to the 2010–11 Canterbury earthquakes) that a number of these costs will be met from existing baselines, insurance proceeds, existing allowances or existing funds. Therefore only a portion of these costs ($1.0 billion) have been forecast in these fiscal forecasts. It is assumed that EQC will call on the Crown guarantee to fund claims costs in relation to the earthquakes.
- The Government has committed $1.0 billion of funding to assist high growth councils facing financial constraints to finance roads and water infrastructure required to unlock housing development (referred to as the Housing Infrastructure Fund). This commitment has been forecast to be allocated in 2017/18 and 2018/19; however, the timing and nature of this fund is still to be determined and will change.
- The Government and Auckland Council signed a Heads of Agreement for the City Rail Link (CRL). This Agreement sets out the Crown's in-principle commitment to fund 50% of the costs of the CRL and outlines arrangements for the establishment of a Special Purpose Vehicle to deliver the CRL. These fiscal forecasts assume the Government's share of costs will be met from existing budget allowances; however, the timing of this funding can change.
- Departments will continue to spend less than the upper limits of approved spending (referred to as appropriations). A top-down adjustment is made to compensate for this. The adjustment will be higher at the front end of the forecast period as departments' appropriations (and therefore expenses) tend to be higher in these years, reflecting the flexibility departments have around transferring underspends to later years.
- Forecast returns of the large investment portfolios managed by ACC and the NZS Fund are based on their expectations of long-term benchmark rates of return for their respective portfolios.

- Finance costs on new bond issuances are based on the five-year rate from the main economic forecasts and adjusted for differing maturities.
- Significant valuations (eg, student loan portfolio, ACC claims liability and the Government Superannuation Fund retirement liability) are based on underlying assumptions (eg, discount rates, salary increases and inflation) made at the time the valuations were prepared.
- No revaluations of property, plant and equipment are projected beyond the current year. Only valuations that have already been completed are included in these forecasts.
- Contributions to the NZS Fund are assumed to resume in the 2020/21 financial year forecast in line with the Government's stated intentions to commence contributions once net core Crown debt falls below 20.0% of GDP as set out in the 2016 Fiscal Strategy Report (FSR). The table below provides a calculation of the estimated contribution that would have been included in the forecasts if they were to resume in 2016/17 to 2019/20 and shows the forecast contribution in the 2020/21 financial year.

Table 2.2 – NZS Fund contributions

Year ending 30 June **$billions**	**2017** **Forecast**	**2018** **Forecast**	**2019** **Forecast**	**2020** **Forecast**	**2021** **Forecast**
Estimated contribution[1]	2.2	2.5	2.7	2.7	2.7
Forecast contribution	-	-	-	-	3.1

1. Calculations of estimated contributions if they were to resume in 2016/17

The underlying assumptions in calculating the required contribution in each year are the previous year's NZS Fund balance and projections over the ensuing 40 years of nominal GDP, net (after-tax) New Zealand superannuation (NZS) expenses and the government five-year bond rate. The latter is used in calculating the Fund's expected long-run after-tax annual return. Over the forecast years, all Fund variables, apart from the capital contributions, are provided by the NZS Fund itself. Refer to the Treasury website for the NZS Fund model.

Further information on the underlying economic assumptions used in these fiscal forecasts can be found on page 53.

Core Crown Tax Revenue

Tax revenue grows over the forecast period...

Core Crown tax revenue (Figure 2.1) is forecast to rise in each year of the forecast period. By 2020/21, core Crown tax revenue is expected to reach $89.9 billion, $19.5 billion higher than in 2015/16.

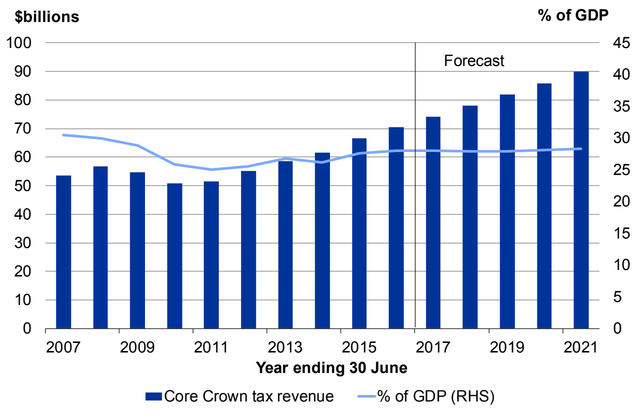
… mainly owing to nominal GDP growth...

The tax-to-GDP ratio remains flat across the forecast at around 28% (Figure 2.1). Tax is forecast to grow a little more strongly than GDP through 2019/20 and 2020/21 owing to the influence of fiscal drag[5] and increasing interest rates on PAYE and interest resident withholding tax (RWT) respectively.

... but with some largely offsetting influences below the headline numbers

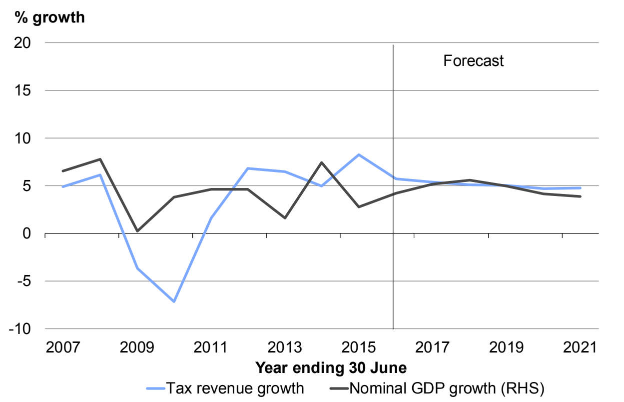
Although headline tax revenue and nominal GDP growth rates are forecast to be broadly similar to each other over the forecast period, there are other factors at work that affect the growth rates of the component parts of the tax forecasts to varying degrees, both positively and negatively, including:

Figure 2.1 – Core Crown tax revenue



Source: The Treasury

Figure 2.2 – Core Crown tax revenue and nominal GDP growth



Source: The Treasury

- The two largest components of total tax revenue are pay-as-you-earn tax (PAYE) and goods and services tax (GST). The principal economic drivers of these taxes, namely employees' compensation and domestic consumption, are both forecast to grow more slowly than nominal GDP, thereby reducing the growth rate of tax revenue relative to GDP by $2.0 billion across the forecast period.

- Fiscal drag is forecast to add increasing amounts to PAYE each year, increasing tax revenue by $1.4 billion across the forecast period.

- Growth in the interest-bearing deposit base (ie, the sum of cash-like investments on which interest is earned that is subject to RWT) is forecast to add $0.4 billion to tax revenue by 2021.

5 Fiscal drag is the effect of higher marginal tax rates applying to higher incomes.

- Although interest rates have a negative effect on tax growth in the early part of the forecast period, rates are forecast to rise from 2018/19 onwards, overall increasing the interest RWT forecast by $0.4 billion.
- CPI indexation of excise rates adds $0.2 billion to customs and excise duties by 2021.

Further detail of these effects is shown in Table 2.3.

Table 2.3 – Composition of growth in core Crown tax revenue over the forecast period

Year ending 30 June $billions	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast	5-year Total
Change in core Crown tax compared with previous year owing to:						
Nominal GDP	3.6	4.1	3.9	3.4	3.3	**18.3**
Composition of GDP	0.2	(0.5)	(0.5)	(0.6)	(0.6)	**(2.0)**
Fiscal drag	0.2	0.2	0.3	0.3	0.4	**1.4**
Interest-bearing deposit base	0.1	-	0.1	0.1	0.1	**0.4**
Interest rates	(0.3)	(0.1)	-	0.3	0.5	**0.4**
Indirect tax CPI inflation indexation	-	-	-	0.1	0.1	**0.2**
Other factors	-	0.1	0.2	0.2	0.3	**0.8**
Total movement in core Crown tax revenue	**3.8**	**3.8**	**4.0**	**3.8**	**4.1**	**19.5**
Plus: previous year's tax base	70.4	74.2	78.0	82.0	85.8	**70.4**
Core Crown tax revenue	**74.2**	**78.0**	**82.0**	**85.8**	**89.9**	**89.9**
Percentage of GDP	**28.0%**	**28.0%**	**27.9%**	**27.9%**	**28.1%**	

Source: The Treasury

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 are relatively close to each other but differ slightly because of the different modelling approaches and assumptions and judgements made by the two agencies. This comparison is included in the Additional Information on the Treasury website at http://www.treasury.govt.nz/budget/forecasts/hyefu2016

Core Crown Expenses

Nominal core Crown expenses increase...

Core Crown expenses are expected to grow by $13.9 billion over the forecast period from $73.9 billion in 2015/16 to $87.8 billion in 2020/21 (refer Figures 2.3 and 2.4). This nominal growth is largely attributable to the $6.0 billion of operating allowances set aside for future Budgets in addition to the new spending allocated at Budget 2016. Social assistance spending is forecast to increase by $5.0 billion across the forecast period (refer to page 34 for further details).

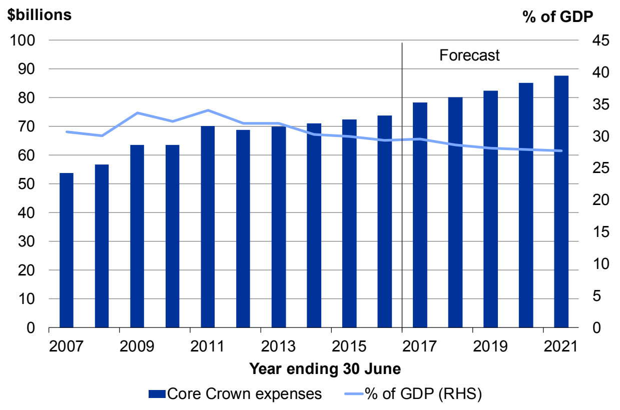
...reflecting new budget spending...

Future operating allowances[6] are currently set at $1.5 billion for Budget 2017 onwards (Figure 2.5).

For forecasting purposes, the allowances are assumed to be all expenditure. However, these allowances can be used for a combination of revenue and expense initiatives, and net of identified savings when allocated.

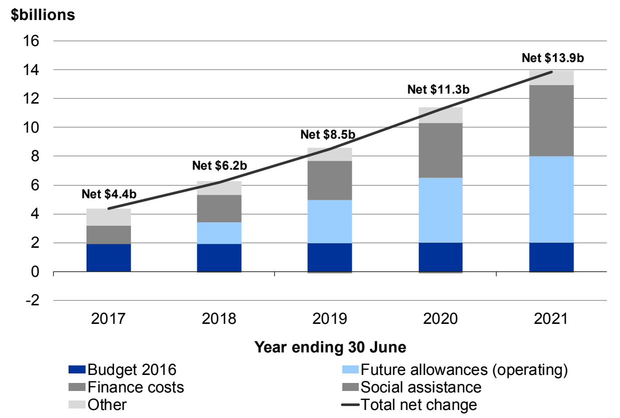
The Budget 2017 operating allowance of $1.5 billion compares to net $1.6 billion new spending in Budget 2016 and an average of $520 million across the previous five Budgets.

Figure 2.3 – Core Crown expenses



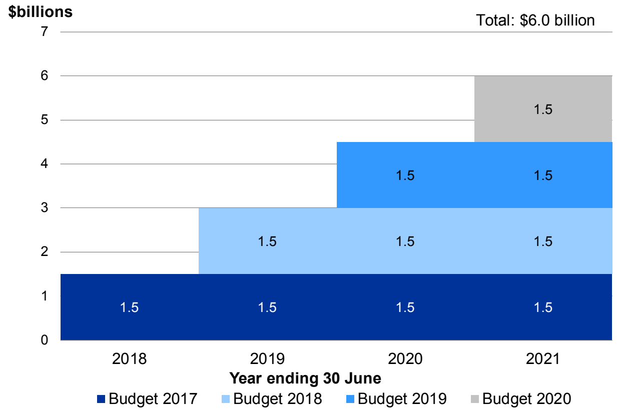
Source: The Treasury

Figure 2.4 – Increase in core Crown expenses relative to 2015/16 actuals



Source: The Treasury

Figure 2.5 – Budget 2017 and future budget allowances



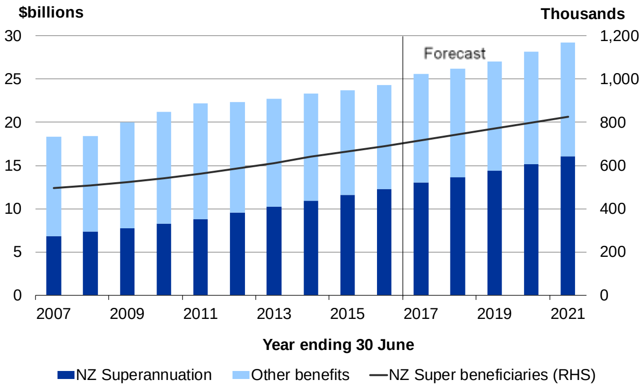
Source: The Treasury

6 New operating spending will be allocated to department baselines when budget decisions are made. As a result, the different functional expense areas, with the exception of social security and welfare and finance costs, remain flat across the forecast period (refer page 102). Therefore, comparisons across the forecast period will not necessarily reflect the expected spend at a functional level.

...and increasing social assistance...

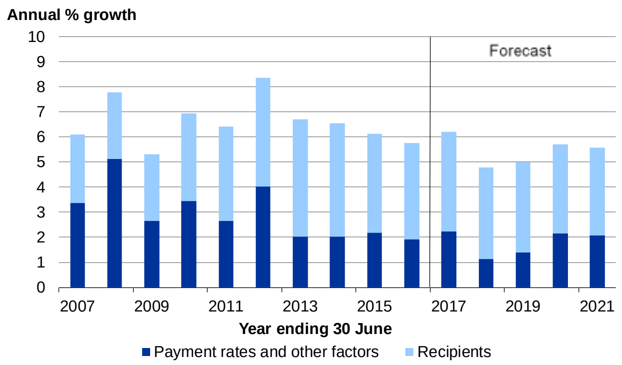
In addition to new budget spending, social assistance spending is expected to increase by $5.0 billion across the forecast period. NZS payments accounts for $3.8 billion of this increase (Figure 2.6). NZS recipient numbers are forecast to increase from 690,600 in 2015/16 to 827,000 by the end of the forecast horizon. This increase in recipient numbers accounts for just over 66% of the increase in NZS costs, with the remaining increase largely owing to indexation of entitlements to wage growth (Figure 2.7). By the end of the forecast period, NZS is around 55% of the total social assistance spending compared to 50% in 2015/16.

Figure 2.6 – Social assistance spending



Source: The Treasury

Figure 2.7 – Growth of NZS expenses



Source: The Treasury

Other (non-NZS) welfare expenditure grows by $1.2 billion over the five-year forecast period with the largest growth relating to the income-related rents subsidy ($0.4 billion) driven by increases in tenancy places and market rents. While most welfare expenditure grows, expenditure on the Jobseeker Support and Emergency Benefit decreases by $0.1 billion across the forecast period as the unemployment rate is forecast to decline, with expenditure on this benefit expected to peak in 2016/17.

...although as a percentage of nominal GDP, core Crown expenses reduce

Core Crown expenses are expected to increase slightly as a percentage of GDP from 29.4% in 2015/16 to 29.6% in 2016/17, largely reflecting a positive reduction in impairment expenses in 2015/16 and the impact on the new spending in Budget 2016. Throughout the remainder of the forecast period core Crown expenses are forecast to grow more slowly than the nominal economy, which sees core Crown expenses declining to 27.7% of GDP at the end of the forecast period (Figure 2.3).

Fiscal impact of migration and population growth

As discussed in the Economic Outlook chapter the forecasts for net inward migration have been consistently revised upwards as current migration levels continue to be above historical trends. Net migration is expected to have a positive impact on both the economy and the Government's finances (as increased tax revenue is estimated to be higher than costs associated with increased pressure on demand-driven government services such as health and education). This box outlines the potential impact of increasing population on the fiscal forecasts.

The composition and geographical distribution of net migration is important for the marginal fiscal impact. For example, non-resident migrants who choose to study in New Zealand are required to pay tertiary fees, not adding any pressure to tertiary funding. In addition, migrants who settle in areas such as Auckland will have a greater impact on social housing expenditure than those who settle in areas where the demand for housing is less. Therefore it is difficult to estimate the fiscal impact of aggregate net migration flows. Instead, this box outlines the types of impacts we expect to see under different types of population increases from migration.

Impact on tax revenue

As discussed earlier in the Economic Outlook chapter net inward migration adds to both total demand and supply in the economy; people coming here have to eat, buy clothes and have somewhere to live, and many come here to work. The additional sales of goods and services that generate additional GST will also generate more profit and more income tax. More people are working, thereby increasing PAYE revenue. An additional 66,000 net migrants by 2020 add just over 1% to the total population compared to the Budget 2016 forecast, and 1% of annual core Crown tax revenue equates to nearly $900 million by the end of the forecast period.

Impact on government operating spending

Overall, the impact on government spending is likely to be in the social sector areas such as health, education and transport (covering around 70% of core Crown expenses). Areas such as defence and core government expenses are unlikely to experience significant demand pressure from population growth.

Sector	**Potential impact**
Education	Increasing roll sizes flow through to early childhood subsidies, school operating funding and staffing levels.
Health	District Health Board (DHB) funding (which makes up around 80% of health spending) is allocated using a Population Based Funding Formula, based on the population living in each district. The formula is used to distribute available funding between DHBs according to the relative needs of their populations, including the number of people who live in each DHB catchment, their age, socio-economic status, ethnicity and sex. As the population changes, the formula is used to allocate any additional funding to DHBs approved by Government.

Sector	Potential impact
Welfare	Historically welfare costs have fallen during times of high net migration since economic growth was also very high. It is possible that high volumes of temporary migrants can displace low-skilled New Zealanders, which could increase benefit numbers, however the evidence is limited. Increased demand for housing from higher migration levels may lead to increases in market rents (with consequential increases in the Income Related-rent Subsidy and Accommodation Allowance).
Transport	While increased migration will result in an increase in transport spending, this will largely be met through existing transport funding mechanisms (ie, Road User Charges and the Fuel Excise Duty), therefore reducing the amount of Crown funding that will be required.

The fiscal forecasts include future budget allowances which may be utilised to meet cost pressures as well as fund new initiatives. While increasing demand for government services may limit choices for the Government in future with regards to how those allowances are allocated, they are assumed sufficient to meet the net migration levels assumed in these forecasts.

Impact on government capital spending

The impact on capital spending is less certain. There can be a significant time lag between increased net migration and the need to increase infrastructure such as new schools or hospitals, depending on the regional distribution of population changes. Spare capacity is utilised in the first instance while the lead time for major capital projects can be lengthy.

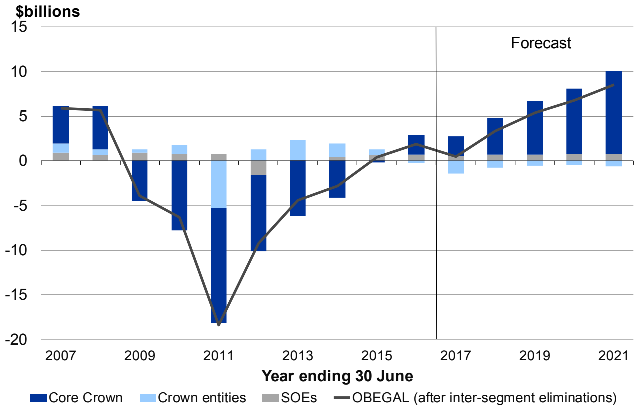
Ultimately though, sustained high net migration levels will eventually result in additional infrastructure spending. As with operating spending, we assume in these forecasts that any future capital pressures will be met from existing budget allowances.

Operating Balance

The operating performance of the Crown strengthens…

OBEGAL is expected to decrease in the current year followed by steady growth in the remaining years of the forecasts. OBEGAL reached a surplus of $1.8 billion in 2015/16 but is expected to decrease to a surplus of $0.5 billion in the current year. This surplus is then forecast to rise to $8.5 billion by 2020/21.

Figure 2.8 – Components of OBEGAL by segment



Source: The Treasury

The forecast deterioration in OBEGAL in the current year largely reflects a strong outcome in 2015/16, owing to impairment reversals for tax receivables and social benefit receivables. In 2016/17, expenditure is forecast to increase with ACC insurance expenses, reflecting recent claims experience and economic growth assumptions, as well as health and education expenditure increases reflecting Budget 2016 decisions. In addition, one-off costs in relation to the Kaikōura earthquakes have been recognised (for more information, refer to *Economic and fiscal impacts of the Kaikōura earthquakes* on page 6).

Figure 2.8 shows the composition of OBEGAL from the different segments of the Government. The core Crown segment is forecast to have an OBEGAL surplus of $2.2 billion in 2016/17, with OBEGAL surpluses continuing to rise over the reminder of the forecast period, largely reflecting growth in tax revenue outpacing growth in nominal spending.

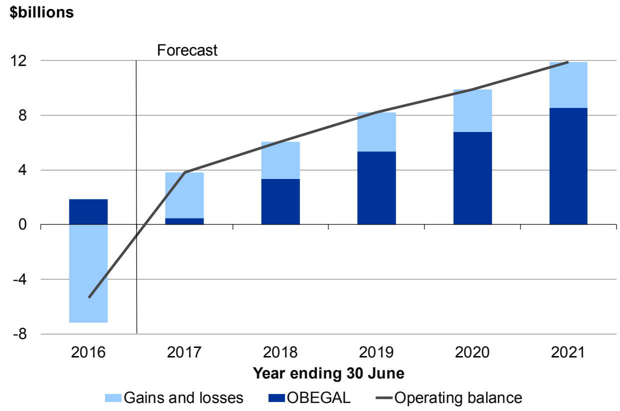
Crown entities' (CEs') OBEGAL is expected to be in deficit throughout the forecast period. The deficit increases from $0.3 billion in 2015/16 to peak at $1.4 billion in 2016/17, before reducing back to $0.8 billion in 2017/18 and then remaining fairly constant, largely reflecting ACC's results, while EQC has additional earthquake costs owing to the Kaikōura earthquakes in the current year. ACC results in particular are sensitive to movements in discount rates affecting the calculation of future claims costs in present day dollars. As such, their OBEGAL forecasts can move significantly between forecasts.

State-owned Enterprises' (SOEs) contribution to OBEGAL is fairly stable with operating surpluses forecast throughout the forecast period.

...with investment returns contributing to the operating balance…

The total Crown operating balance, inclusive of gains and losses, is forecast to be in surplus across all years of the forecast period with a surplus in 2016/17 of $3.8 billion growing to $11.9 billion in 2020/21 (Figure 2.9). This compares to net losses of $7.2 billion recorded in the previous financial year (mainly in relation to actuarial losses).

Figure 2.9 – Components of operating balance



Source: The Treasury

ACC and NZS Fund hold the largest investment portfolios and market movements in these portfolios can have a significant impact on the operating balance.

The NZS Fund incurred losses on investment in 2015/16. For the first four months of 2016/17, gains on investments have been recorded, which has resulted in the NZS Fund forecasting gains on investments for the 2016/17 year.

Beyond 2016/17, investment gains assume a long-term rate of return, resulting in investment gains increasing to $3.1 billion in 2020/21. The level of investment gains plays a significant part in increasing the Government's financial assets and contributing to growth in the Crown's net worth.

The Crown's significant long-term liabilities such as ACC and Government Superannuation Fund (GSF) use discount rates and CPI assumptions in their valuations. However, as future changes to discount rates and CPI are not forecast, they do not impact on gains and losses beyond 2016/17.

While the Crown is forecast to be in surplus across the forecast period, net debt is forecast to continue to increase in the near future. Table 2.4 below illustrates the link between OBEGAL and the movement in net debt. The key differences are that OBEGAL includes non-cash items and the results of SOEs, CEs, and the NZS Fund (that do not impact net debt), while net debt is also impacted by capital cash flows (that are excluded from OBEGAL).

Table 2.4 – Reconciliation between OBEGAL and net core Crown debt

Year ending 30 June **$billions**	**2016** **Actual**	**2017** **Forecast**	**2018** **Forecast**	**2019** **Forecast**	**2020** **Forecast**	**2021** **Forecast**
Core Crown revenue	76.1	80.5	84.2	88.4	92.6	97.1
Core Crown expenses	(73.9)	(78.3)	(80.1)	(82.4)	(85.2)	(87.8)
Net surpluses/(deficits) of SOEs and CEs	(0.4)	(1.7)	(0.8)	(0.6)	(0.6)	(0.8)
Total Crown OBEGAL	**1.8**	**0.5**	**3.3**	**5.4**	**6.8**	**8.5**
Net retained surpluses of SOEs, CEs and NZS Fund	0.3	1.9	0.8	0.7	0.5	0.7
Non-cash items and working capital movements	1.2	2.0	0.1	1.3	0.9	1.4
Net core Crown cash flow from operations	**3.3**	**4.4**	**4.2**	**7.4**	**8.2**	**10.6**
Net purchase of physical assets	(2.0)	(3.2)	(2.4)	(1.9)	(1.6)	(1.7)
Advances and capital injections	(2.6)	(3.4)	(3.1)	(2.8)	(2.1)	(1.6)
Contribution to NZS Fund	-	-	-	-	-	(3.1)
Forecast for future new capital spending	-	(0.5)	(1.0)	(1.4)	(1.6)	(1.7)
Top down capital adjustment	-	0.5	0.2	0.1	0.1	0.1
Net core Crown capital cash flows	**(4.6)**	**(6.6)**	**(6.3)**	**(6.0)**	**(5.2)**	**(8.0)**
Core Crown residual cash (deficit)/surplus	**(1.3)**	**(2.2)**	**(2.1)**	**1.4**	**3.0**	**2.6**
Opening net core Crown debt	60.6	61.9	64.4	66.4	65.0	62.1
Core Crown residual cash deficit/(surplus)	1.3	2.2	2.1	(1.4)	(3.0)	(2.6)
Valuation changes in financial instruments	-	0.3	(0.1)	-	0.1	0.1
Closing net core Crown debt	**61.9**	**64.4**	**66.4**	**65.0**	**62.1**	**59.6**
As a percentage of GDP	**24.6%**	**24.3%**	**23.8%**	**22.2%**	**20.3%**	**18.8%**

Source: The Treasury

Structural fiscal balance indicators

The Treasury calculates a range of fiscal indicators to help assess the relationship between fiscal policy and the economy. Further detail on these indicators can be found in the Additional Information section of the *Half Year Update*, which is available on the Treasury website (http://www.treasury.govt.nz/budget/forecasts/hyefu2016).

Table 2.5 – Structural fiscal balance indicators

Year ending 30 June % of GDP	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
OBEGAL	0.7	0.2	1.2	1.8	2.2	2.7
Cyclically-adjusted balance	1.6	1.0	1.2	1.6	2.2	2.7
Fiscal impulse[1]	(0.4)	0.9	0.1	(0.9)	(0.4)	(0.6)

Note: 1 The fiscal impulse measure shown is the core Crown fiscal impulse plus Crown entities excluding Earthquake Commission (EQC) and Southern Response payments and receipts related to the Canterbury and Kaikōura earthquakes.

Source: The Treasury

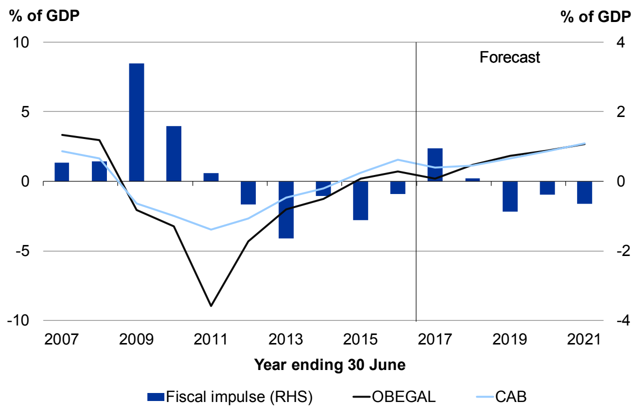
Structural budget balance

The Treasury's headline structural fiscal balance indicator (the cyclically-adjusted balance (CAB)) is an estimate of the OBEGAL adjusted for fluctuations of actual GDP around potential GDP and for significant one-off shocks such as the Canterbury and Kaikōura earthquakes. This means cyclical or one-off factors are removed so only the structural or underlying component remains. The economy is estimated to be operating just below its potential level in the current year, and this gap is forecast to become slightly positive by 2018. CAB will therefore remain above OBEGAL until 2018 then fall slightly below for the remainder of the forecast period. This means that the forecast OBEGAL surpluses appear to be structural in nature rather than being caused by short-term cyclical factors. As mentioned above, the impacts of the Kaikōura earthquakes have been excluded from CAB, this causes the slightly larger difference between CAB and OBEGAL in 2017 compared to previous years.

Fiscal impulse

The fiscal impulse is an estimate of discretionary changes in the fiscal position that can be expected to have an impact on aggregate demand in the economy. The average fiscal impulse across the forecast period is broadly neutral. Positive fiscal impulses in 2016/17 and 2017/18 are caused in part by increases in capital spending forecast in these years. The negative fiscal impulses from 2018/19 to 2020/21 reflect reductions in operating spending (relative to GDP) and, from 2017/18, a decline in capital spending.

Figure 2.10 – Operating balance indicators



Source: The Treasury

Capital Expenditure

The Government is forecast to spend a net total of $32.1 billion on capital items over the forecast period, which includes recommencing contributions to the NZS Fund in 2020/21 (refer to page 30), building and acquiring physical assets (eg, school buildings), advances (eg, student loans), providing capital to CEs (eg, the New Zealand Transport Agency (NZTA)) and future new capital spending (Table 2.6).

Table 2.6 – Net capital expenditure activity 2016/17 to 2020/21

Year ending 30 June $billions	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast	5-year Total
Education	0.6	0.8	0.8	0.7	0.6	0.6	**3.5**
Defence	0.4	0.9	0.5	0.4	0.2	0.5	**2.5**
Corrections	0.1	0.2	0.1	0.1	0.1	0.1	**0.6**
Health	0.2	0.3	0.2	-	-	-	**0.5**
IRD	-	0.1	0.2	0.1	0.1	0.1	**0.6**
Other	0.7	0.9	0.5	0.6	0.6	0.4	**3.0**
Net purchase of physical assets[1]	**2.0**	**3.2**	**2.3**	**1.9**	**1.6**	**1.7**	**10.7**
Housing Infrastructure Fund	-	-	0.5	0.5	-	-	**1.0**
Student loans	0.2	0.2	0.2	0.1	0.1	-	**0.6**
Other	0.3	0.4	0.4	(0.1)	(0.1)	(0.2)	**0.4**
Net advances	**0.5**	**0.6**	**1.1**	**0.5**	**-**	**(0.2)**	**2.0**
NZTA	1.1	1.5	1.3	1.4	1.4	1.4	**7.0**
City Rail Link project	-	0.2	0.1	0.3	0.4	0.4	**1.4**
Southern Response	0.3	0.3	0.2	-	-	-	**0.5**
Other	0.7	0.8	0.5	0.5	0.3	0.1	**2.2**
Net investments	**2.1**	**2.8**	**2.1**	**2.2**	**2.1**	**1.9**	**11.1**
Contribution to NZS Fund	-	-	-	-	-	3.1	**3.1**
Future new capital spending	-	0.5	1.0	1.4	1.6	1.7	**6.2**
Top-down capital adjustment	-	(0.5)	(0.2)	(0.1)	(0.1)	(0.1)	**(1.0)**
Net capital spending	**4.6**	**6.6**	**6.3**	**5.9**	**5.2**	**8.1**	**32.1**

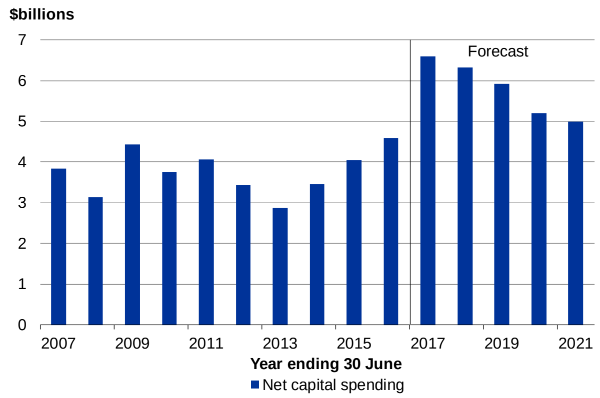
Note: 1 Excluding assets acquired via Public Private Partnerships.

Source: The Treasury

Net capital spending is expected to increase significantly in 2016/17, with the largest capital spend in a number of years (Figure 2.11). The size of the forecast spend does increase some risk that spending may be pushed into future periods as capacity constraints are tested.

Figure 2.11 sets out a history of capital expenditure over the past 10 years and includes the forecast capital activity to 2020/21. The graph excludes contributions to the NZS Fund (2006–10 and 2021 years) and proceeds from the Government Share Offer programme in 2012–14 (a total of $4.6 billion) which were used to fund capital expenditure.

Figure 2.11 – Net capital spending history

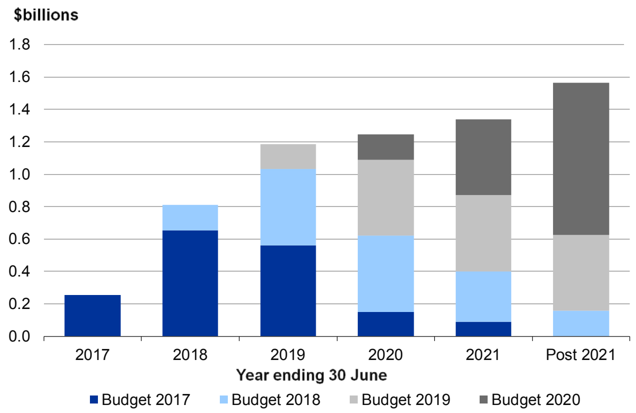


Source: The Treasury

A net capital allowance of $3.0 billion is forecast for Budget 2017 with $2.0 billion for Budgets 2018–20. The Government's commitment relating to its share of the cost of the CRL joint project with Auckland Council ($1.4 billion in the current forecast period) is assumed to be met from these allowances. Each capital allowance is assumed to be spread over five fiscal years reflecting the assumed profile of future spending. This profile is illustrated in Figure 2.12.

In addition to budget allowances, further capital spending is forecast to occur through the purchase of physical assets, investments in CEs and lending such as student loans.

Figure 2.12 – New capital spending (capital allowances)



Source: The Treasury

Forecast net purchases of physical assets of $10.7 billion are forecast across the period and represent spending by core Crown agencies to maintain and expand their existing asset base. Over half of the spending ($6 billion) is expected to be on defence and education assets.

Net investments of $11.1 billion are forecast, and largely represent capital injections to CEs to maintain and expand their asset base. These are estimated to be between $1.9 billion and $2.8 billion a year. The largest capital injections across the forecast period are to NZTA for state highways ($7.0 billion). Capital injections to DHBs, Crown Fibre Holdings, Southern Response and Ōtākaro are also included.

Net advances of $2.0 billion include issuance and repayment of student loans as well as the Housing Infrastructure Fund ($1.0 billion). Student loan repayments have been increasing over time so that, by the end of the forecast period, repayments are expected to match issuances.

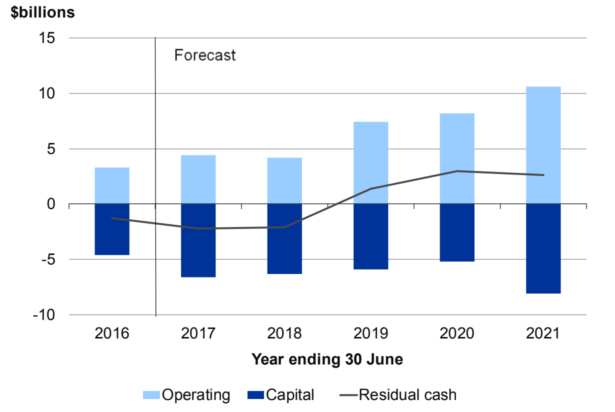
Residual Cash and Net Core Crown Debt[7]

Operating cash flows improve over time...

Net operating cash flows are forecast to be in surplus across the forecast period with a moderate cash surplus in 2016/17 year increasing to $10.6 billion in 2020/21. Over the forecast period the Government is expected to generate cash flows from core Crown operations of $34.9 billion.

The growth in operating cash flows largely mirrors the trend shown in OBEGAL and strengthens each year of the forecast period. The strength in operating cash flows largely represents growth in tax receipts exceeding the growth in operating payments.

Figure 2.13 – Core Crown residual cash



Source: The Treasury

...outpacing capital spending near the end of the forecast period

The residual cash deficit is forecast to increase in 2016/17 mainly owing to the increased capital spending forecast in 2016/17. Net capital spending is forecast to exceed operating cash flows until 2018/19, when core Crown residual cash returns to surplus (Figure 2.13).

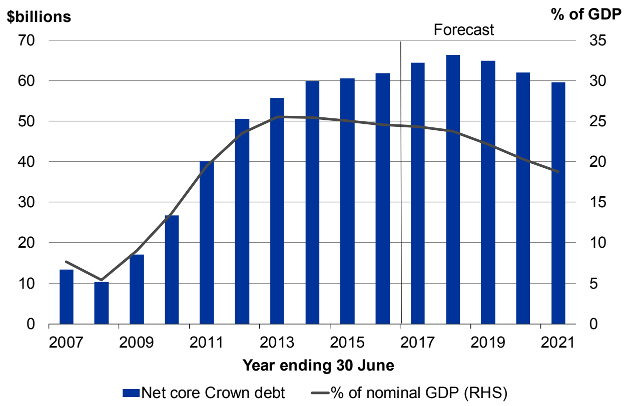
Over the entire forecast period a cash surplus of $2.8 billion is expected. This cash surplus is expected to help fund future government bond repayments (Table 2.7).

Net core Crown debt declines over the forecast period...

Net core Crown debt as a share of nominal GDP is forecast to decrease over the forecast period, from 24.6% in 2015/16 (Figure 2.14) to 18.8% by 2020/21.

In dollar terms, net core Crown debt is forecast to increase for the first two years as cash flows from operating activities are not expected to be sufficient to meet capital spending (as discussed above) before starting to decline once residual cash returns to surplus. Net debt is forecast to be $59.6 billion in 2020/21.

Figure 2.14 – Net core Crown debt



Source: The Treasury

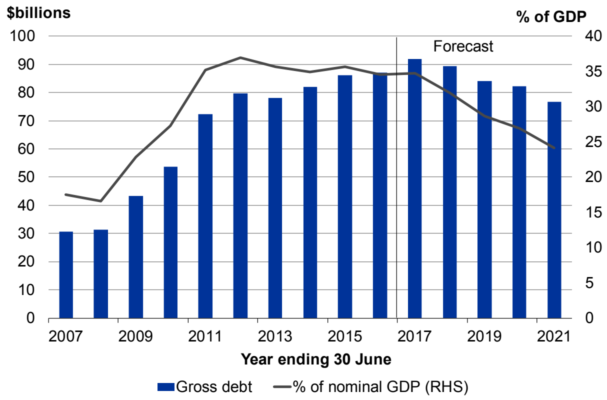
7 Net core Crown debt and residual cash indicators are measured on a core Crown basis. Residual cash includes both operating and capital activity. This differs from OBEGAL, which is measured at a total Crown level and includes operating activity only.

...and gross debt begins to decline after 2016/17

Gross debt is expected to peak at $92.0 billion in 2016/17. Forecast maturities are then expected to exceed new debt being issued, and gross debt begins to decline. Gross debt is forecast to be $76.7 billion in 2020/21 which is equivalent to 24.2% of nominal GDP (Figure 2.15).

Gross debt falls faster in nominal terms than net debt as bond repayments are met with a mixture of new bond issuances and a reduction in financial assets.

Figure 2.15 – Gross debt



Source: The Treasury

The bond programme is expected to raise funds of $31.9 billion over the forecast period, while $42.2 billion of existing debt will be repaid, providing net repayments of $10.3 billion (Table 2.7). Any excess cash proceeds raised from the bond programme are expected to be invested in financial assets and used to meet future debt maturities.

The issuance profile is relatively flat in order to reduce year-to-year volatility of bond programmes and ensure consistency of supply over this time.

Table 2.7 – Net increase in government bonds

Year ending 30 June **$billions**	**2017** **Forecast**	**2018** **Forecast**	**2019** **Forecast**	**2020** **Forecast**	**2021** **Forecast**	**5-year** **Total**
Face value of government bonds issued (market)	8.0	7.0	7.0	6.0	6.0	34.0
Cash proceeds from government bond issue						
Cash proceeds from issue of market bonds	8.3	6.7	6.3	5.3	5.3	31.9
Repayment of market bonds	(2.4)	(9.1)	(11.5)	(7.3)	(11.1)	(41.4)
Net proceeds from market bonds	5.9	(2.4)	(5.2)	(2.0)	(5.8)	(9.5)
Repayment of non-market bonds	(0.8)	-	-	-	-	(0.8)
Net repayment of non-market bonds	(0.8)	-	-	-	-	(0.8)
Net cash proceeds from bond issuance	**5.1**	**(2.4)**	**(5.2)**	**(2.0)**	**(5.8)**	**(10.3)**

Source: The Treasury

Total Crown Balance Sheet

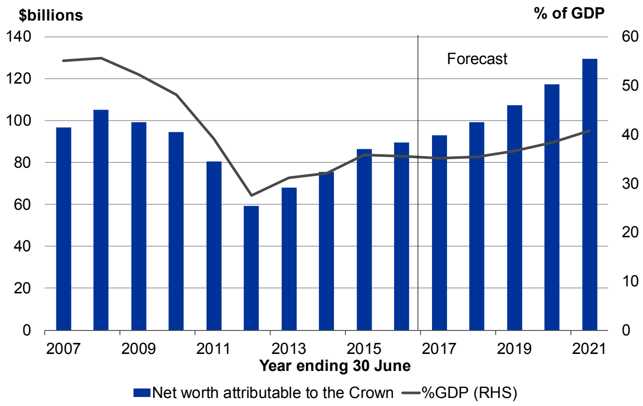
Increasing operating balance surpluses result in a stronger balance sheet...

Net worth attributable to the Crown is forecast to grow in nominal terms across the forecast period largely owing to forecast operating balance surpluses. Beyond 2017, net worth attributable to the Crown is expected to grow over the four years by $36.3 billion to stand at $129.3 billion by 2020/21. As a share of nominal GDP net worth attributable to the Crown is expected to decline slightly in 2016/17 to 35.1%, as expected GDP growth continues to remain strong in the near term. From 2017/18 increasing operating balances outpace GDP growth for net worth attributable to the Crown to reach 40.7% by 2020/21 (Figure 2.16).

...with assets increasing by $35.9 billion over the forecast period...

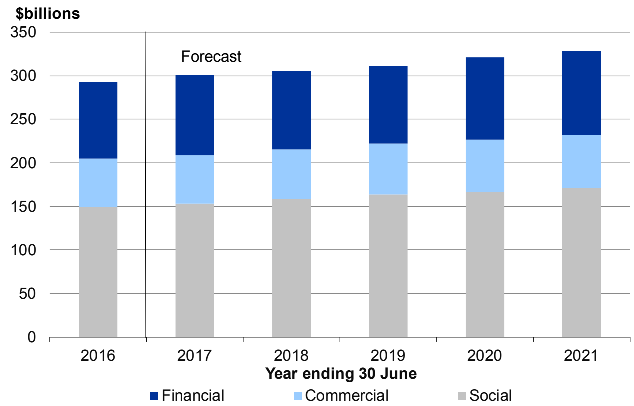
Total assets are forecast to grow by $35.9 billion over the forecast period to $328.6 billion in 2020/21, made up of additional investments in assets (both physical and financial) of $89.4 billion, partially offset by reductions (largely depreciation) of $53.5 billion.
The largest asset growth over the forecast period is in the social assets portfolio (around 50% of the total Crown balance sheet). Social assets (eg, schools, hospitals and social housing) are expected to increase by $21.5 billion over the forecast period to be $170.9 billion in 2020/21 (Figure 2.18). This increase largely reflects growing capital spending. Liabilities in relation to the social sector (eg, tax refunds, Emissions Trading Scheme (ETS) provision and payables and provisions in relation to social assets noted above) remain fairly static across the forecast period. As a result, social net worth is expected to increase.

Figure 2.16 – Net worth attributable to the Crown



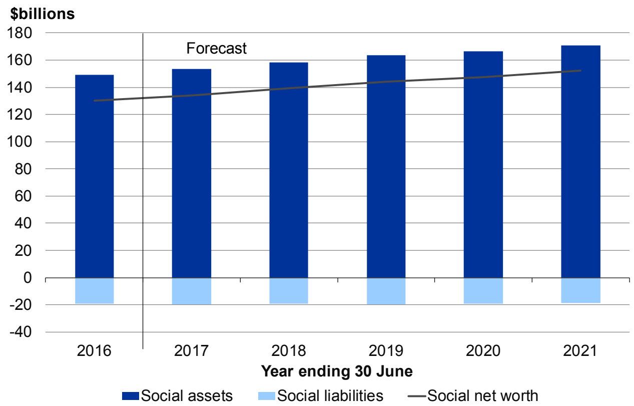
Source: The Treasury

Figure 2.17 – Total Crown assets



Source: The Treasury

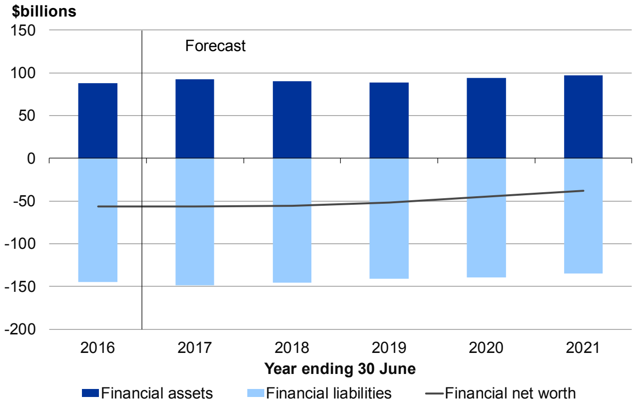
Figure 2.18 – Social balance sheet



Source: The Treasury

The financial asset portfolio (around 30% of the total Crown balance sheet) is expected to increase by $9.0 billion to be $96.9 billion in 2020/21, primarily reflecting investment growth in the large investment portfolios (NZS Fund and ACC).

Figure 2.19 – Financial balance sheet

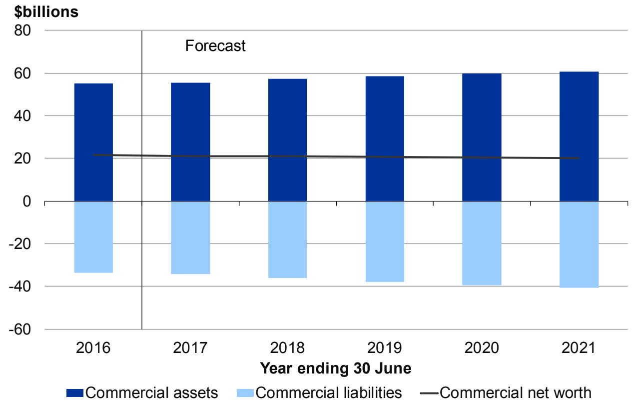


Source: The Treasury

On the liability side, borrowings that are mostly undertaken by the Treasury's New Zealand Debt Management Office (NZDMO) (which manages the Crown's bond programme and funds forecast cash shortfalls), and the Reserve Bank. Borrowings in the financial sector are forecast to decrease by $14.0 billion by 2020/21. Insurance liabilities are expected to increase by $0.6 billion in the current year partly owing to claims from the Kaikōura earthquakes. Beyond 2016/17, ACC's insurance liability will continue to increase from $39.1 billion at the end of 2015/16 to stand at $47.3 billion in 2020/21. The GSF liability is forecast to be $11.9 billion in 2016/17 falling to $9.6 billion by 2020/21. Overall, net worth in the financial sector increases by $18.8 billion across the forecast period (Figure 2.19).

The commercial asset portfolio (representing 20% of the Crown's balance sheet) is expected to increase by $5.5 billion over the forecast period to be $60.8 billion in 2020/21, with growth mostly coming from growth in Kiwibank[8] loan book (with a corresponding increase in liabilities as deposit balances are also forecast to rise). Commercial net worth decreases by $1.6 billion over the forecast period (Figure 2.20).

Figure 2.20 – Commercial balance sheet



Source: The Treasury

The Crown's balance sheet remains sensitive to market movements...

Many of the assets and liabilities on the Crown's balance sheet are measured at "fair value" in order to show current estimates of what the Crown owns and owes. While the measurement at fair value is intended to reflect the value of these items, it can be volatile, resulting in fluctuations in the value of the assets and liabilities reflecting changes in the market and underlying assumptions.

Refer to the Risks and Scenarios chapter page 69 for more details.

8 The sale of shares in Kiwibank to NZSF and ACC does not impact on the total Crown balance sheet as Kiwibank remained 100% owned by the Crown (through its government reporting entities) following the investment.

...and judgements and estimates will also impact on the balance sheet...

Apart from market factors, valuations are subject to a number of judgements and estimates with valuations based on underlying assumptions made at the time the valuations were prepared. In general, as time goes on, better information becomes available and initial estimates are updated to reflect current information. Some examples of this are noted below:

- 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 forecasts.
- GSF's assets are offset against the gross liability and have been updated to reflect market values. The GSF liability is valued by projecting future cash payments, and discounting them to the present. The value of assets over the forecast period reflects long-run rate of return assumptions appropriate to the forecast portfolio mix.
- The ACC liability has been adjusted for the latest discount rate. This liability is valued by projecting future cash payments, and discounting them to the present. These valuations rely on historical data to predict future trends and use assumptions such as inflation and discount rates. Any changes 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.

...while other risks remain

In addition to those items on the balance sheet there are a number of liabilities (and assets) that may arise in the future but are not yet included in our forecasts, either because they are contingent on an uncertain future event occurring (eg, outcome of litigation) or the liability cannot be measured reliably. If these liabilities crystallise, there will be associated costs with a negative impact (or positive in the case of contingent assets) on the operating balance or net debt. Refer to page 85 for a list of the contingent liabilities at 31 October 2016.

Comparison to the *Budget Update*

The *Budget Update* was published on 26 May 2016. Since then, there have been a number of developments that have significantly impacted the fiscal outlook. Table 2.8 below summarises the changes in the key fiscal indicators since then.

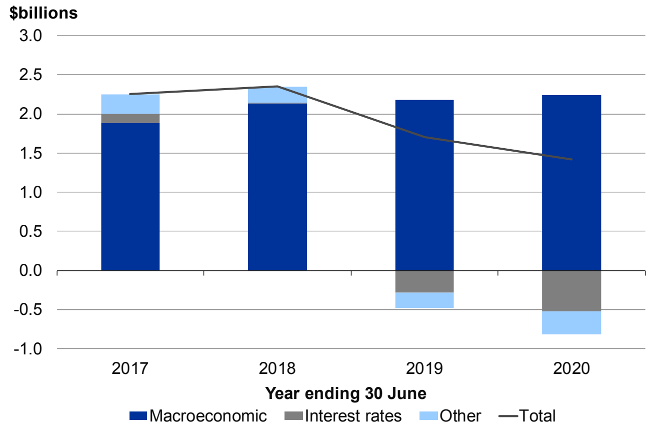
Table 2.8 – Key fiscal indicators compared to the *Budget Update*

Year ending 30 June $billions	**2016 Actual**	**2017 Forecast**	**2018 Forecast**	**2019 Forecast**	**2020 Forecast**
Core Crown tax revenue					
Half Year Update	-	74.2	78.0	82.0	85.8
Budget Update	69.7	72.0	75.7	80.3	84.4
Actual	70.4	-	-	-	-
Change	**0.7**	**2.2**	**2.3**	**1.7**	**1.4**
Core Crown expenses					
Half Year Update	-	78.3	80.1	82.4	85.2
Budget Update	74.4	77.4	79.7	82.0	84.8
Actual	73.9	-	-	-	-
Change	**0.5**	**(0.9)**	**(0.4)**	**(0.4)**	**(0.4)**
OBEGAL					
Half Year Update	-	0.5	3.3	5.4	6.8
Budget Update	0.7	0.7	2.5	5.0	6.7
Actual	1.8	-	-	-	-
Change	**1.1**	**(0.2)**	**0.8**	**0.4**	**0.1**
Core Crown residual cash					
Half Year Update	-	(2.2)	(2.1)	1.4	3.0
Budget Update	(2.1)	(4.2)	(2.1)	2.0	3.9
Actual	(1.3)	-	-	-	-
Change	**0.8**	**2.0**	**0.0**	**(0.6)**	**(0.9)**
Net core Crown debt					
Half Year Update	-	64.4	66.4	65.0	62.1
Budget Update	62.3	66.3	68.3	66.3	62.3
Actual	61.9	-	-	-	-
Change	**0.4**	**1.9**	**1.9**	**1.3**	**0.2**
Net worth attributable to the Crown					
Half Year Update	-	93.0	99.1	107.4	117.3
Budget Update	83.5	86.6	91.6	99.3	108.9
Actual	89.4	-	-	-	-
Change	**5.9**	**6.4**	**7.5**	**8.1**	**8.4**

Source: The Treasury

A stronger economic outlook has improved the tax take...

Figure 2.21 – Movement in core Crown tax revenue since the *Budget Update*



Source: The Treasury

As outlined in the Economic Outlook chapter, economic growth over the first half of 2016 has exceeded expectations, and this has likely continued into the latter half of 2016. In addition, nominal GDP growth up to the end of the 2017/18 is now expected to be much stronger than was forecast in the *Budget Update*.

As a result of both of these factors, nominal GDP is forecast to be a cumulative (2016/17 to 2019/20 inclusive) $23.7 billion higher than in the *Budget Update*. This has contributed to an upward revision to the core Crown tax revenue forecasts of $7.6 billion across the forecast period. Forecasts for most of the major tax types have been increased, with the exception of interest RWT, which has followed the interest rate forecasts downwards. Table 2.9 below summarises the movements by tax type since the *Budget Update*.

Table 2.9 – Reconciliation of the change in core Crown tax revenue

Year ending 30 June **$billions**	**2017** **Forecast**	**2018** **Forecast**	**2019** **Forecast**	**2020** **Forecast**	**Total** **Change**
Movement in core Crown tax owing to:					
Source deductions	0.6	0.8	0.8	0.8	**3.0**
Other persons tax	0.5	0.4	0.4	0.3	**1.6**
Corporate tax	0.5	0.5	0.3	0.2	**1.5**
RWT	(0.2)	(0.3)	(0.6)	(0.9)	**(2.0)**
GST	0.6	0.7	0.7	0.8	**2.8**
Other taxes	0.2	0.2	0.1	0.2	**0.7**
Total movement in core Crown tax revenue	**2.2**	**2.3**	**1.7**	**1.4**	**7.6**
Plus: *Budget Update*'s tax base	72.0	75.7	80.3	84.4	
Core Crown tax revenue at *Half Year Update*	**74.2**	**78.0**	**82.0**	**85.8**	
As a % of GDP	**28.0%**	**28.0%**	**27.9%**	**27.9%**	
Core Crown tax movements consist of:					
Forecast changes	2.2	2.3	1.7	1.4	**7.6**

Source: The Treasury

- A higher forecast for compensation of employees (aggregate wages and salaries) has contributed to the source deductions forecasts being increased by $3.0 billion across the forecast period.
- Increases to the outlook for private consumption and residential investment help to increase the total GST forecasts by $2.8 billion.

- An increased forecast for entrepreneurial income, partly owing to the improved outlook for dairy farmers, has contributed to a $1.6 billion increase in the other persons tax forecast.
- Corporate tax forecasts have been revised upwards by a total of $1.5 billion owing to an increased forecast for corporate profits.
- The forecasts for interest RWT have been lowered by a collective $2.0 billion through a combination of lower interest rates and a recalibration of the model used to estimate RWT.

...but the OBEGAL outlook is similar to the previous forecast …

While tax revenue is stronger than forecast in the *Budget Update,* increased expenses (largely social assistance) and reduced ACC forecasts (see below) mean OBEGAL is expected to be similar to the previous forecast (Table 2.10).

Table 2.10 – Changes in OBEGAL since the *Budget Update*

Year ending 30 June $billions	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast
OBEGAL – 2016 *Budget Update*	**0.7**	**2.5**	**5.0**	**6.7**
Changes in forecasts:				
Tax revenue	2.2	2.3	1.7	1.4
Social assistance	(0.2)	(0.2)	(0.2)	(0.3)
Kaikōura net incremental earthquake costs	(1.0)	-	-	-
ACC forecasts	(0.4)	(0.6)	(0.3)	(0.2)
Net finance costs	(0.4)	(0.3)	(0.4)	(0.3)
Other changes	(0.4)	(0.4)	(0.4)	(0.5)
Total changes since the Budget Update	**(0.2)**	**0.8**	**0.4**	**0.1**
OBEGAL – 2016 *Half Year Update*	**0.5**	**3.3**	**5.4**	**6.8**

Source: The Treasury

An increase in expected social assistance spending across all years is mostly attributable to an increase in forecast NZS payments, a result of both indexation of payments to wage growth and higher growth in the number of NZS recipients compared to the *Budget Update.*

As discussed in the Overview, a portion of the operating costs ($1.0 billion) has been added to the 2016/17 forecasts on top of existing spending, representing the estimated net costs of the Kaikōura earthquakes that are not expected to be funded from other sources. The fiscal forecasts capture initial estimates of known costs. Experience with the 2010–11 Canterbury earthquakes suggests that, as more information comes to hand and the recovery plan becomes clearer, additional damage may be uncovered and that future aftershocks may cause further damage or delay the recovery. Where this occurs, cost estimates may rise over time (page 6 includes a detailed discussion of the expected increase in costs of the earthquakes).

Updated ACC forecasts have resulted in a decrease in OBEGAL in each year of the forecast owing to a number of factors:

- Lower discount rates have resulted in higher insurance expenses across all years than previously forecast.

- From 2017/18, ACC levy revenue is expected to be lower than previously forecast owing to assumptions around levy rate reductions being based on ACC's agreed funding policy.

Net finance costs are unfavourably affected by the following factors:

- Decreases in short-term interest rates have resulted in a reduction in interest income.
- Some interest income (included in OBEGAL) has been re-forecast as gains (excluded from OBEGAL). This reclassification does not impact the total Crown operating balance.

Lower medium-term interest rates have resulted in a reduction in finance costs and partially offset some of the unfavourable impacts mentioned above.

...while net core Crown debt is lower compared to the Budget Update

Residual cash deficits, which have the most direct impact on net debt, are lower than previously forecast in the short term as the stronger tax take outweighs additional spending. Overall, residual cash is $0.5 billion better than forecast in the *Budget Update* over the four years ended 2019/20. Changes to net debt since the *Budget Update* largely follow changes in residual cash (Table 2.11).

Table 2.11 – Changes in net debt since the *Budget Update*

Year ending 30 June $billions	**2017 Forecast**	**2018 Forecast**	**2019 Forecast**	**2020 Forecast**
Net debt – 2016 *Budget Update*	**66.3**	**68.3**	**66.3**	**62.3**
Changes in forecasts (cumulative):				
Tax receipts	(3.0)	(5.3)	(7.2)	(8.8)
Benefit payments	0.2	0.4	0.7	1.1
Kaikōura net incremental earthquake costs	0.5	1.0	1.0	1.0
Increase in capital spending	0.2	1.3	3.0	4.4
Other changes	0.2	0.7	1.2	2.1
Total changes since the Budget Update	**(1.9)**	**(1.9)**	**(1.3)**	**(0.2)**
Net debt – 2016 *Half Year Update*	**64.4**	**66.4**	**65.0**	**62.1**

Source: The Treasury

There has been an increase of $4.4 billion in relation to forecast capital spending. While capital allowances have increased significantly since the *Budget Update* (Table 2.12), increased transport spending and the formation of the Housing Infrastructure Fund ($1.0 billion) also add to the expected capital programme.

Table 2.12 – Increase in allowances for new capital spending since the *Budget Update*

Year ending 30 June $billions	**2017 Forecast**	**2018 Forecast**	**2019 Forecast**	**2020 Forecast**	**Post- 2020 Forecast**	**Total Increase**
Budget 2017	0.2	0.5	0.6	0.4	0.4	2.1
Budget 2018	-	0.1	0.3	0.3	0.4	1.1
Budget 2019	-	-	0.1	0.3	0.7	1.1
Budget 2020	-	-	-	0.1	1.0	1.1
Increase in new capital spending	**0.2**	**0.6**	**1.0**	**1.1**	**2.5**	**5.4**

Source: The Treasury

Allowances are spread over a number of years, reflecting that capital projects may take a number of years to complete.

Allowances for new capital spending have increased from $0.9 billion in the *Budget Update* to $3.0 billion for Budget 2017 and $2.0 billion as the Government looks to increase spending on priority infrastructure. In total the increased capital allowances add $2.9 billion onto capital spending over the next four years compared to the *Budget Update*.

The Government's commitment relating to its share of the cost of the CRL joint project with Auckland Council is assumed to be met from these allowances.

Key Economic Assumptions

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 Table 2.13 below.

Table 2.13 – Summary of key economic forecasts used in fiscal forecasts

Year ending 30 June	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Real GDP[1] (ann avg % chg)	2.8	3.6	3.5	2.9	2.4	2.3
Nominal GDP[2] ($m)	251,760	264,760	279,480	293,391	305,502	317,405
CPI (ann avg % chg)	0.3	1.1	1.8	2.1	2.0	2.0
Govt 10-year bonds (ann avg, %)	3.2	2.7	3.1	3.7	4.1	4.3
5-year bonds (ann avg, %)	2.6	2.3	2.9	3.4	3.8	4.2
90-day bill rate (ann avg, %)	2.7	2.0	1.9	2.1	2.9	3.7
Unemployment rate (ann avg, %)	5.2	4.8	4.7	4.3	4.3	4.3
Employment (ann avg % chg)	2.3	4.8	1.6	1.5	1.1	0.9

Notes: 1 Production measure.

2 Expenditure measure.

Source: The Treasury

3

Risks and Scenarios

Overview

- Overall, risks to the economic outlook have increased since the 2016 *Budget Update.* International risks are largely skewed to the downside, while domestic risks are more balanced. This chapter first outlines these key risks to the economic outlook, then presents two alternative scenarios for the economy, assuming some combination of these risks are realised, and outlines their implications for the fiscal forecasts. The final part of the chapter focuses on general fiscal risks.
- Internationally, the key risk to the New Zealand economy is slower trading partner growth that leads to lower export demand and prices. This risk could arise from a sharp slowing of growth in China, further deterioration of growth in the euro area and Japan, or as a consequence of Brexit. The timing and extent of the US economic recovery and monetary tightening cycle, and future trade and fiscal policy present a further source of uncertainty to these forecasts.
- Risks to the domestic outlook are more balanced, and centre around net migration, residential investment and the extent of spare capacity in the economy, tourism growth, goods exports (particularly dairy), uncertainty around inflation and housing market dynamics, and the impact of the Kaikōura earthquakes.
- Two scenarios are presented that show ways in which the New Zealand economy could deviate from the main forecast. Scenario One illustrates the impact of an international shock that lowers our trading partners' growth and increases global financial market volatility, prompting a fall in export demand, asset prices, the New Zealand dollar and the terms of trade, leading to lower investor and consumer confidence. In this scenario, nominal GDP, tax revenue and OBEGAL are lower.
- Scenario Two shows the economic impact of tighter-than-expected capacity constraints. In this scenario, inflationary pressures are stronger as prices are bid up, while in the medium term investment and consumption growth is constrained to lower than in the main forecasts. This scenario lifts nominal GDP, tax revenue and OBEGAL.
- The above risks have implications for economic activity and income, and therefore represent risks to the Crown's forecast revenue. The Crown is also subject to other risks affecting expenditure and the Crown's balance sheet. In particular, volatility in financial asset prices and interest rates can have a significant impact on the Crown's fiscal position.

Economic Risks

Risks to global growth, particularly in the medium term, have increased since the 2016 *Budget Update* with a rise in protectionist sentiment, while further fiscal stimulus in China exacerbates risks relating to its overheated housing market and high levels of government debt. Some negative medium-term risks may be accompanied by positive short-term risks; further stimulus in China and expansionary US fiscal policy would support global growth in the near term, and the short-run impact of Brexit may be less severe than previously anticipated. The current outlook, however, is for growth to slow in the near term in Australia, the UK, China and the euro area.

The scope internationally for further monetary policy easing or fiscal stimulus is limited, meaning negative growth shocks are likely to be persistent. There is a risk that slow global growth becomes entrenched, with a more prolonged period of low inflation and interest rates, while financial market risks increase as asset prices become overvalued. The realisation of any of these downside risks to the world economy would weigh on economic growth in New Zealand, materialising as lower demand and/or prices for New Zealand's exports, a lower New Zealand dollar as well as adversely affecting confidence and bank funding costs.

Risks to the domestic outlook are more balanced, and centre around net migration, residential investment and the extent of spare capacity in the economy, tourism growth, goods exports (particularly dairy), uncertainty around inflation and housing market dynamics, and the impact of the Kaikōura earthquakes.

Other risks include adverse natural events, including aftershocks following the Kaikōura earthquakes, military tensions in the Middle East and elsewhere, terrorism and disease. In addition, economic dynamics may play out differently from these forecasts, and uncertainty remains around key judgements and assumptions (see *Key economic forecast judgements and assumptions* on page 11).

Economic stability in China remains a key risk to the global outlook…

Annual average GDP growth in China has fallen from over 10% in 2010 to 6.7% in the September 2016 quarter as the composition of growth shifts from investment towards consumption. The transition is intended to lead to more sustainable growth in the long term, with the trade-off of slower growth in the near term. Authorities have tried to mitigate slower growth in the near term with greater levels of support; however, such support may prolong the transition and create further imbalances, especially if other key risks are exacerbated, such as the high level of local government and state-owned enterprise (SOE) debt and the risk of a sharp downturn in China's overheated housing market.

Slower growth and heightened uncertainty about China's outlook have been reflected in lower commodity prices, subdued growth in international trade flows, reduced confidence and increased financial market volatility. A sharper slowdown in China would be expected to be transmitted as a more severe deterioration through these channels, with a flow-on impact of slower growth in other trading-partner economies, particularly in Australia and elsewhere in the Asia-Pacific region. The direct effect on New Zealand of a slowdown in China may be offset to some extent by the rebalancing towards consumption as the main driver of growth, as a successful transition could be positive for New Zealand by increasing Chinese demand for our mostly consumer-orientated primary products in the longer term.

…alongside uncertain growth prospects in advanced economies…

While the US recovery continues, the outlook is for moderate growth in both 2016 and 2017, and consequently gradual tightening in monetary policy. Possible expansionary fiscal policy, risks to financial market stability with the proposed repeal of regulation introduced post-global financial crisis and a potential policy shift towards greater trade protectionism and reduced people flows will influence future growth, although at this stage to what extent is unclear. Uncertainty remains around the timing and extent of the Federal Reserve's monetary tightening cycle, as well as the possible unintended destabilisation of emerging market economies that have US dollar-denominated debt from tighter US monetary policy. Further out, risks remain around the rate of US potential growth, which may continue to decline with an ageing population.

In addition to the flow-on impacts of slowing growth in China to other trading partners, risks to the Australian economy centre on a more gradual-than-expected transition from mining investment to non-mining, resulting in a longer period of below-trend growth. There is some uncertainty about Australia's trend growth rate, with slower population and productivity growth. A key upside risk is the path of Australia's commodity export prices and volumes. For instance, if the recent spike in the price of coking coal is sustained, nominal GDP may be significantly higher in the near term. On the downside, Australia faces similar risks to New Zealand, in the form of elevated house prices in some areas and high levels of household debt. Trans-Tasman flows represent a large portion of New Zealand's net migration, and will be influenced by the strength of Australia's labour market.

The growth outlook for Japan and the euro area is for ongoing low and moderate growth respectively, with both economies facing policy challenges to stimulate demand. Divergence between the monetary policy stance of these two countries and the US may reduce the efficacy of Japan's and the euro area's monetary policy in some areas, while concerns remain around the stability of the euro area's banking sector, particularly with regard to the adverse effects of negative interest rates. Room for fiscal stimulus is also limited given high debt levels and ongoing large fiscal deficits.

Brexit is a key source of uncertainty that is likely to last for some time to come. Much uncertainty centres on the precise nature of Brexit: the timeframes, constitutional arrangements and nature of future agreements with the European Union. This uncertainty is expected to weigh on firm investment and employment decisions, although to what extent is unclear. Prominent risks relate to the future of the UK's financial centre and the value of sterling, which at its present subdued level supports exporters in the short term, but increases producer input price pressures, which in turn is expected to erode consumers' purchasing power. These risks will influence New Zealand through UK and euro area demand for our exports (eg, lamb) and future bilateral trade agreements.

…with the risk of weaker demand for key exports…

The outlook for key exports, such as dairy and tourism, continues to be marked by uncertainty and remains dependent on the growth of our trading partners (particularly China). The dairy price outlook is uncertain, despite recent large increases. Risk centres on how international production will respond over the medium term, particularly in the European Union where further market intervention by the European Commission could continue to distort price signals. Global dairy production growth has been further supported by decreased input costs from low oil and stockfeed prices and the strength of the US domestic dairy market. There is also uncertainty around the outlook for demand, particularly from China, and how long the Russian import ban remains in place. Other risks include the outlook for oil prices, which will be influenced by potential OPEC coordination, adverse weather events and the path of the New Zealand dollar. Despite recent improvements in farm-gate prices, dairy farm cashflows will remain constrained in the 2016/17 season.

Travel services export growth has been robust, as the gradual loosening of travel restrictions in China and approval of additional flights to New Zealand has supported a record number of visitor arrivals. Similarly, arrivals on student visas from Asian countries are at high levels, although they have moderated slightly in recent months. However, the Kaikōura earthquakes may prompt a decline in tourism arrivals to New Zealand (see *Economic and fiscal impacts of the Kaikōura earthquakes* on page 6). A shift in travel preferences, significantly slower income growth and/or heightened uncertainty abroad pose risks to the outlook for both tourism and education services exports.

…and increasing financial market volatility

Long-term interest rates increased from record lows in the second half of 2016, with increased optimism around global growth and inflation prospects. A global financial shock, such as a banking crisis, would increase perceptions of risk and financial market volatility, and thereby increase costs for New Zealand banks accessing funds offshore, potentially further increasing the interest rate facing households (via mortgage rates) and firms, while the New Zealand dollar would likely fall on "flight to safety" sentiment. Higher interest rates may then place pressure on households' and farmers' balance sheets, particularly those borrowers who have high levels of debt relative to income.

Net migration presents a significant risk to the central forecast…

Net migration in the year to June 2016 accounted for nearly three-quarters of population growth, increasing the size of the labour force and both the actual and potential output of the economy. Net migration has historically moved in large cycles, with gross inflows and outflows often changing at the same time, leading to large swings in net flows. However, it is difficult to gauge the strength and timing of these movements. If, for example, the Australian labour market materially improves in the near term, net migration inflows could decline more sharply than in the main forecast as arrivals from Australia decline and departures pick up again. On the other hand, the large inflows to date may suggest structurally higher permanent migration gains. See *Migration, population growth and potential output* on page 22 for further discussion on the economic implications of migration, and *Fiscal impact of migration and population growth* on page 35 for the fiscal implications.

…as does the housing market…

Housing demand has been supported by rapid population growth (at 2.1%, population growth in the year to June 2016 was the fastest since 1974) and low mortgage interest rates. These two factors are expected to continue to underpin housing demand in the year ahead. Meanwhile, housing supply growth was sluggish over 2008 and 2009 and was further affected by the Canterbury earthquakes. As a consequence, the national housing stock is smaller than it would otherwise be, which – combined with robust housing demand – has led to rapidly rising house prices, with median house prices increasing nearly 50% over the past four years.

There is a risk housing demand and house prices grow more than anticipated in the main forecast, particularly if migration inflows are higher than expected or if housing supply is slower to respond. Greater housing demand could lead to stronger-than-anticipated residential investment growth. Likewise, faster nationwide house price growth than in the main forecast could boost household wealth and consumer confidence, possibly leading to higher consumption. Conversely, a lower level of net migration may reduce housing demand and soften house price growth, while the Reserve Bank's loan-to-value regulations may subdue housing demand more than anticipated.

Nationwide, house prices grew 14% in the year to October 2016.[9] Faster house price growth represents a positive risk to economic activity through its effect on home-owning households' wealth, but may also lead to higher levels of household debt relative to disposable income, presenting a risk to financial stability as households become more vulnerable to interest rate increases (although Reserve Bank regulation on loan-to-value ratios aims to mitigate this risk). Estimates of debt servicing ratios for representative new buyers in Auckland are elevated (around 46% of income) even with current low interest rates. They would pass previous peaks if mortgage rates were to return to their 10-year average of 6.7%.[10] Alternatively, slower house price growth or a sharp fall in Auckland house prices presents a downside risk to home-owning households' wealth and therefore consumption, although this is unlikely without a major external trigger given the presence of strong economic fundamentals supporting demand.

…raising questions around the economy's capacity to respond…

Strong, simultaneous growth is expected over the forecast period in residential, business and infrastructure investment. Each of these sectors of the economy requires similar resources and a key judgement has been made around how much of this work can be completed at once. Damage caused by natural disasters, such as the Christchurch and Kaikōura earthquakes, will increase demand for these resources. The economy may not be able to respond as quickly as forecast if, for example, not enough builders were able to be attracted from within or outside New Zealand, there was insufficient land or credit available for development or if bottlenecks occurred from poor resource management and coordination. That said, the economy may be able to respond faster than anticipated if, for instance, land for residential building was released more rapidly than assumed through the AUP, or if the mobility of construction workers between Canterbury and other regions is greater than expected.

…and the future path of inflation

There is a risk that inflation may be higher than expected if capacity constraints in the economy cause wages and the price of resources to be bid up. Rising construction costs are a prime example, with different regions and companies competing for workers, building materials and machinery. Rising construction costs and a shortage of workers and land may then be passed through to consumers via higher rents, wages and prices, increasing overall inflation.

In recent times, low global inflation has weighed on inflation in New Zealand through the cost of imports and price competition. Low global commodity prices, particularly for oil, have also been a factor, as has the high New Zealand dollar which has further lowered the cost of imports. In addition, non-tradables inflation has been weaker than the long-term relationship with the output gap would suggest, with low wage growth, and inflation expectations are lower than previously as persistently weak inflation weighs on expectations. These trends may continue, leading to continued low inflation.

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9 Real Estate Institute of New Zealand (REINZ) stratified median house price index.

10 See *RBNZ Financial Stability Report – May 2016.* A representative buyer is defined as one buying an average value house, on an average income, with a 20 percent deposit.

Scenarios

The following scenarios show how the economy might evolve if some of the key judgements in the main forecast are altered (Table 3.1). They illustrate two of the many ways that the economy may deviate from the main forecast. Scenario One illustrates the economic impacts of an international shock that lowers our trading partners' growth and increases global financial market volatility, prompting a fall in export demand, asset prices and the terms of trade, leading to lower investor and consumer confidence. Scenario Two shows the impact if the economy is unable to respond to high domestic demand as quickly as anticipated. In this scenario, inflationary pressures are stronger as prices are bid up, while consumption and investment are dampened.

Table 3.1 – Economic and fiscal variables for main forecast and scenarios

June years	2016	2017	2018	2019	2020	2021
	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Real GDP (annual average % change)						
Main forecast	**2.8**	**3.6**	**3.5**	**2.9**	**2.4**	**2.3**
Scenario One	2.8	3.3	2.4	3.0	3.1	2.5
Scenario Two	2.8	4.0	3.3	2.5	2.2	2.1
Unemployment rate[1]						
Main forecast	**5.0**	**4.8**	**4.6**	**4.2**	**4.3**	**4.3**
Scenario One	5.0	4.8	5.5	4.8	4.3	4.4
Scenario Two	5.0	4.7	4.5	4.2	4.3	4.3
Nominal GDP (annual average % change)						
Main forecast	**4.2**	**5.2**	**5.6**	**5.0**	**4.1**	**3.9**
Scenario One	4.2	4.6	3.8	4.7	4.5	4.2
Scenario Two	4.2	5.9	6.0	4.8	4.0	3.9
Consumers price index (annual % change)						
Main forecast	**0.4**	**1.5**	**2.0**	**2.1**	**2.0**	**2.1**
Scenario One	0.4	1.6	2.0	1.3	1.9	2.2
Scenario Two	0.4	1.8	2.3	2.3	2.1	2.2
Operating balance before gains and losses (% of GDP)						
Main forecast	**0.7**	**0.2**	**1.2**	**1.8**	**2.2**	**2.7**
Scenario One	0.7	0.3	1.6	2.2	2.6	3.1
Scenario Two	0.7	0.1	0.6	1.0	1.4	2.0
Net core Crown debt (% of GDP)						
Main forecast	**24.6**	**24.3**	**23.8**	**22.2**	**20.3**	**18.8**
Scenario One	24.6	24.5	25.0	24.3	23.2	22.2
Scenario Two	24.6	24.0	22.9	21.0	18.9	17.0

Note: 1 June quarter, seasonally adjusted.

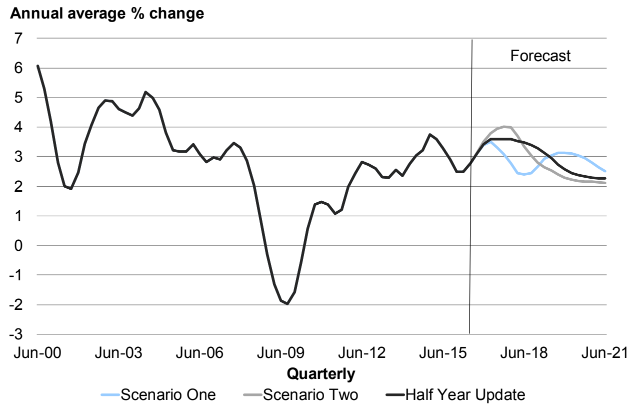
Sources: Statistics New Zealand, the Treasury

Scenario One – An International Shock Dampens Confidence

An international shock subdues global growth…

In the first scenario, downside risks to the international outlook eventuate, causing trading partner growth to deteriorate and elevating global financial market volatility. The flow-on impact through trade and confidence reinforces slow growth in key trading-partner economies, amplifying the severity of the international shock. Increased financial market volatility and slower growth cause investor confidence and asset prices to decline, while borrowing costs increase as banks experience higher funding costs. By June 2018, real GDP growth is 2.4%, compared with 3.5% in the main forecast, although growth accelerates later as the economy recovers (Figure 3.1).

Figure 3.1 – Real production GDP growth

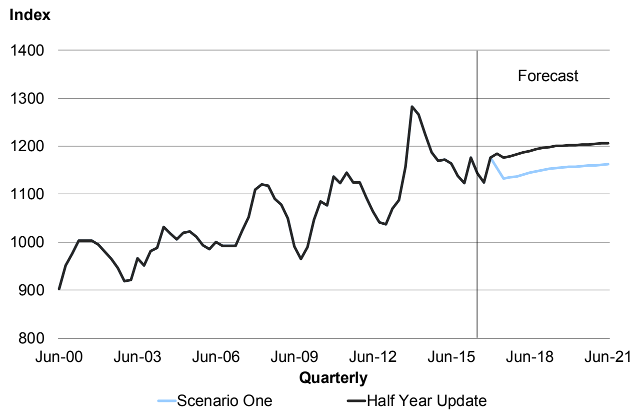


Sources: Statistics New Zealand, the Treasury

…depressing export demand and prices…

Export demand decreases as global income declines and tourists adopt a "wait and see" mentality. The terms of trade fall and remain around 4% weaker than in the main forecast as weaker global demand prolongs the recovery in export prices across the board (relative to import prices) (Figure 3.2). The New Zealand dollar depreciates on "flight to safety" sentiment, with the TWI around 9.5% lower than in the main forecast by June 2021. The current account deficit widens further, to be 1.4 percentage points larger than in the main forecast by June 2018 at 5.2% of GDP.

Figure 3.2 – SNA terms of trade

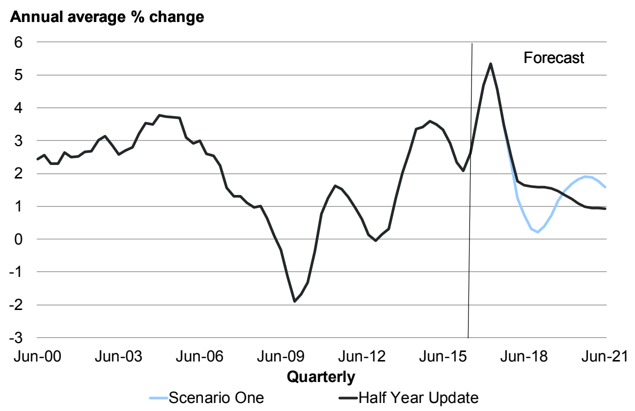


Sources: Statistics New Zealand, the Treasury

…and translating into decreased investment and consumption…

Firms invest less as export growth falls and as the lower New Zealand dollar increases the cost of capital imports. Lower investment leads to a fall in employment and wage growth (Figure 3.3), with higher unemployment. Weaker wage and employment growth, alongside the lower terms of trade, come together to dampen household income growth and confidence, which is compounded by a slight fall in house prices. As a consequence, household consumption growth falls.

Figure 3.3 – Employment growth

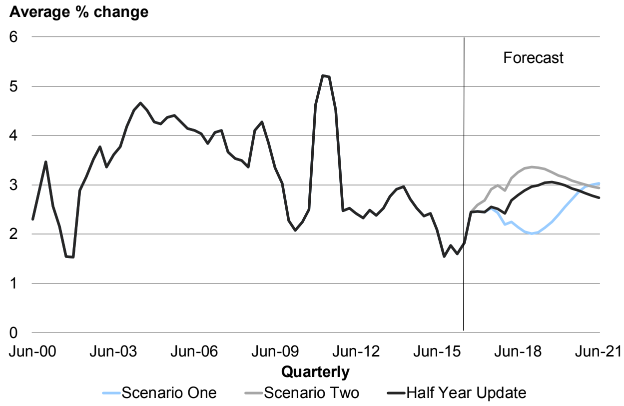


Sources: Statistics New Zealand, the Treasury

…followed by subdued inflation…

In this scenario, non-tradables inflation declines with softer domestic activity, while tradables inflation initially rises as the weaker New Zealand dollar increases the cost of imports, then falls owing to dampened commodity prices and global inflation (Figure 3.4). The Reserve Bank responds to weaker demand by easing monetary policy further (90-day interest rates trough at 1.2% in late 2017). However, increased bank funding costs and risk premiums in the short term limit how much Reserve Bank interest rate cuts are passed on by banks, delaying the impact of easier monetary policy on domestic demand. Inflation briefly reaches 2.0% in late 2017 as New Zealand dollar depreciation offsets weakness in non-tradables inflation (as also occurred following the global financial crisis), but later in the forecast period the effect of the lower New Zealand dollar on inflation fades and inflation does not return to target until late 2020 (Figure 3.7).

Figure 3.4 – Non-tradables inflation



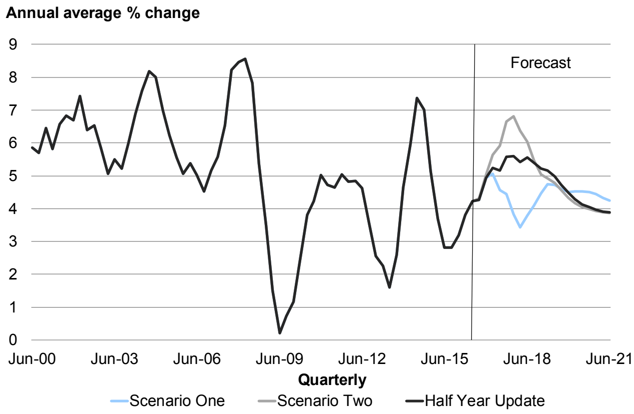
Sources: Statistics New Zealand, the Treasury

…and softer real and nominal GDP

The international shock, and its flow-on effects modelled in this scenario, drive both real GDP and nominal GDP lower over most of the forecast period. As a result, nominal GDP is a cumulative $27.1 billion lower than in the main forecast (Figure 3.5).

Core Crown tax revenue is a cumulative $9.0 billion lower over the forecast period in this scenario. Lower nominal consumption and residential investment reduce GST revenue by a cumulative $1.4 billion over the forecast period and lower interest rates reduce RWT by a cumulative $1.7 billion. A lower value of output in the economy reduces business profits, resulting in corporate taxes being a cumulative $1.3 billion lower. The weaker labour market and lower labour incomes reduce source deductions revenue by $2.5 billion over the forecast period.

Figure 3.5 – Nominal GDP growth



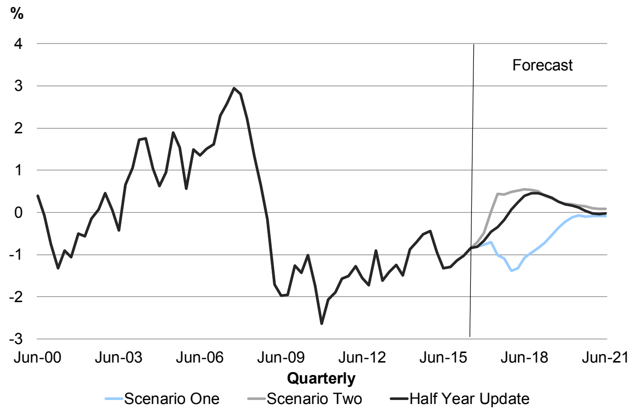
Sources: Statistics New Zealand, the Treasury

Core Crown expenses are a cumulative $0.6 billion higher than in the main forecast, owing largely to increased debt financing costs. Discretionary fiscal policy is assumed to remain unchanged from the main forecast. In this scenario, OBEGAL reaches a small surplus of 0.1% of GDP in the June 2017 year, with growing surpluses thereafter (Figure 3.8). As a consequence, net core Crown debt rises to 25.0% of nominal GDP in the June 2018 year, rather than continuing to steadily decline, as in the main forecast (Figure 3.9).

Scenario Two – Capacity Constraints Curb Activity

Stronger near-term activity is curbed by tighter capacity constraints…

Figure 3.6 – Output gap

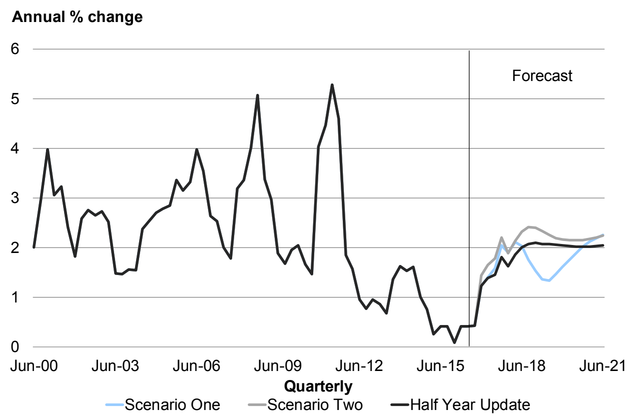


Sources: Statistics New Zealand, the Treasury

The second scenario tests a key judgement around the speed at which the economy can respond to elevated demand. In this scenario, the strong growth that characterised domestic demand in the latter half of 2016 accelerates in 2017. The acceleration does not last for long, however, as the stronger momentum in the economy is unable to be sustained owing to tighter capacity constraints. In particular, the speed at which the economy can respond is constrained by labour and capital shortages, further exacerbated by lower underlying labour productivity. In the construction industry, for instance, there may be greater delays or bottlenecks than anticipated owing to the industry's small-scale and fragmented nature. As such, the economy reaches its potential output sooner than anticipated in the main forecast, with the output gap peaking at 0.6% in the 2018 June quarter (Figure 3.6).

…leading to higher inflationary pressures and interest rates…

Figure 3.7 – CPI inflation



Sources: Statistics New Zealand, the Treasury

The cost of land, workers and resources are bid up by competing firms, and then passed on to consumers through higher rents, wages and prices. This has the effect of raising overall inflation and inflation expectations (Figure 3.7). The Reserve Bank responds to the stronger inflation outlook by increasing the OCR earlier than in the main forecast, resulting in 90-day interest rates that are on average 40 basis points higher than in the main forecast from June 2018 onwards. Inflation exceeds 2.0% in September 2017 and remains elevated, driven by higher non-tradables inflation (Figures 3.4 and 3.7).

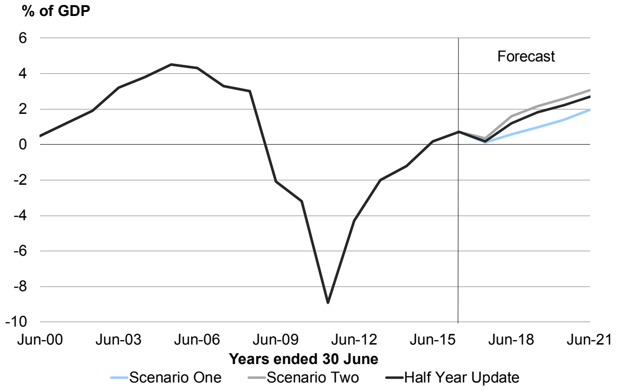
…and higher nominal GDP…

Sustained momentum raises real GDP in the near term, which is then curbed by greater capacity constraints later in the forecast period, causing a more exaggerated economic cycle than in the main forecast. Stronger real GDP in the beginning of the forecast period, combined with higher inflation throughout the forecast, results in nominal GDP being cumulatively $13.9 billion higher than in the main forecast by the end of June 2021 (Figure 3.5). This figure may be larger or smaller depending on how binding the capacity constraints are and what other shocks the economy may be experiencing at the time.

…increasing tax revenue and the operating balance

Core Crown tax revenue is a cumulative $4.9 billion higher than in the main forecast over the period to June 2021. Increased nominal consumption and residential investment boost GST revenue by a cumulative $1.1 billion over the forecast period. Greater business profitability results in corporate taxes being a cumulative $1.4 billion higher. The stronger labour market and higher wage growth lift source deductions revenue by $1.2 billion over the forecast period. An earlier increase in short-term interest rates flows through to a cumulative $0.7 billion rise in RWT.

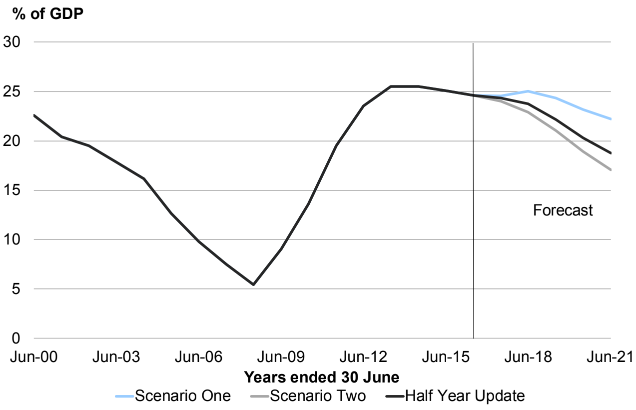
Figure 3.8 – Total Crown OBEGAL



Source: The Treasury

Core Crown expenses are marginally lower than in the main forecast owing largely to lower debt financing costs. OBEGAL surpluses are larger over the entire forecast period reaching a surplus of 3.1% of GDP by the June 2021 year, compared to 2.7% in the main forecasts (Figure 3.8). Net core Crown debt falls consistently across the forecast period, reaching 17.0% of GDP in the June 2021 year, compared to 18.8% in the main forecast (Figure 3.9).

Figure 3.9 – Net core Crown debt



Source: The Treasury

General Fiscal Risks

The remainder of this chapter focuses on the nexus between economic risks and the Crown's fiscal position. Specifically, we look at economic risks and how they translate to fiscal risks via their effects on Crown revenue, Crown expenditure and the Crown balance sheet. For more on fiscal risks, see the Specific Fiscal Risks chapter.

Revenue Risks

One of the major sources of risk to the fiscal position arises from the inherent uncertainty about future tax revenue, which accounts for around 70% of the Crown's revenue. As demonstrated earlier in this chapter in Scenario One and Scenario Two, the amount of tax revenue that the Crown receives in a given year is closely linked to the performance of the economy. For example – as set out in Scenario One – an international shock that depresses export demand and prices translates to decreased investment and consumption, which leads to lower core Crown tax revenue (lower GST, corporate tax revenue and source deductions) owing to the combined effects of lower nominal consumption, lower interest rates and a weaker labour market. Alternatively, an acceleration in domestic demand raises core Crown tax revenue (higher GST revenue, higher corporate taxes and source deductions) because of an increase in nominal consumption, greater business profitability and a stronger labour market (Scenario Two).

Figure 3.10 plots the main annual tax revenue forecast, along with confidence intervals around these forecasts based on the Treasury's historical tax forecast variances and the assumption of an even balance of risks around the main forecast.[11] The outermost shaded area captures the range of approximately plus or minus $7.5 billion in the June 2021 year, within which actual tax outturns are expected to fall 80% of the time.[12]

The tax revenue forecasts from Scenario One and Scenario Two are also shown in Figure 3.10. Should any of the uncertainties outlined in the Economic Risks section eventuate, Crown revenue would be different from forecast, with Scenario One and Scenario Two being examples of possible outcomes.

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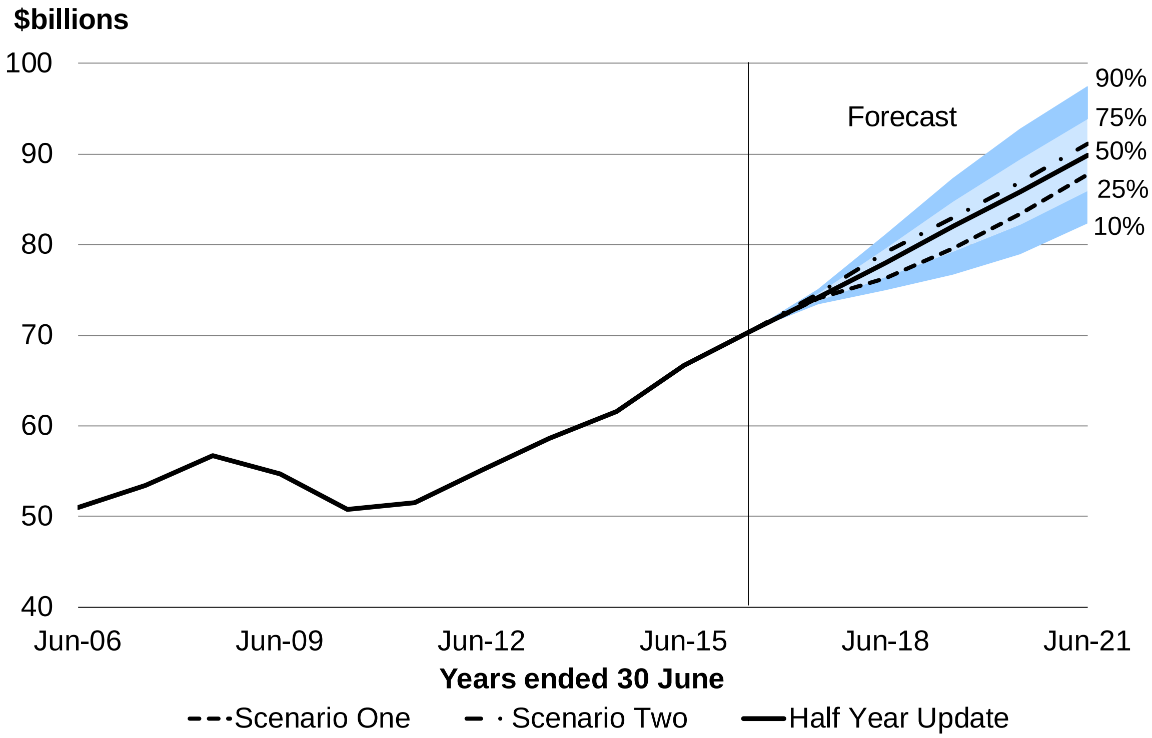
[11] A summary of the methodology and key assumptions is found in Parkyn, O (2010), *Estimating New Zealand's Structural Budget Balance*, New Zealand Treasury Working Paper 10/08, available at http://www.treasury.govt.nz/publications/research-policy/wp/2010/10-08/

[12] Treasury analysis showed that a shock that has a significant and persistent impact on economic growth can result in tax revenues significantly beyond the outermost shaded area. See Fookes, C (2011), *Modelling Shocks to New Zealand's Fiscal Position*, New Zealand Treasury Working Paper 11/02, available at http://www.treasury.govt.nz/publications/research-policy/wp/2011/11-02/

Figure 3.10 – Core Crown tax revenue uncertainty



Source: The Treasury

Based on average historical forecast variances, Figure 3.10 suggests that an annual tax revenue outturn associated with Scenario One lies between the 25th and 50th percentiles. An annual tax revenue outturn associated with Scenario Two lies between the 50th and 75th percentiles in each year. On this basis, actual tax outcomes would be expected to fall within the range of the two alternative scenarios approximately half of the time, with greater or lesser outcomes also expected approximately half of the time.

Exogenous shocks can have severe effects on government revenue. The detrimental impact of the 2008/09 global financial crisis on core Crown tax revenue is shown in Figure 3.10. Although nominal core Crown tax revenue has surpassed pre-global financial crisis levels, future exogenous shocks pose a potential risk to Crown tax revenues. For the possible tax revenue effects of the recent earthquakes, see *Economic and fiscal impacts of the Kaikōura earthquakes* on page 6.

There are also risks around other sources of revenue including sales of goods and services, investment income, and fees and levies. This additional revenue is also subject to changes in economic conditions, such as changes in interest rates which impact investment income and changes in oil prices which impact the amount of petroleum royalties the Crown receives.

Fiscal Sensitivities

We have performed some sensitivity analysis that tests the effect of small changes in specific economic variables on Crown revenue. Table 3.2 sets out some rules of thumb on the sensitivities of the fiscal position to small changes in specific variables. For example, if nominal GDP growth is one percentage point higher than forecast in each year up to June 2021, tax revenue would be around $4.7 billion higher than forecast in the June 2021 year as a result. The sensitivities are broadly symmetric and if nominal GDP growth is one percentage point lower than expected each year, tax revenue would be around $4.5 billion lower than forecast in the June 2021 year. The figures are indicative and can be influenced by the composition of growth as different types of activity have different effective tax rates.

A different interest rate path from the forecast would also impact the fiscal position due to the effect on the portfolios of various government reporting entities, such as the New Zealand Superannuation Fund, the Accident Compensation Corporation (ACC) and the Treasury's Debt Management Office (NZDMO). A one percentage point lower interest rate would result in interest income on funds managed by the NZDMO being $118 million lower in the June 2021 year. This would be more than offset by interest expenses $330 million lower in the June 2021 year.

Table 3.2 – Fiscal sensitivity analysis

Year ending 30 June ($millions)	**2017 Forecast**	**2018 Forecast**	**2019 Forecast**	**2020 Forecast**	**2021 Forecast**
Impact on tax revenue of a 1 percentage point increase in growth of					
Nominal GDP	750	1,580	2,505	3,525	4,655
Wages and salaries	320	675	1,070	1,505	1,985
Taxable business profits	150	350	575	820	1,085
Impact of 1% lower interest rates on					
Interest income[1]	(90)	(139)	(131)	(113)	(118)
Interest expenses[1]	4	(131)	(194)	(274)	(330)
Net impact on operating balance	(94)	(8)	62	161	212

Note: 1 Funds managed by the Treasury's NZDMO only.

Source: The Treasury

The interest rate impacts in the table above represent the impact of lower interest rates on the financial assets and debt managed by the NZDMO. While the majority of the government's debt is managed by NZDMO, other government reporting entities hold financial assets and liabilities that are also sensitive to changes in interest rates. For example, at 30 June 2016, a 1% increase in NZ interest rates would have reduced the total Crown operating balance by $896 million while a 1% decrease would have increased the total Crown operating balance by $926 million.

The forecast financial position is based on a number of judgements and assumptions about the future. To inform these judgements and assumptions we rely on market information. Some additional assumptions include those around foreign exchange rates, share prices, the carbon price and property prices. Where the actual outcome differs from our assumptions, the Crown's actual financial position is likely to differ from the forecasts. For example, foreign currency-denominated financial assets and liabilities are converted into New Zealand dollars at the reporting date, the Government's listed share investments are reported on market prices and property owned by the Crown is valued using market information. Changes in these variables can also have flow-on effects on the Crown's operating balance. For example, a strengthening of share prices may result in higher returns from the Government's direct share investments.

Expenditure Risks

Economic risks can also affect Crown expenditure levels. There is considerable uncertainty regarding these effects. This uncertainty relates largely to the operation of the so-called automatic stabilisers. For example, if the economy performs better (worse) than expected in a given year, official expenditures on social programmes may be lower (higher) than planned. This relationship is explored in Scenario One: a weaker than expected economy leads to a fall in employment, which drives up welfare costs. Furthermore, long-term liabilities, such as the ACC claims liability and the Government Superannuation Fund retirement plan, are sensitive to the underlying assumptions on which their discounted cashflows are based. The variables that these liabilities are particularly sensitive to are the inflation rate and the risk-free rate.

One-off and unexpected expenditure shocks can also have a large impact on the Crown's operating balance in the year in which they occur. Over-forecasting of expenditure leads to policy being tighter than otherwise, and uncertainty is inherent in forecasting the cost of new policy initiatives.

In recent years, earthquakes have demonstrated the inherent exposure of the Crown's fiscal position to unexpected events. The Crown's fiscal position will be affected by the recent M7.8 Kaikōura earthquake, although the exact fiscal costs are not certain yet. When such an event does occur, a number of choices arise about how to respond and when potential liabilities are recognised (eg, through setting aside an allocation of funding).

The ageing population implies increased public expenditure, especially for health and superannuation spending. If this cannot be accommodated within operating allowances, it presents risks to the medium-term fiscal position, particularly given uncertainty around demographic forecasts. Likewise, uncertainty around population growth presents a risk of increased demand for public services which may result in increased expenditure, including education and health spending. Current migration levels continue to be above historical trends. While net migration has positive impacts on the economy (eg, increased tax revenue), higher-than-expected levels can lead to pressure on demand-driven government services such as health and education. For further information, refer to *Fiscal impact of migration and population growth* on page 35.

Balance Sheet Risks

In addition to risks around revenue and expenditure, which affect the balance sheet through their impact on the operating balance, the Crown's financial position is also exposed to risk through change in the value of the Crown's assets or liabilities. The balance sheet can also be affected owing to the Crown having both explicit and implicit obligations (a strong expectation that the Crown would respond to an event) as a result of policy settings.

A large source of balance sheet risk can be attributed to changes in the value of the Crown's assets and liabilities owing to movements in market variables such as interest rates, exchange rates and equity prices. These changes can also have an impact on the Crown's operating balance. Of the Crown's aggregate financial risk, a significant proportion can be attributed to market risk. Three areas of the balance sheet are particularly susceptible to various types of market risk:

- Financial assets held by the Crown Financial Institutions (CFIs) are sensitive to financial-market volatility. CFIs tend to diversify their portfolios across a range of financial assets to manage exposures to specific market risks.
- Insurance and retirement liabilities and provisions are prone to market volatility through their actuarial valuations, which are sensitive to assumptions about variables such as interest and inflation rates.
- Physical assets such as land, buildings, state highways and military equipment are susceptible to valuation movements through changes in property market conditions, interest rates and changes in the costs of construction.

Other large sources of balance sheet risk are contingent and implicit liabilities relating to natural disasters and financial system stress. The Specific Fiscal Risks chapter discusses contingent assets and liabilities in greater detail.

Business risks, relating to the broader commercial environment, may also affect the Crown's balance sheet. A number of entities owned by the Crown, including commercial and social entities, have their financial performance and valuations impacted by these external factors.

While the Crown's exposure to risks is sometimes unavoidable, the Crown's general approach is to identify, measure and treat these risks where practicable. When a risk cannot be reduced, the Government's response has been to increase the Crown's resilience by reducing debt ahead of the time when financial resources could be needed, or increasing sustainability through achieving higher levels of net worth. This helps to absorb the impact of the risk through the balance sheet so that the wider economy need not adjust immediately at a greater economic cost.

The New Zealand Government remains amongst the highest-rated sovereigns globally, with the top Aaa foreign-currency rating from Moody's and AA foreign-currency ratings from Standard & Poor's and Fitch. Ratings outlooks are stable from all three agencies.

In the case of an increase in global risk aversion and in the absence of a marked improvement in the external position, New Zealand may face increased funding pressure in the future. All else being equal, deterioration in the ratings outlook could raise debt-servicing costs and lessen the funding capability for the Crown. The Crown is also susceptible to "liquidity risk" with respect to its ability to raise cash to meet its obligations.

This risk is relatively small and managed by each agency to meet its specific liquidity risk requirements and by the Treasury's NZDMO to manage the Crown's liquidity requirements.

For additional detail, refer to the 2014 *Investment Statement* which provides information on the shape and health of the Crown's portfolio of assets and liabilities at the end of the 2013/14 financial year.[13] It outlines how the balance sheet has changed in recent years and includes forecasts of its anticipated composition and size through to 30 June 2018.

[13] http://www.treasury.govt.nz/government/investmentstatements/2014

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Specific Fiscal Risks

The Statement of Specific Fiscal Risks is required by the Public Finance Act 1989. It sets out, to the fullest extent possible, all government decisions and other circumstances known to the Government that may have a material effect on the fiscal and economic outlook, but are not certain enough in timing or amount to include in the fiscal forecasts. The risks disclosed in this chapter reflect those which are known at the date of the finalisation of the fiscal forecasts. Although the process for disclosure of specific fiscal risks involves a number of parties, including government departments, the Treasury and the Minister of Finance, there remains a possibility that not every significant risk is identified. Disclosure of known risks is also subject to specific requirements and materiality thresholds.

Overview

Specific fiscal risks can be positive or negative and can affect revenue or spending or assets and liabilities. The links between external events and spending are indirect because new policies that change spending and revenue usually require a decision by the Government and approval from Parliament. The approach taken in this chapter is to disclose those potential policy decisions and key areas of uncertainty that may have a material effect on the fiscal outlook.

Established practice is that the Government sets aside operating and capital allowances for future Budgets to manage uncertainty and cost pressures. These allowances are included in the fiscal forecasts. Current fiscal management policy is for future policy decisions affecting operating expenses or capital expenditure to be met through reprioritisation or from within the allowances included in the fiscal forecasts. Future policy decisions are risks to the fiscal forecasts only to the extent that they cannot be managed from within:

- for operating expenditure, existing baselines or the allowance in the fiscal forecasts for forecast new operating expenses, or

- for capital, the existing Crown balance sheet or the allowance in the fiscal forecasts, for forecast new capital expenditure.

Notwithstanding this, known material policy risks are identified as specific fiscal risks, even though the Government has more control in managing such risks through reprioritisation, the existing Crown balance sheet and the Budget allowances. This is done to ensure a prudent approach to the disclosure of risks, improve transparency and not pre-judge future decisions by governments.

The Specific Fiscal Risks are categorised by portfolio. For example, all housing related risks are listed under the portfolios ‘Building and Housing/Social Housing’. The summary table also classifies each risk into:

- **Potential policy decisions affecting revenue:** For example, changes to tax policy or ACC levies could reduce or increase government income.
- **Potential policy decisions affecting expenses (expected to be funded from reprioritisation or the Budget operating allowance):** Costs of policy proposals could increase or decrease expenses depending on decisions taken, and they are risks to the fiscal forecasts only to the extent that they cannot be managed within existing baselines or the Budget operating allowances.
- **Potential capital decisions (expected to be funded from the existing Crown balance sheet, or the Budget capital allowance):** Capital investment decisions are risks to the fiscal forecasts only to the extent that they cannot be managed within the existing Crown balance sheet, or the Budget capital allowance.

A range of generic risks to the fiscal forecasts exist but are not separately disclosed as specific fiscal risks:

- Risks from changes to economic assumptions; the most significant economic risks have been identified in Chapter 3.
- Business risks and volatility in the returns from and valuation of the Crown’s investments relating to the broader economic and commercial environment.
- General cost pressures, such as those associated with demographic changes (eg, an ageing population).
- Potential risks from changes in demand for government services or transfer payments owing to underlying structural factors (such as changes in demand for Jobseeker Support).
- The costs of future individual natural disasters, biosecurity incursions, and other major events, as they usually occur infrequently and their occurrence, nature and timing cannot be predicted. Once a disaster does occur, a number of choices arise about how to respond and when potential liabilities are recognised (eg, through setting aside an allocation of funding). Specific risks are disclosed at this point based on the range of possible responses.

The final part of the chapter contains a current list of contingent liabilities and contingent assets. Contingent liabilities are costs that the Crown will have to face if a particular event occurs or are present liabilities that are unable to be measured. Typically, contingent liabilities consist of guarantees and indemnities, legal disputes and claims on uncalled capital. The largest quantified contingent liabilities are to international financial organisations and mostly relate to uncalled capital and promissory notes. Contingent assets are possible assets that have arisen from past events but the value of the asset, or whether it will eventuate, will not be confirmed until a particular event occurs.

Criteria and Rules for Inclusion in the Fiscal Forecasts or Disclosure as Specific Fiscal Risks

The Public Finance Act 1989 requires that the Statement of Specific Fiscal Risks sets out all government decisions, contingent liabilities or contractual obligations known to the Government and subject to specific requirements that may have a material effect on the economic or fiscal outlook.

The criteria and rules set out below are used to determine if government decisions or other circumstances should be incorporated into the fiscal forecasts, disclosed as specific fiscal risks or, in some circumstances, excluded from disclosure.

Criteria for Including Matters in the Fiscal Forecasts

Matters are incorporated into the fiscal forecasts provided they meet the following criteria:

- The matter can be quantified for particular years with reasonable certainty.
- A decision has been taken, or a decision has not yet been taken but it is reasonably probable[14] the matter will be approved, or it is reasonably probable the situation will occur.

Additionally, any other matters may be incorporated into the forecasts if the Secretary to the Treasury considers, using best professional judgement, that the matters may have a material effect on the fiscal and economic outlook and are certain enough to include in the fiscal forecasts.

Rules for the disclosure of specific fiscal risks

Matters are disclosed as specific fiscal risks if:

- the likely impact is more than $100 million over five years, and either
- a decision has not yet been taken but it is reasonably possible[15] (but not probable) that the matter will be approved or the situation will occur, or
- it is reasonably probable that the matter will be approved or the situation will occur, but the matter cannot be quantified or assigned to particular years with reasonable certainty.

Additionally, any other matters may be disclosed as specific fiscal risks if the Secretary to the Treasury considers, using best professional judgement, that the matters may have a material effect (more than $100 million over five years) on the fiscal and economic outlook but are not certain enough to include in the fiscal forecasts.

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[14] For these purposes "reasonably probable" is taken to mean that the matter is **more likely than not** to be approved within the forecast period (by considering, for example, whether there is a better than 50% chance of the matter occurring or being approved).

[15] For these purposes "reasonably possible" is taken to mean that the matter **might** be approved within the forecast period (by considering, for example, whether there is a 20% to 50% chance of the matter occurring or being approved).

Exclusions from Disclosure

Matters are excluded from disclosure as specific fiscal risks if they fail to meet the materiality criterion (ie, are less than $100 million over five years), or if they are unlikely[16] to be approved or occur within the forecasting period.

Additionally, the Minister of Finance may determine, under section 26V of the Public Finance Act 1989, that a matter be included in the fiscal forecasts or a specific fiscal risk not be disclosed, if such disclosure would be likely to:

- prejudice the substantial economic interests of New Zealand
- prejudice the security or defence of New Zealand or international relations of the Government
- compromise the Crown in a material way in negotiation, litigation or commercial activity, or
- result in a material loss of value to the Crown.

If possible, the Minister of Finance should avoid withholding the matter, either by making a decision on it before the forecasts are finalised, or by disclosing it without quantifying the risk.

[16] For these purposes “unlikely” is taken to mean that the matter **will probably not** be approved within the forecast period (by considering, for example, whether there is a less than 20% chance of the matter occurring or being approved).

Statement of Specific Fiscal Risks

Summary Table

The matters listed below are disclosed as specific fiscal risks because they meet the rules for disclosure outlined before this Statement. Full descriptions of the risks listed below are set out in the next section. Where quantification is possible, this is included in the description of the risk.

The table below is ordered by portfolio and includes the title of the risk, its status and the type of risk. The status of the risk describes whether the risk is changed or unchanged since the 2016 Budget Economic and Fiscal Update or reflects a new matter. The type of risk highlights whether the risk impacts on revenue, operating expenses, or capital expenditure. Cross portfolio risks to the fiscal forecasts are outlined in a separate table.

Specific fiscal risks as at 21 November 2016

Specific fiscal risk by portfolio	Status[17]	Type of risk
ACC		
Levies	Unchanged	Revenue
Non-earners Account	Unchanged	Expenses
Work-related Gradual Process Disease and Infection	Unchanged	Expenses
Building and Housing/Social Housing		
Divestment and Development of Housing	Changed	Capital
Housing Infrastructure Fund	New	Capital
Social Housing Reform	Unchanged	Expenses
Tamaki Regeneration Project	Unchanged	Expenses
Corrections		
Additional Capacity to Address Prison Population	New	Expenses and Capital
Defence		
Operating and Capital Costs	Changed	Expenses and Capital
Disposal of NZDF Assets	Unchanged	Expenses
Education		
School and ECE Funding Review	New	Expenses
Finance		
Crown Overseas Properties	Unchanged	Capital
Goodwill on Acquisition	Unchanged	Expenses
Greater Christchurch Regeneration		
Christchurch Central Recovery Plan – Anchor Projects	Unchanged	Expenses
EQC	Changed	Expenses
Residential Red Zone	Unchanged	Expenses
Southern Response Earthquake Services Support	New	Expenses

17 *Unchanged – risks* where the nature and/or scale of the risk has not changed substantively since the previous *Economic and Fiscal Update*.

Changed – risks where the nature and/or scale of the risk has changed substantively since the previous *Economic and Fiscal Update*.

Specific fiscal risk by portfolio	Status	Type of risk
Internal Affairs		
Fire Services Levy	Unchanged	Revenue
Parliamentary Agencies		
Parliamentary Office Accommodation	Unchanged	Capital
Primary Industries		
Investment in Water Infrastructure	Unchanged	Capital
Revenue		
Cash Held in Tax Pools	Unchanged	Capital
Income Tax and Family Assistance Changes	New	Revenue
Potential Tax Policy Changes	Changed	Revenue
Student Loans	Unchanged	Expenses
Transformation and Technology Renewal	Changed	Expenses
Social Development		
Transformation to Ministry for Vulnerable Children, Oranga Tamariki	Changed	Expenses
Transport		
Auckland City Rail Link	New	Capital
Auckland Transport Alignment Plan	New	Capital
Regional State Highways	Unchanged	Capital
Support for KiwiRail	Unchanged	Capital
Treaty Negotiations		
Government Response to Wai 262	Unchanged	Expenses
Relativity Clause	Unchanged	Expenses
Treaty Settlement Forecasts	Unchanged	Expenses

Cross Portfolio Specific Fiscal Risks	Status	Type of Risk
Agency Capital Intentions	Unchanged	Capital
Budget Operating Initiatives	Unchanged	Expenses
Kaikōura Earthquakes	New	Expenses and Capital
Pay Equity and Caregiver Employment Conditions	Changed	Expenses
State Sector Employment Agreements	Unchanged	Expenses
Services Funded by Third Parties	Unchanged	Revenue
Unexpected Maintenance for Crown-owned buildings	Unchanged	Capital

Specific Fiscal Risks by Portfolio

ACC

ACC Levies (Unchanged)

Indicative future levy rates for the Work, Earners and Motor Vehicle accounts have been included in the forecasts. However, final levy decisions are made by the Government, and may differ from the forecast levy path. In addition, revenue from the levies set for these accounts may be more or less than is required to cover the cost of claims. If factors such as claims experience, ACC performance, economic assumptions (particularly discount rates and unemployment rates) turn out differently from what has been forecast, ACC's levy revenue, claims costs and liability may also differ from forecast. Any variance will have a corresponding impact on the operating balance.

Non-earners Account (Unchanged)

The amount of funding provided by the Crown (and included in the fiscal forecasts) for the Non-earners' Account may be more or less than is required to cover the cost of claims. If factors such as claims experience, ACC performance and economic assumptions (particularly discount rates) turn out differently from what has been forecast, any such variance will have a corresponding fiscal impact.

Work-related Gradual Process Disease and Infection (Unchanged)

Under current legislation, the Government incurs an obligation for Work-related Gradual Process Disease and Infection claims when the claim is made, and an expense is recognised at this point. The liability for commercial accident and sickness insurance contracts would usually be recognised when exposure to conditions that will give rise to a claim occurs. An amendment to legislation would be required to recognise claims at the same time as for commercial contracts. An initial adjustment to the liability and an expense of about $1.0 billion to $1.5 billion would need to be reported if such an amendment were to be enacted.

Building and Housing/Social Housing

Divestment and Development of Housing (Changed)

The forecasts include divestments and redevelopments of housing property as part of Housing New Zealand Corporation's (HNZC) asset management strategy. Proceeds from property divestments will be used to help fund investment in redeveloping and growing HNZC's stock. Market conditions impact on the proceeds of sale and the cost of acquisitions and development. Given these uncertainties, there is a risk that there will be variations from the fiscal forecasts. In addition, the Government has requested that HNZC investigate further opportunities for increasing large scale redevelopment of its Auckland portfolio with further business cases due in mid-2017. Due to the scale of the redevelopments, there is also a risk that the Crown will be requested to invest additional capital into HNZC impacting on net debt.

Housing Infrastructure Fund (New)

In June 2016, Cabinet agreed to establish a $1 billion Housing Infrastructure Fund (HIF) to which high-growth, financially constrained councils can apply to help finance roading and water infrastructure needed to unlock residential development. As final proposals are not expected to be received until late March 2017, and as decisions are still yet to be made about the water infrastructure governance and loan arrangements, there is a high level of uncertainty in the areas noted below, which may have additional fiscal impacts that need to be managed:

- The split between capital and operating spending, which will impact fiscal indicators. Currently the fund has been reflected as capital expenditure in the forecasts.
- Whether or not market interest rates will be applied to the loans.
- Whether or not the full amount of the fund will be repaid to the Crown.
- For the amount that is repaid, when the repayment will occur.

Social Housing Reform (Unchanged)

The Government is progressing the Social Housing Reform Programme (SHRP). The SHRP aims to improve the housing and associated services provided to those in housing need, to build the social housing market and to fully recognise the costs of social housing. Specific Fiscal Risks associated with the SHRP are as follows:

- Existing and additional social housing places may require funding above the current Income Related Rent Subsidy (IRRS) appropriation cap.
- The development of a more diverse and competitive social housing market may adversely affect HNZC's financial position.
- Proceeds from social housing transfers are likely to differ from book value.

Tamaki Regeneration Project (Unchanged)

Proceeds from housing sales in Tamaki over the next 10 to 15 years may be less than the book value of the houses sold. Over this period 7,500 new houses are planned to be built in Tamaki in place of about 2,500 existing houses.

Corrections

Additional Capacity to Address Prison Population (New)

The fiscal forecasts include provision for the Government's agreed investment to create additional prison capacity to accommodate prison population growth over the next 10 years. It is likely that the Department of Corrections will require additional funding relating to the direct costs of accommodating prison population increases, as they arise, which would impact on the operating balance. The total quantum of the cost could be between $100 and $140 million over the next four years. There is also a risk that growth in the prison population is different from what is included in the forecasts and additional funding is required.

Defence

Operating and Capital Costs (Changed)

In 2016, the Government reconsidered New Zealand Defence Force (NZDF) capability and funding requirements through the Defence White Paper 2016. It is expected that changes to NZDF operating and capital funding will be made over the forecast period to achieve the Defence White Paper settings. However the precise quantum and timing of these changes will be dependent on a range of business cases that will be considered by Cabinet in the future.

Disposal of NZDF Assets (Unchanged)

The Government is considering the potential to dispose of a number of NZDF assets. Depending on market conditions, the timing of disposal and sale price received could have an impact on the Government's overall financial position. NZDF is also completing an analysis of inventory that is surplus to requirements and is over and above the existing provision for obsolescence. The existing provision is also being reviewed to ensure that all items comprising the provision are still relevant.

Education

School and ECE Funding Review (New)

The Minister of Education is currently engaging the sector on a review of education funding, across schooling and ECE. There is potential for fiscal costs but this depends on policy decisions that are yet to be made. Any funding changes would not be implemented until 2020.

Finance

Crown Overseas Properties (Unchanged)

The Government holds New Zealand House in London on a long-term lease from the Crown Estate (UK). Depending on the outcome of ongoing discussions with the Crown Estate an upgrade to the building may be required. Should a decision be taken to refurbish the property, a rough-order cost estimate for this upgrade is $100 million over the forecast period.

Goodwill on Acquisition (Unchanged)

As at 30 June 2016, the Government had goodwill on acquisition of a number of sub-entities totalling $602 million. Under New Zealand accounting standards (PBE IPSAS 26), such goodwill items are required to be assessed annually for impairment. If there is any indication that the goodwill may be impaired, the recoverable amount of the cash generating units to which the goodwill is allocated is required to be estimated. If the recoverable amount is less than the carrying amount of those units, the units and the goodwill allocated to them are regarded as impaired and the Government is required to recognise impairment losses in the operating statement. Such assessments will be conducted at the end of the financial year, and the fiscal forecasts currently make no allowance for such impairment losses.

Greater Christchurch Regeneration

Christchurch Central-Recovery Plan – Anchor Projects (Unchanged)

The Crown is partially funding the construction of Anchor Projects as part of the Christchurch Central Recovery Plan. The funding for the construction of Anchor Projects will vary from project to project, dependent on final scope, ownership decisions, implementation and project costs, and will to some extent eventually be recovered. Business cases are progressing through the decision-making process and construction costs will become increasingly clear during the business case process and the subsequent procurement phase. The quantum and timing of Crown contribution may differ from that included in the fiscal forecasts.

EQC (Changed)

Every six months EQC undertakes an actuarial valuation of the total Canterbury Earthquakes liability. This includes settled and yet-to-settle claims and reinsurance recoveries. Based on this valuation, a profile of the claims yet to settle is included in the Crown's fiscal forecasts. There still remains some risk that EQC's remaining settlement expenditure relating to the Canterbury earthquakes will be different (higher or lower) from that forecast.

Residential Red Zone (Unchanged)

Some recoveries from EQC and private insurers remain outstanding and there is a risk that final recoveries may be greater or less than forecast. In addition, potential costs or potential revenues or recoveries associated with the future use of residential red zone are uncertain. The future value may change depending on any future alternate uses of the land. The fiscal impact of this is not yet certain.

Southern Response Earthquake Services Support (New)

The ultimate cost to the Crown of settling earthquake claims remains subject to significant uncertainty. Forecasts assume that the actual cost to settle claims will align with the actuary's central estimate of the claims provision. There is a risk that the actual cost could vary from this estimate which is sensitive to its underlying assumptions such as damage estimates, legal challenges, reinsurance recoveries and the forecast profile of claims settlement. The Crown's financial position may be adversely impacted as these assumptions are modified over time. Because the net claims liability is large, small percentage changes in the liability can have a material impact on costs and forecasts.

Internal Affairs

Fire Services Levy (Unchanged)

The Government has announced it will unify the Fire Services into Fire and Emergency New Zealand and signalled that this change will cost approximately $303 million which will be funded through a Crown contribution, a repayable capital loan and levy increases. The increase in levies required to meet the increase expenditure on Fire Services, and to contribute to repaying the repayable capital injection are uncertain and not yet included in the fiscal forecasts.

Parliamentary Agencies

Parliamentary Office Accommodation (Unchanged)

With the imminent expiry of the lease on Bowen House, the Parliamentary Service is considering options for the provision of accommodation for future Parliaments. Options for future accommodation are likely to require capital expenditure.

Primary Industries

Investment in Water Infrastructure (Unchanged)

In 2013/14 and 2014/15, $120 million was appropriated for the Crown-owned company, Crown Irrigation Investments Limited, to manage the Crown's investment in irrigation infrastructure. The Government will consider providing further capital of up to $280 million in future Budgets as schemes reach the "investment-ready" stage.

Revenue

Cash Held in Tax Pools (Unchanged)

Funds held in tax pools are recognised as a Crown asset. There is a risk that funds held in these pools, over and above a taxpayer's provisional tax liability, may be withdrawn by that taxpayer, resulting in a reduction in the Crown's available cash reserves.

Income Tax and Family Assistance Changes (New)

The Government has indicated it will give consideration to income tax changes and family assistance within the forecast period, if fiscal and economic conditions allow. A decision to implement any changes would have an impact on the operating balance.

Potential Tax Policy Changes (Changed)

Some of the items on the Tax Policy work programme could each have a significant positive impact on operating revenue: work on Base Erosion and Profit Shifting including interest allocation rules, the taxation of foreign hybrid instruments and entities, the taxation of diverted profits, and working with the OECD on a multilateral instrument to strengthen the world's double tax agreement network.

Student Loans (Unchanged)

The value of student loans is sensitive to assumptions such as the borrower's future income, and general economic factors such as interest rates, unemployment levels, salary inflation and the CPI. As new lending occurs, an initial write-down to fair value will be made, and an expense will be incurred, reflecting the cost the Crown incurs in making an interest free loan and the risk that borrowers may not repay their loans. However, the assumptions made at the time of lending are volatile and are subject to change.

Transformation and Technology Renewal (Changed)

The Business Transformation programme agreed by Cabinet is reflected in forecasts. There are risks that the expected implementation costs, revenue gains and operating costs savings may differ from forecasts. This includes a risk that, during the transition between systems, Inland Revenue discovers historic procedural issues. In addition, the Government is considering possible policy changes affecting the way Inland Revenue manages its processes and data. Any changes to procedures or policy could materially impact the programme's cost, and the additional revenue collected.

Social Development

Transformation to Ministry for Vulnerable Children, Oranga Tamariki (Changed)

The new Ministry for Vulnerable Children, Oranga Tamariki is due to start on 1 April 2017 with a new operating model to be implemented over the next few years and an expanded focus and target group. To the extent that the costs associated with the new Ministry cannot be funded from the tagged contingency established at Budget 2016 or from reprioritisation, additional funding is likely to be required.

Transport

Auckland City Rail Link (New)

The Government has committed to fund 50% of the costs associated with the City Rail Link project, which is estimated to cost $3.4 billion. Based on this estimate, the Government's contribution to the project will be around $1.7 billion. There is a risk that the timing and amount of government contribution towards the project could be different from what is included in the forecasts.

Auckland Transport Alignment Plan (New)

The Government and Auckland Council released the final report for the Auckland Transport Alignment Project in August 2016. This report identified a funding gap of $4 billion over the next 30 years. The Government and Auckland Council are considering options to address this funding gap.

Regional State Highways (Unchanged)

Investigation into tranche three of the regional state highway acceleration being undertaken may result in additional Crown funding being sought for the construction of these projects.

Support for KiwiRail (Unchanged)

The Government in Budgets 2010 to 2016 supported KiwiRail Holdings Limited (KiwiRail) with an investment of around $1.5 billion in the New Zealand freight rail system. A major review of the business informed Budget 2015 and $400 million funding was provided for in 2015/16 and 2016/17. Further Crown investment into KiwiRail is likely to be required.

Treaty Negotiations

Government response to Wai 262 (Unchanged)

The Waitangi Tribunal's report on the Wai 262 claim focuses on the protection of Māori culture and identity, with a particular focus on mātauranga Māori and associated taonga. The Tribunal's recommendations are directed towards a number of government agencies individually, as groups and across sectors. The Government has yet to respond to the Tribunal's report and recommendations.

Relativity Clause (Unchanged)

The Deeds of Settlement negotiated with Waikato-Tainui and Ngāi Tahu include a relativity mechanism. Now that the total redress amount for all historical Treaty settlements exceeds $1.0 billion in 1994 present-value terms, the mechanism provides that the Crown is liable to make payments to maintain the real value of Ngāi Tahu's and Waikato-Tainui's settlements as a proportion of all Treaty settlements. The agreed relativity proportions are 17% for Waikato-Tainui and approximately 16% for Ngāi Tahu. There is a risk that the timing and amount of the expense for the relativity payments may differ from that included in the fiscal forecasts. There is also uncertainty on how various disputes concerning the interpretation of the mechanism will be resolved.

Treaty Settlement Forecasts (Unchanged)

The fiscal forecasts include provision for the cost of future Treaty settlements. Given settlements are finalised through negotiations, there is a risk that the timing and amount of the settlements could be different from the profile included in the fiscal forecasts.

Cross Portfolio Specific Fiscal Risks

Agency Capital Intentions (Unchanged)

Future Budgets may well include new capital investments other than those identified in other specific fiscal risks. Such investments are most likely to be developed by the 25 investment-intensive agencies that are required to identify their capital spending intentions over the next 10 years based on current policy settings and certain demographic and inflation assumptions. The Government expects that these intentions will be managed back through a range of measures such as prioritisation, improvements in asset performance, alternative methods of service delivery and changes to policy settings. New investments are risks to the fiscal forecasts only to the extent they cannot be managed through existing balance sheets, or the provision in the fiscal forecasts for forecast new capital spending.

Budget Operating Initiatives (Unchanged)

Future Budgets may well include new operating initiatives for new policies or to address cost pressures other than those identified in other specific fiscal risks. Such new operating initiatives are risks to the fiscal forecasts only to the extent they cannot be managed through reprioritisation or from within the existing provision in the fiscal forecasts for forecast new operating spending. The Government's stated intention is that all new operating initiatives will be managed through these mechanisms.

Kaikōura Earthquakes (New)

An initial estimate has been included in the fiscal forecasts for expenses and capital expenditure arising from the Kaikōura earthquakes. The total extent of damage and support required is still being determined with key expenditure areas expected to cover short-term support and recovery assistance, reconstruction of infrastructure, repairing government owned property, and meeting costs of claims to EQC for residential property damage. There is a risk that the timing and amount of government contribution towards the rebuild and recovery could be different from what is included in the forecasts.

Pay Equity and Caregiver Employment Conditions (Changed)

There are several existing cases and funding claims, mainly in the disability support and aged care sectors, relating to interpretation of the Minimum Wage Act 1983, the Equal Pay Act 1972 and the Government's policy of paying certain family members through its Funded Care Policy that may involve significant costs to the Crown. It is also expected that there will be further pay equity claims within State-funded sectors under the Equal Pay Act. The Government has entered into negotiations over pay rates for care and support workers which will cover around 50,000 workers. A Joint Working Group was established to develop principles for dealing with claims of pay equity under the Equal Pay Act. The group has provided its recommendations to Ministers on agreed pay equity principles that could be applied in all sectors in the economy. The Government has agreed to these Principles, with one modification around choosing pay comparators. The result of the care and support worker negotiations and any other pay equity claims could require additional Crown funding.

Services Funded by Third Parties (Unchanged)

A wide range of government services are funded through third party fees and charges. Demand for these services can vary with a direct effect on revenue received. There is a risk the Government may need to provide additional funding if revenue collected is lower than the total costs of providing the service. There is also a risk that changes will be required to the way government services are delivered, which could result in costs to the Crown.

State Sector Employment Agreements (Unchanged)

A number of large collective agreements are due to be renegotiated over the forecast period. As well as direct fiscal implications from any changes to remuneration, the renegotiation of these agreements can have flow-on effects to remuneration in other sectors. The Government has signalled an expectation of restraint given its current fiscal stance and that agreements will be managed within the current fiscal forecasts.

Unexpected Maintenance for Crown-owned buildings (Unchanged)

There is a possibility that the Crown will incur costs when unexpected maintenance is required for the buildings it owns, for example, earthquake strengthening some of the buildings that do not meet modern building standards, and maintenance for buildings with weathertight issues. The likelihood, timing and fiscal impact of any repairs are uncertain.

Risks Removed Since the 2016 *Budget Update*

The following risks have been removed since the 2016 Budget Update.

Expired risks	Reason
Concessionary Loans	No longer a material risk
Energy and Resources – Crown Revenue from Petroleum Royalties	Risk covered in Chapter 3: Risks and Scenarios
Finance – Air New Zealand Sale of Virgin Australia Shareholding	Air New Zealand has sold its shareholding in Virgin Australia and paid the proceeds to shareholders
Fire Service Expenses	Funding provided through Budget 2016
Social Development – Welfare Reform Forecast Benefit Savings	No longer a material risk as forecasts have been updated
Transport – Auckland Transport Projects	Replaced by the Auckland Transport Alignment Plan risk
Tertiary Education, Skills and Employment – Tertiary Funding	No longer a material risk as the accounting treatment used for tertiary funding now complies with accounting standards

Contingent Liabilities and Contingent Assets

Contingent liabilities are possible costs that have arisen from past events, but the amount of the liability, or whether it will eventuate, will not be confirmed until a particular event occurs or present liabilities that are unable to be measured with sufficient reliability to be recorded in the financial statements (unquantifiable liabilities).

Typically, contingent liabilities consist of guarantees and indemnities, uncalled capital and legal disputes and claims. The contingent liabilities facing the Crown are a mixture of operating and balance sheet risks, and they can vary greatly in magnitude and likelihood of realisation.

In general, if a contingent liability were realised, or the amount becomes sufficiently reliable to record as a liability, it would reduce the operating balance and net worth and increase net core Crown debt. In the case of some contingencies (eg, uncalled capital), the negative impact would be restricted to net core Crown debt because the cost would be offset by the acquisition of capital.

Where contingent liabilities have arisen as a consequence of legal action being taken against the Crown, the amount shown is the amount claimed and thus the maximum potential cost. It does not represent either an admission that the claim is valid or an estimation of the amount of any award against the Crown.

Contingent assets are possible assets that have arisen from past events but the amount of the asset, or whether it will eventuate, will not be confirmed until a particular event occurs.

Only contingent liabilities and contingent assets involving amounts of over $100 million are separately disclosed. Quantifiable contingencies less than $100 million are aggregated in the "other quantifiable" total.

Some contingencies of the Crown are not able to be quantified. We have disclosed all unquantifiable contingent liabilities and unquantifiable contingent assets that are not expected to be remote.[18]

The contingencies have been stated as at 31 October 2016, being the latest set of reported contingencies.

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[18] "Remote" is defined as being an item with less than a 10% chance of occurring.

Quantifiable Contingent Liabilities and Contingent Assets

Contingent liabilities

Uncalled capital	Status[19]	31 October 2016 ($millions)
Asian Development Bank	Unchanged	2,978
International Monetary Fund – promissory notes	Unchanged	2,282
International Bank for Reconstruction and Development	Unchanged	1,550
International Monetary Fund – arrangements to borrow	Unchanged	540
Asian Infrastructure Investment Bank	Unchanged	517
Other uncalled capital	Unchanged	18
		7,885
Guarantees and indemnities		
New Zealand Export Credit Office guarantees	Unchanged	210
Other guarantees and indemnities	Unchanged	76
		286
Legal proceedings and disputes		
Legal tax proceedings	Unchanged	167
Other legal proceedings and disputes	Unchanged	128
		295
Other quantifiable contingent liabilities		
Unclaimed monies	Unchanged	134
Other quantifiable contingent liabilities	Unchanged	141
		275
Total quantifiable contingent liabilities		**8,741**

Contingent assets

Legal proceedings and disputes	Status	31 October 2016 ($millions)
Other contingent assets	Unchanged	73
Total quantifiable contingent assets		**73**

[19] Status of contingent liabilities or assets when compared to the *Financial Statements of the Government of New Zealand* year ended 30 June 2016.

Unquantifiable Contingent Liabilities and Contingent Assets

Contingent liabilities	
Indemnities	**Status**
Air New Zealand	Unchanged
Contact Energy Limited	Unchanged
Earthquake Commission	Unchanged
Genesis Energy Limited	Unchanged
Housing New Zealand Corporation	Unchanged
Justices of the Peace, Community Magistrates and Disputes Tribunal Referees	Unchanged
Maui Contracts	Unchanged
Maui Partners	Unchanged
New Zealand Aluminium Smelter and Comalco	Unchanged
New Zealand Local Authorities	Unchanged
New Zealand Railways Corporation	Unchanged
Persons exercising investigating powers	Unchanged
Synfuels-Waitara Outfall Indemnity	Unchanged
Westpac New Zealand Limited	Unchanged
Legal claims and proceedings	
Accident Compensation Corporation litigation	Unchanged
Air New Zealand litigation[1]	Changed
Kiwibank	Unchanged
Ministry for Primary Industries – Kiwifruit vine disease[2]	Changed
Treaty of Waitangi claims	Unchanged
Other unquantifiable contingent liabilities	
Criminal Proceeds (Recovery) Act 2009	Unchanged
Environmental liabilities	Unchanged
Treaty of Waitangi claims – settlement relativity payments	Unchanged
Holidays Act 2003 and other relevant legislation	Unchanged

Notes: 1 Previously two cases. One legal claim has been removed from unquantifiable contingencies, as it was settled, leaving one unquantifiable claim that remains unchanged.

2 Previously two cases. One legal claim was transferred from unquantifiable contingencies to quantifiable contingencies, leaving one unquantifiable claim that remains unchanged.

Description of Contingent Liabilities

Quantifiable contingent liabilities over $100 million

Uncalled capital

As part of the Crown's commitment to a multilateral approach to ensure global financial and economic stability, New Zealand, as a member country of these organisations, contributes capital by subscribing to shares in certain institutions.

The capital (when called) is typically used to raise additional funding for loans to other member countries or, in the case of the quota contributions, to directly finance lending to members. For New Zealand and other donor countries, capital contributions comprise both "paid in" capital and "callable capital or promissory notes".

The Crown's uncalled capital subscriptions over $100 million are as follows:

Uncalled capital	**31 October 2016**	**30 June 2016**
	$millions	**$millions**
Asian Development Bank	2,978	3,051
International Monetary Fund – promissory notes	2,282	2,205
International Bank for Reconstruction and Development	1,550	1,558
International Monetary Fund – arrangements to borrow	540	559
Asian Infrastructure Investment Bank	517	519

Southern Response Earthquake Services Limited

In addition to the uncalled capital above, the Crown Support Deed agreed with Southern Response Earthquake Services Limited includes:

- $500 million of uncalled ordinary shares under an amended Crown Support Deed dated 30 January 2013. This capital facility has since been extended with additional $250 million during 2015/16.

As at 31 October 2016, $555 million has been called, and $143 million of this has been paid, under the uncalled ordinary capital facility. There is also a possibility that the remaining $195 million will be called owing to significant complexities that exist in settling Christchurch earthquake claims. The extent to which the subscription is called and paid depends on the ultimate cost of settling earthquake claims, which continues to be subject to significant uncertainty.

The above capital subscriptions have an impact on the core Crown net debt; however as Southern Response is part of the Crown, there would be no impact on the total Crown operating balance.

Guarantees and indemnities

Guarantees are legally binding promises made by the Crown to assume responsibility for a debt, or performance of an obligation of another party, should that party default. Guarantees generally relate to the payment of money but may require the performance of obligations.

Indemnities are legally binding promises where the Crown undertakes to accept the risk of loss or damage that another party may suffer and to hold the other party harmless against loss caused by a specific stated event(s).

New Zealand Export Credit Office guarantees

The New Zealand Export Credit Office provides a range of guarantee products to assist New Zealand exporters manage risk and capitalise on trade opportunities around the globe. The obligations to third parties are guaranteed by the Crown and are intended to extend the capacity of facilities in the private sector.

$210 million at 31 October 2016 ($211 million at 30 June 2016)

Legal proceedings and disputes

Legal tax proceedings

When a taxpayer disagrees with an assessment issued following the dispute process, the taxpayer may challenge that decision by filing proceedings with the Taxation Review Authority or the High Court. This contingent liability represents the maximum liability Inland Revenue has in respect of these cases.

$167 million at 31 October 2016 ($172 million at 30 June 2016)

Other quantifiable contingent liabilities

Unclaimed monies

Under the Unclaimed Money Act 1971, entities (eg, financial institutions, insurance companies) hand over money not claimed after six years to Inland Revenue. The funds are repaid to the entitled owner on proof of identification.

$134 million at 31 October 2016 ($133 million at 30 June 2016)

Unquantifiable contingent liabilities

This part of the Statement provides details of those contingent liabilities of the Crown that are not quantified, excluding those that are considered remote, reported by the following categories:

a) Indemnities

b) Legal claims and proceedings, and

c) Other contingent liabilities.

a) Indemnities

A number of these indemnities are provided to organisations within the Crown's control. If these indemnities were to crystallise, the Crown would compensate the individual entity for the loss and there would likely be an adverse impact on core Crown expenses and net core Crown debt.

Party indemnified	**Instrument of indemnification**	**Actions indemnified**
Air New Zealand	Deed of indemnity issued 24 September 2001	Claims arising from acts of war and terrorism that cannot be met from insurance, up to a limit of US$1 billion in respect of any one claim.
Contact Energy Limited	The Crown and Contact Energy signed a number of documents to settle in full Contact's outstanding land rights and geothermal asset rights at Wairakei	The documents contained two reciprocal indemnities between the Crown and Contact Energy to address the risk of certain losses to the respective parties' assets arising from the negligence or fault of the other party.
Earthquake Commission (EQC)	Section 16 of the Earthquake Commission Act 1993	As set out in the Earthquake Commission Act 1993, the Crown shall fund any deficiency in EQC's assets to cover its financial liabilities on such terms and conditions that the Minister of Finance determines.
Genesis Energy Limited	Deed between Genesis Power Limited and the Crown	The agreement sees the Crown compensate Genesis in the event that Genesis has less gas than it requires for the long-term supply of gas to cover Huntly power station's minimum needs.
	Genesis acquisition of Tekapo A & B power stations	Indemnity against any damage to bed of lakes and rivers subject to operating easements.
Housing New Zealand Limited (HNZL)	The Crown has provided a warranty in respect of title to the assets transferred to HNZL	The Crown indemnified HNZL against: • any breach of the warranty provided, and • any third party claims that are a result of acts or omissions prior to 1 November 1992. The Crown also indemnified the directors and officers of HNZL against any liability consequent upon the assets not complying with statutory requirements, provided it is taking steps to rectify any non-compliance.

Party indemnified	**Instrument of indemnification**	**Actions indemnified**
Justices of the Peace, Community Magistrates and Disputes Tribunal Referee	Section 11CE of the District Courts Act 1947 Section 4F of the Justices of the Peace Act 1957 Section 58 of the Disputes Tribunal Act 1988	Damages or costs awarded against them as a result of them exceeding their jurisdiction, provided a High Court Judge certifies that they have exceeded their jurisdiction in good faith and ought to be indemnified.
Maui Contracts	Contracts in respect of which the Crown purchases gas from Maui Mining companies and sells gas downstream to Contact Energy Limited, Vector Gas Limited and Methanex Waitara Valley Limited	The contracts provide for invoices to be re-opened in certain circumstances within two years of their issue date as a result of revisions to indices. These revisions may result in the Crown refunding monies or receiving monies from those parties.
Maui Partners	Confidentiality agreements with the Maui Partners in relation to the provision of gas reserves information	Any losses arising from a breach of the deed.
New Zealand Aluminium Smelter and Comalco	The Minister of Finance signed indemnities in November 2003 and February 2004 in respect of aluminium dross currently stored at another site in Invercargill	The indemnity relates to costs incurred in removing the dross and disposing of it at another site if required to do so by an appropriate authority.
New Zealand Local Authorities	Section 9 of the Civil Defence Emergency Management Act 2002 Civil Defence Emergency Management Plan	The Guide to the National Civil Defence Emergency Management Plan ('the Guide') states that, with the approval of the Minister, the Government will reimburse local authorities, in whole or in part, for certain types of response and recovery costs incurred as a result of a local or national emergency. The Guide is approved and issued by the Director of Civil Defence Emergency Management.
New Zealand Railways Corporation	The Minister of Finance signed the indemnity on 1 September 2004	The directors of New Zealand Railways Corporation against all liabilities in connection with the Corporation taking ownership and/or responsibility for the national rail network and any associated assets and liabilities.
	Section 10 of the Finance Act 1990	Guarantees all loan and swap obligations of the New Zealand Railways Corporation.

Party indemnified	**Instrument of indemnification**	**Actions indemnified**
Persons exercising investigating powers	Section 63 of the Corporations (Investigation and Management) Act 1989	Indemnifies the Financial Markets Authority (formerly Securities Commission), the Registrar and Deputy Registrar of Companies, members of advising committees within the Act, every statutory manager of a corporation and persons appointed pursuant to sections 17 to 19 of the Act, in the exercise of investigating powers, unless the power has been exercised in bad faith.
Synfuels-Waitara Outfall Indemnity	1990 sale of the Synfuels plant and operations to New Zealand Liquid Fuels Investment Limited (NZLFI)	The Crown transferred to NZLFI the benefit and obligation of a Deed of Indemnity between the Crown and Borthwick-CWS Limited (and subsequent owners) in respect of the Waitara effluent transfer line which was laid across the Waitara meat processing plant site. The Crown has the benefit of a counter indemnity from NZLFI which has since been transferred to Methanex Motunui Limited.
Westpac New Zealand Limited	The Crown Transactional Banking Services Agreement with Westpac New Zealand Limited dated 24 September 2015	The Crown has indemnified Westpac New Zealand Limited: • for all amounts paid by Westpac New Zealand under letters of credit issued on behalf of the Crown, and • against certain cost, damages and losses to third parties resulting from: o unauthorised, forged or fraudulent payment instructions, o unauthorised or incorrect direct debit instructions, or o cheques mistakenly drawn in favour of a third party rather than drawn in favour of the Crown.

b) Legal claims and proceedings

There are numerous legal actions that have been brought against the Crown. However, in the majority of these actions it is considered a remote possibility that the Crown would lose the case. Based on these factors, not all legal actions are individually disclosed. The claims that are disclosed individually, while they cannot be quantified, have the potential to exceed $20 million in costs and not considered to be remote.

Accident Compensation Corporation litigation

Litigation involving ACC arises almost exclusively from challenges to operational decisions made by ACC through the statutory review and appeal process. No accrual has been made for contingent liabilities which could arise, as these disputes are issue-based and ACC's active management of litigation means that it will be either settling or defending, depending on the merits of the issue in dispute. ACC's Board believes the resolution of outstanding appeals will not have any material effect on the financial statements of ACC.

Air New Zealand litigation

Air New Zealand is defending a class action in the US, in which it is alleged that Air New Zealand together with other airlines acted anti-competitively in respect of fares and surcharges on trans-Pacific routes.

Allegations of anti-competitive conduct in the air cargo business in Hong Kong and Singapore were the subject of proceedings by the Australian Competition and Consumer Commission (ACCC). Following a defended hearing, the Federal Court released its decision in October 2014, finding in favour of Air New Zealand. The ACCC appealed the decision and a majority decision of the Full Federal Court found in favour of the ACCC. The High Court of Australia has granted Air New Zealand leave to appeal that decision with a hearing to be scheduled early in 2017.

In the event that a Court determined that Air New Zealand had breached competition laws, the Group would have potential liability for damages or (in Australia) pecuniary penalties.

Kiwibank

In June 2013, a group called Fair Play on Fees announced plans for a representative action against banks in New Zealand in relation to certain default fees charged to New Zealand customers. In November 2013, the group issued proceedings against Kiwibank. The potential outcome of the proceedings cannot be determined with any certainty at this stage.

Ministry for Primary Industries – Kiwifruit vine disease

In November 2014, 42 growers filed a claim against the Ministry for Primary Industries (MPI) alleging MPI is legally liable for damages they have suffered from a biosecurity incursion of the kiwifruit vine disease, Psa-V, in New Zealand. Included in the proceedings are approximately 178 grower claims represented by the first plaintiff, Strathboss Kiwifruit Limited. The total losses have not been quantified, but previous media reports claim they are in the vicinity of $380 million (and cite total industry losses of $885 million). As Strathboss Kiwifruit Limited is required to prove MPI owes a duty of care to the growers before losses will be assessed, MPI is unable to quantify the first plaintiff's claim. The Ministry is defending the claim.

Treaty of Waitangi claims

Under the Treaty of Waitangi Act 1975, any Māori may lodge certain claims relating to land or actions counter to the principles of the Treaty with the Waitangi Tribunal. Where the Tribunal finds a claim is well founded, it may recommend to the Crown that action be taken to compensate those affected. The Tribunal can make recommendations that are binding on the Crown with respect to land which has been transferred by the Crown to an SOE or tertiary institution, or is subject to the Crown Forest Assets Act 1989.

On occasion, Māori claimants pursue the resolution of particular claims against the Crown through higher courts. Failure to successfully defend such actions may result in a liability for historical Treaty grievances in excess of that currently anticipated.

c) Other unquantifiable contingent liabilities

Criminal Proceeds (Recovery) Act 2009

The Ministry of Justice is responsible for administering the Criminal Proceeds (Recovery) Act 2009. The Act requires the Crown to give an undertaking as to damages or costs in relation to asset restraining orders. In the event that the Crown is found liable, payment may be required.

Environmental liabilities

Under common law and various statutes, the Crown may have responsibility to remedy adverse effects on the environment arising from Crown activities. Entities managing significant Crown properties have implemented systems to identify, monitor and assess potential contaminated sites.

In accordance with PBE IPSAS 19: Provisions, Contingent Liabilities and Contingent Assets, any contaminated sites for which costs can be reliably measured have been included in the statement of financial position as provisions.

Treaty of Waitangi claims – Settlement Relativity Payments – see page 82

Holidays Act 2003 and other relevant legislation

A number of entities have commenced a review of payroll calculations over the last six years in order to ensure compliance with the Holidays Act 2003 and other relevant legislation. Where possible, provision has been made in these financial statements for obligations arising from that review. To the extent that an obligation cannot reasonably be quantified at 31 October 2016, a contingent liability exists.

Description of Contingent Assets

Quantifiable contingent assets over $100 million

There are no contingent assets over $100 million at 31 October 2016.

5

Forecast Financial Statements

These forecasts have been prepared in accordance with the Public Finance Act 1989.

They are based on the accounting policies and assumptions that follow. As with all such assumptions, there is a degree of uncertainty surrounding them. This uncertainty increases as the forecast horizon extends. The Risks and Scenarios and Specific Fiscal Risks chapters discuss the risks to the fiscal forecast in more detail.

The forecasts have been prepared in accordance with the Statement of Responsibility and reflect the judgements and information known at the time they were prepared. They reflect all government decisions and circumstances communicated to 21 November 2016.

The finalisation dates and key assumptions that underpin the preparation of the Forecast Financial Statements are outlined in the Fiscal Outlook chapter (pages 27 to 53).

Statement of Accounting Policies

Significant Accounting Policies

The Forecast Financial Statements have been prepared in accordance with the accounting policies that are expected to be used in the comparable audited actual Financial Statements of the Government. They comply with generally accepted accounting practice (GAAP) as required by the Public Finance Act 1989 and have been prepared in accordance with *Public Benefit Entity Financial Reporting Standard 42: Prospective Financial Statements*.

All forecasts use the accrual basis of accounting. Forecasts have been prepared for the consolidated Financial Statements of the Government reporting entity, which includes all entities controlled by the Government (as defined by applicable financial reporting standards).

The specific accounting policies are included within the 2016 *Half Year Economic and Fiscal Update Additional Information* document which can be found on the Treasury's website at http://www.treasury.govt.nz/budget/forecasts/hyefu2016

Forecast Policies

The Forecast Financial Statements have been prepared on the basis of the Treasury's best professional judgement. Actual financial results for the periods covered are likely to vary from the information presented in these forecasts. Factors that may lead to a material difference between information in these Forecast Financial Statements and the actual reported results in future years are set out in the Specific Fiscal Risks chapter on pages 71 to 94.

Key forecast assumptions are set out on pages 29 to 30.

Reporting and Forecast Period

The reporting periods for these Forecast Financial Statements are the years ended 30 June 2017 to 30 June 2021. The "2016 Actual" figures reported in the statements are the audited results reported in the Financial Statements of the Government for the year ended 30 June 2016. The "2017 Previous Budget" figures are the original forecasts to 30 June 2017 as presented in the 2016 Budget.

Government Reporting Entity as at 21 November 2016

These Forecast Financial Statements are for the government reporting entity as specified in Part 3 of the Public Finance Act 1989. This comprises Ministers of the Crown and the following entities (classified in the three institutional components used for segmental reporting):

Core Crown

Departments

Crown Law Office
Department of Conservation
Department of Corrections
Department of Internal Affairs
Department of the Prime Minister and Cabinet
Education Review Office
Government Communications Security Bureau
Inland Revenue Department
Land Information New Zealand
Ministry for Culture and Heritage
Ministry for Pacific Peoples
Ministry for Primary Industries
Ministry for the Environment
Ministry for Women
Ministry of Business, Innovation and Employment
Ministry of Defence
Ministry of Education
Ministry of Foreign Affairs and Trade
Ministry of Health
Ministry of Justice
Ministry of Māori Development
Ministry of Social Development
Ministry of Transport
New Zealand Customs Service
New Zealand Defence Force
New Zealand Police
New Zealand Security Intelligence Service
Office of the Clerk of the House of Representatives
Parliamentary Counsel Office
Parliamentary Service
Serious Fraud Office
State Services Commission
Statistics New Zealand
The Treasury

Offices of Parliament

Controller and Auditor-General
Office of the Ombudsman
Parliamentary Commissioner for the Environment

Others

New Zealand Superannuation Fund
Reserve Bank of New Zealand

State-owned Enterprises

Airways Corporation of New Zealand Limited
Animal Control Products Limited
AsureQuality Limited
Electricity Corporation of New Zealand Limited
KiwiRail Holdings Limited
Kordia Group Limited
Landcorp Farming Limited
Meteorological Service of New Zealand Limited
New Zealand Post Limited
New Zealand Railways Corporation
Quotable Value Limited
Solid Energy New Zealand Limited
Transpower New Zealand Limited

Mixed ownership model companies (Public Finance Act schedule 5 companies)

Genesis Energy Limited
Mercury NZ Limited (formerly Mighty River Power Limited)
Meridian Energy Limited

Other

Air New Zealand Limited

Crown entities

- Accident Compensation Corporation
- Accreditation Council
- Arts Council of New Zealand Toi Aotearoa
- Broadcasting Commission
- Broadcasting Standards Authority
- Callaghan Innovation
- Careers New Zealand
- Children's Commissioner
- Civil Aviation Authority of New Zealand
- Commerce Commission
- Crown Irrigation Investments Limited
- Crown Research Institutes (7)
- District Health Boards (20)
- Drug Free Sport New Zealand
- Earthquake Commission
- Education New Zealand
- Electoral Commission
- Electricity Authority
- Energy Efficiency and Conservation Authority
- Environmental Protection Authority
- External Reporting Board
- Families Commission
- Financial Markets Authority
- Government Superannuation Fund Authority
- Guardians of New Zealand Superannuation
- Health and Disability Commissioner
- Health Promotion Agency
- Health Quality and Safety Commission
- Health Research Council of New Zealand
- Heritage New Zealand Pouhere Taonga
- Housing New Zealand Corporation
- Human Rights Commission
- Independent Police Conduct Authority
- Law Commission
- Maritime New Zealand
- Museum of New Zealand Te Papa Tongarewa Board
- New Zealand Antarctic Institute
- New Zealand Artificial Limb Service
- New Zealand Blood Service
- New Zealand Film Commission
- New Zealand Fire Service Commission
- New Zealand Lotteries Commission
- New Zealand Productivity Commission
- New Zealand Qualifications Authority
- New Zealand Symphony Orchestra
- New Zealand Tourism Board
- New Zealand Trade and Enterprise
- New Zealand Transport Agency
- New Zealand Venture Investment Fund Limited
- New Zealand Walking Access Commission
- Office of Film and Literature Classification
- Pharmaceutical Management Agency
- Privacy Commissioner
- Public Trust
- Radio New Zealand Limited
- Real Estate Agents Authority
- Retirement Commissioner
- School Boards of Trustees (2,418)
- Social Workers Registration Board
- Sport and Recreation New Zealand
- Takeovers Panel
- Te Reo Whakapuaki Irirangi (Māori Broadcasting Funding Agency)
- Te Taura Whiri i te Reo Māori (Māori Language Commission)
- Television New Zealand Limited
- Tertiary Education Commission
- Tertiary Education institutions (27)
- Transport Accident Investigation Commission
- WorkSafe New Zealand

Crown entities

Organisations listed in schedule 4 of the Public Finance Act 1989

Agricultural and Marketing Research and Development Trust
Asia New Zealand Foundation
Fish and Game Councils (12)
Game Animal Council
Leadership Development Centre Trust
Māori Trustee
National Pacific Radio Trust
New Zealand Fish and Game Council
New Zealand Game Bird Habitat Trust Board
New Zealand Government Property Corporation
New Zealand Lottery Grants Board
Ngāi Tahu Ancillary Claims Trust
Pacific Co-operation Foundation
Pacific Island Business Development Trust
Reserves Boards (20)
Sentencing Council
Te Ariki Trust

Non-listed companies in which the Crown is majority or sole shareholder (Public Finance Act schedule 4A companies)

Crown Asset Management Limited
Crown Fibre Holdings Limited
Education Payroll Limited
Fairway Resolution Limited
Health Benefits Limited (ceased operating)
Ōtākaro Limited
Research and Education Advanced Network New Zealand Limited
Southern Response Earthquake Services Limited
Tāmaki Redevelopment Company Limited
The Network for Learning Limited

Legal entities created by Treaty of Waitangi settlement Acts (Public Finance Act schedule 6)

Te Urewera

Others

Education Council of Aotearoa New Zealand
Regenerate Christchurch

Subsidiaries of SOEs, Crown entities and other government entities are consolidated by their parents and not listed separately in this table.

Forecast Statement of Financial Performance

for the years ending 30 June

	Note	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Revenue								
Taxation revenue	1	69,668	71,221	73,567	77,350	81,226	85,067	89,235
Other sovereign revenue	1	4,643	4,593	4,790	4,930	5,210	5,593	5,744
Total Sovereign Revenue		**74,311**	**75,814**	**78,357**	**82,280**	**86,436**	**90,660**	**94,979**
Sales of goods and services		16,364	17,259	16,905	17,367	18,001	18,427	18,777
Interest revenue and dividends	2	3,603	4,267	3,821	3,972	4,176	4,169	4,482
Other revenue		3,881	3,615	3,549	3,556	3,564	3,596	3,605
Total revenue earned through operations		**23,848**	**25,141**	**24,275**	**24,895**	**25,741**	**26,192**	**26,864**
Total revenue (excluding gains)		**98,159**	**100,955**	**102,632**	**107,175**	**112,177**	**116,852**	**121,843**
Expenses								
Transfer payments and subsidies	3	24,312	25,395	25,566	26,223	27,059	28,133	29,265
Personnel expenses	4	21,763	22,144	22,466	22,631	22,803	22,884	23,094
Depreciation and amortisation	5	4,875	5,200	5,116	5,283	5,499	5,583	5,634
Other operating expenses	6	35,869	38,666	39,522	38,660	38,666	38,979	39,076
Finance costs	7	4,336	4,566	4,384	4,441	4,441	4,175	4,183
Insurance expenses	8	4,725	4,239	5,307	4,744	4,841	5,194	5,541
Forecast new operating spending	9	-	534	368	1,986	3,538	5,054	6,415
Top-down expense adjustment	9	-	(1,025)	(1,025)	(575)	(500)	(400)	(400)
Total expenses (excluding losses)		**95,880**	**99,719**	**101,704**	**103,393**	**106,347**	**109,602**	**112,808**
Minority interests share of operating balance before gains/(losses)		(448)	(517)	(455)	(442)	(464)	(478)	(486)
Operating balance before gains/(losses) (excluding minority interests)		**1,831**	**719**	**473**	**3,340**	**5,366**	**6,772**	**8,549**
Net gains/(losses) on financial instruments	10	1,117	2,111	4,080	2,594	2,696	2,954	3,184
Net gains/(losses) on non-financial instruments	11	(8,636)	(54)	(992)	(90)	(89)	(72)	(63)
Less minority interests share of net gains/losses		12	(4)	(14)	(21)	(8)	(4)	(5)
Gains/(losses) (excluding minority interests)		**(7,507)**	**2,053**	**3,074**	**2,483**	**2,599**	**2,878**	**3,116**
Net surplus/(deficit) from associates and joint ventures		307	286	248	226	248	250	252
Operating balance (excluding minority interests)	12	**(5,369)**	**3,058**	**3,795**	**6,049**	**8,213**	**9,900**	**11,917**

The accompanying notes and accounting policies are an integral part of these Statements.

Forecast Analysis of Expenses by Functional Classification

for the years ending 30 June

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Total Crown expenses							
By functional classification							
Social security and welfare	28,901	30,120	30,610	31,242	31,941	33,320	34,759
Health	15,160	15,567	15,989	15,671	15,660	15,685	15,702
Education	13,809	14,235	14,310	14,406	14,494	14,555	14,732
Core government services	3,950	4,874	5,744	4,617	4,445	4,358	4,209
Law and order	3,894	4,062	4,151	4,204	4,219	4,245	4,250
Transport and communications	9,400	9,641	9,662	9,721	10,028	10,249	10,504
Economic and industrial services	7,428	7,551	7,469	7,704	8,041	8,277	8,380
Defence	2,013	2,149	2,167	2,228	2,234	2,241	2,253
Heritage, culture and recreation	2,210	2,401	2,299	2,330	2,344	2,368	2,390
Primary services	1,852	1,961	2,038	1,922	1,952	1,952	1,963
Housing and community development	1,600	1,694	1,984	1,962	2,030	1,979	1,921
Environmental protection	580	719	877	990	928	997	1,001
GSF pension expenses	286	231	232	187	171	166	165
Other	461	439	445	357	381	381	381
Finance costs	4,336	4,566	4,384	4,441	4,441	4,175	4,183
Forecast new operating spending	-	534	368	1,986	3,538	5,054	6,415
Top-down expense adjustment	-	(1,025)	(1,025)	(575)	(500)	(400)	(400)
Total Crown expenses excluding losses	**95,880**	**99,719**	**101,704**	**103,393**	**106,347**	**109,602**	**112,808**

Below is an analysis of core Crown expenses by functional classification. Core Crown expenses include expenses incurred by Ministers, Departments, Offices of Parliament, the NZS Fund and the Reserve Bank, but not Crown entities and SOEs.

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Core Crown expenses							
By functional classification[1]							
Social security and welfare	24,081	25,224	25,264	25,930	26,628	27,682	28,772
Health	15,626	16,214	16,490	16,332	16,414	16,409	16,409
Education	13,158	13,478	13,526	13,654	13,733	13,791	13,967
Core government services	4,102	4,943	5,096	4,619	4,505	4,423	4,257
Law and order	3,648	3,811	3,873	3,874	3,849	3,871	3,882
Transport and communications	2,178	2,358	2,266	2,267	2,275	2,315	2,306
Economic and industrial services	2,107	2,493	2,808	2,735	2,749	2,803	2,825
Defence	2,026	2,177	2,179	2,241	2,246	2,254	2,265
Heritage, culture and recreation	787	855	861	847	834	879	875
Primary services	749	709	750	636	625	621	618
Housing and community development	558	568	650	548	572	531	545
Environmental protection	587	716	880	992	931	999	1,003
GSF pension expenses	271	212	213	168	152	146	145
Other	461	439	445	357	381	381	381
Finance costs	3,590	3,682	3,632	3,501	3,475	3,456	3,518
Forecast new operating spending	-	534	368	1,986	3,538	5,054	6,415
Top-down expense adjustment	-	(1,025)	(1,025)	(575)	(500)	(400)	(400)
Total core Crown expenses excluding losses	**73,929**	**77,388**	**78,276**	**80,112**	**82,407**	**85,215**	**87,783**

1. The classifications of the functions of the Government reflect current approved baselines. Forecast new operating spending is shown as a separate line item in the above analysis and will be allocated to functions of the Government once decisions are made in future Budgets.

The accompanying notes and accounting policies are an integral part of these Statements.

Forecast Statement of Comprehensive Income

for the years ending 30 June

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Operating Balance (including minority interests)	**(4,933)**	**3,579**	**4,264**	**6,512**	**8,685**	**10,382**	**12,408**
Other comprehensive revenue and expense							
Revaluation of physical assets	8,865	-	(153)	-	-	-	-
Net change in hedging instruments entered into for cash flow hedges	(248)	22	39	1	10	18	14
Foreign currency translation differences for foreign operations	(15)	-	(8)	-	-	-	-
Valuation gains/(losses) on investments available for sale taken to reserves	(14)	9	8	8	8	9	10
Other movements	34	13	(5)	16	34	50	53
Total other comprehensive revenue and expense	**8,622**	**44**	**(119)**	**25**	**52**	**77**	**77**
Total comprehensive revenue and expense	**3,689**	**3,623**	**4,145**	**6,537**	**8,737**	**10,459**	**12,485**
Attributable to:							
- minority interest	777	529	477	466	477	487	496
- the Crown	2,912	3,094	3,668	6,071	8,260	9,972	11,989
Total comprehensive revenue and expense	**3,689**	**3,623**	**4,145**	**6,537**	**8,737**	**10,459**	**12,485**

Forecast Statement of Changes in Net Worth

for the years ending 30 June

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Opening net worth	92,236	89,302	95,521	98,926	104,953	113,147	123,003
Operating balance (including minority interest)	(4,933)	3,579	4,264	6,512	8,685	10,382	12,408
Net revaluations	8,865	-	(153)	-	-	-	-
Transfers to/(from) reserves	(136)	40	57	34	56	80	81
(Gains)/losses transferred to the Statement of Financial Performance	(56)	6	(11)	3	4	8	9
Other movements	(51)	(2)	(12)	(12)	(8)	(11)	(13)
Comprehensive income	**3,689**	**3,623**	**4,145**	**6,537**	**8,737**	**10,459**	**12,485**
Transactions with minority interest	(404)	(500)	(740)	(510)	(543)	(603)	(669)
Closing net worth	**95,521**	**92,425**	**98,926**	**104,953**	**113,147**	**123,003**	**134,819**

The accompanying notes and accounting policies are an integral part of these Statements.

Forecast Statement of Cash Flows

for the years ending 30 June

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Cash Flows from Operations							
Cash was provided from							
Taxation receipts	69,027	70,058	72,637	75,799	80,210	83,981	88,200
Other sovereign receipts	4,685	4,154	4,267	4,307	4,332	4,753	4,873
Sales of goods and services	17,074	17,327	16,882	17,525	18,151	18,562	18,875
Interest and dividend receipts	3,430	3,504	3,770	3,961	4,080	4,119	4,467
Other operating receipts	4,131	3,590	3,871	3,358	3,668	3,382	3,405
Total cash provided from operations	**98,347**	**98,633**	**101,427**	**104,950**	**110,441**	**114,797**	**119,820**
Cash was disbursed to							
Transfer payments and subsidies	24,338	25,384	25,579	26,285	27,097	28,497	29,647
Personnel and operating payments	61,160	63,751	66,021	64,178	63,456	64,192	64,461
Interest payments	4,333	4,682	4,884	4,936	4,911	4,370	4,333
Forecast new operating spending	-	534	368	1,986	3,538	5,054	6,415
Top-down expense adjustment	-	(1,025)	(1,025)	(575)	(500)	(400)	(400)
Total cash disbursed to operations	**89,831**	**93,326**	**95,827**	**96,810**	**98,502**	**101,713**	**104,456**
Net cash flows from operations	**8,516**	**5,307**	**5,600**	**8,140**	**11,939**	**13,084**	**15,364**
Cash Flows from Investing Activities							
Cash was provided from/(disbursed to)							
Net (purchase)/sale of physical assets	(6,198)	(7,971)	(8,326)	(6,972)	(6,281)	(5,573)	(5,606)
Net (purchase)/sale of shares and other securities	1,410	(3,881)	(3,971)	3,951	3,325	(1,576)	29
Net (purchase)/sale of intangible assets	(687)	(837)	(830)	(689)	(655)	(557)	(478)
Net (issue)/repayment of advances	(1,702)	(1,504)	(931)	(1,893)	(1,893)	(1,366)	(1,328)
Net acquisition of investments in associates	113	57	(16)	(24)	(305)	(334)	(309)
Forecast new capital spending	-	(587)	(465)	(1,006)	(1,354)	(1,606)	(1,658)
Top-down capital adjustment	-	625	500	150	50	50	50
Net cash flows from investing activities	**(7,064)**	**(14,098)**	**(14,039)**	**(6,483)**	**(7,113)**	**(10,962)**	**(9,300)**
Net cash flows from operating and investing activities	**1,452**	**(8,791)**	**(8,439)**	**1,657**	**4,826**	**2,122**	**6,064**
Cash Flows from Financing Activities							
Cash was provided from/(disbursed to)							
Issues of circulating currency	378	175	30	170	175	180	186
Net issue/(repayment) of government bonds[2]	6,250	7,893	5,908	(2,330)	(5,133)	(1,965)	(5,735)
Net issue/(repayment) of foreign-currency borrowings	2,210	(957)	(2,549)	(696)	12	28	21
Net issue/(repayment) of other New Zealand dollar borrowings	(5,961)	2,360	3,445	2,103	1,394	1,098	881
Dividends paid to minority interests[1]	(509)	(546)	(609)	(510)	(543)	(603)	(669)
Net cash flows from financing activities	**2,368**	**8,925**	**6,225**	**(1,263)**	**(4,095)**	**(1,262)**	**(5,316)**
Net movement in cash	**3,820**	**134**	**(2,214)**	**394**	**731**	**860**	**748**
Opening cash balance	11,982	15,036	15,617	13,280	13,674	14,405	15,265
Foreign-exchange gains/(losses) on opening cash	(185)	(2)	(123)	-	-	-	-
Closing cash balance	**15,617**	**15,168**	**13,280**	**13,674**	**14,405**	**15,265**	**16,013**

1. Excludes transactions with ACC and NZS Fund.

2. Further information on the proceeds and repayments of government bonds is available in note 23.

The accompanying notes and accounting policies are an integral part of these Statements.

Forecast Statement of Cash Flows (continued)

for the years ending 30 June

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Reconciliation Between the Net Cash Flows from Operations and the Operating Balance							
Net Cash Flows from Operations	**8,516**	**5,307**	**5,600**	**8,140**	**11,939**	**13,084**	**15,364**
Items included in the operating balance but not in net cash flows from operations							
Gains/(losses)							
Net gains/(losses) on financial instruments	1,117	2,111	4,080	2,594	2,696	2,954	3,184
Net gains/(losses) on non-financial instruments	(8,636)	(54)	(992)	(90)	(89)	(72)	(63)
Minority interest share of net gains/(losses)	12	(4)	(14)	(21)	(8)	(4)	(5)
Total gains/(losses)	**(7,507)**	**2,053**	**3,074**	**2,483**	**2,599**	**2,878**	**3,116**
Other Non-cash Items in Operating Balance							
Depreciation and amortisation	(4,875)	(5,200)	(5,116)	(5,283)	(5,499)	(5,583)	(5,634)
Cost of concessionary lending	(747)	(842)	(758)	(750)	(748)	(700)	(689)
Impairment on financial assets (excluding receivables)	(169)	(126)	(126)	(129)	(136)	(138)	(138)
Change in accumulating pension expenses	420	505	505	561	581	591	592
Change in accumulating insurance expenses	(597)	44	621	(712)	(1,641)	(1,407)	(1,495)
Other non-cash items	(85)	(229)	(206)	(214)	(218)	(229)	(235)
Total other non-cash Items in Operating Balance	**(6,053)**	**(5,848)**	**(5,080)**	**(6,527)**	**(7,661)**	**(7,466)**	**(7,599)**
Movements in Working Capital							
Increase/(decrease) in receivables	(532)	188	538	437	559	315	437
Increase/(decrease) in accrued interest	169	879	551	506	568	245	165
Increase/(decrease) in inventories	115	(116)	(146)	7	(6)	(49)	(11)
Increase/(decrease) in prepayments	70	(14)	(27)	(9)	(10)	(6)	-
Decrease/(increase) in deferred revenue	(66)	3	41	(17)	(26)	(16)	(22)
Decrease/(increase) in payables/provisions	(81)	606	(756)	1,029	251	915	467
Total movements in working capital	**(325)**	**1,546**	**201**	**1,953**	**1,336**	**1,404**	**1,036**
Operating balance (excluding minority interests)	**(5,369)**	**3,058**	**3,795**	**6,049**	**8,213**	**9,900**	**11,917**

The accompanying notes and accounting policies are an integral part of these Statements.

Forecast Statement of Financial Position

as at 30 June

	Note	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Assets								
Cash and cash equivalents	13	15,617	15,168	13,280	13,674	14,405	15,265	16,013
Receivables	13	16,789	17,484	16,869	17,227	17,828	18,189	18,673
Marketable securities, deposits and derivatives in gain	13	53,398	53,289	55,223	51,443	48,762	51,120	52,178
Share investments	13	24,217	26,617	28,435	29,927	31,494	33,208	34,950
Advances	13	28,234	28,779	28,776	30,615	32,409	33,676	34,685
Inventory		1,110	863	964	971	965	916	904
Other assets		2,914	2,301	2,323	2,235	2,238	2,227	2,240
Property, plant and equipment	15	134,499	131,100	138,887	141,619	143,473	144,407	145,090
Equity accounted investments[1]		12,705	12,451	13,093	13,356	13,920	14,471	14,992
Intangible assets and goodwill	16	3,196	3,643	3,468	3,644	3,734	3,705	3,601
Forecast for new capital spending	9	-	618	465	1,471	2,825	4,431	6,089
Top-down capital adjustment	9	-	(725)	(500)	(650)	(700)	(750)	(800)
Total assets		**292,679**	**291,588**	**301,283**	**305,532**	**311,353**	**320,865**	**328,615**
Liabilities								
Issued currency		5,715	6,074	5,744	5,914	6,089	6,269	6,454
Payables	18	12,029	12,282	13,441	12,741	13,167	12,850	12,581
Deferred revenue		2,178	2,127	2,136	2,153	2,179	2,195	2,217
Borrowings		113,956	121,698	118,405	117,240	113,555	112,804	107,914
Insurance liabilities	19	42,126	39,281	42,304	43,016	44,658	46,065	47,560
Retirement plan liabilities	20	12,442	10,782	11,911	11,350	10,769	10,178	9,586
Provisions	21	8,712	6,919	8,416	8,165	7,789	7,501	7,484
Total liabilities		**197,158**	**199,163**	**202,357**	**200,579**	**198,206**	**197,862**	**193,796**
Total assets less total liabilities		**95,521**	**92,425**	**98,926**	**104,953**	**113,147**	**123,003**	**134,819**
Net Worth								
Taxpayers' funds		13,932	20,087	17,957	24,150	32,554	42,846	55,003
Property, plant and equipment revaluation reserve		75,626	66,623	75,239	75,110	74,953	74,612	74,425
Other reserves		(192)	(69)	(162)	(155)	(142)	(121)	(102)
Total net worth attributable to the Crown		**89,366**	**86,641**	**93,034**	**99,105**	**107,365**	**117,337**	**129,326**
Net worth attributable to minority interest		6,155	5,784	5,892	5,848	5,782	5,666	5,493
Total net worth	22	**95,521**	**92,425**	**98,926**	**104,953**	**113,147**	**123,003**	**134,819**

1. Tertiary education institutions constitute most of the equity accounted investments.

The accompanying notes and accounting policies are an integral part of these Statements.

Forecast Statement of Borrowings

as at 30 June

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Borrowings							
Government bonds	65,046	71,308	69,095	66,398	60,948	58,842	53,029
Treasury bills	3,799	3,809	4,157	4,054	4,047	4,031	4,016
Government retail stock	201	190	206	206	206	206	206
Settlement deposits with Reserve Bank	6,878	7,657	6,620	6,620	6,620	6,620	6,620
Derivatives in loss	4,577	3,531	3,899	3,484	3,179	3,042	2,924
Finance lease liabilities	1,631	2,406	2,335	2,662	2,806	2,675	2,340
Other borrowings	31,824	32,797	32,093	33,816	35,749	37,388	38,779
Total borrowings	**113,956**	**121,698**	**118,405**	**117,240**	**113,555**	**112,804**	**107,914**
Sovereign-guaranteed debt	84,043	90,594	87,285	84,317	78,788	76,527	70,575
Non sovereign-guaranteed debt	29,913	31,104	31,120	32,923	34,767	36,277	37,339
Total borrowings	**113,956**	**121,698**	**118,405**	**117,240**	**113,555**	**112,804**	**107,914**
Net Debt:							
Core Crown borrowings[1]	95,037	102,812	99,192	96,551	91,383	89,565	84,015
Add back NZS Fund holdings of sovereign-issued debt and NZS Fund borrowings	(1,754)	(1,651)	(1,677)	(1,695)	(1,711)	(1,723)	(1,727)
Gross sovereign-issued debt[2]	**93,283**	**101,161**	**97,515**	**94,856**	**89,672**	**87,842**	**82,288**
Less core Crown financial assets[3]	75,793	80,236	78,376	76,613	75,538	78,976	81,275
Net core Crown debt	**17,490**	**20,925**	**19,139**	**18,243**	**14,134**	**8,866**	**1,013**
Add back core Crown advances	14,612	14,572	12,615	13,534	13,924	13,778	13,463
Net core Crown debt (incl. NZS Fund)[4]	**32,102**	**35,497**	**31,754**	**31,777**	**28,058**	**22,644**	**14,476**
Add back NZS Fund holdings of core Crown financial assets and NZS Fund financial assets[5]	29,778	30,837	32,686	34,648	36,973	39,454	45,160
Net core Crown debt (excl. NZS Fund and advances)[6]	**61,880**	**66,334**	**64,440**	**66,425**	**65,031**	**62,098**	**59,636**
Gross Debt:							
Gross sovereign-issued debt[2]	93,283	101,161	97,515	94,856	89,672	87,842	82,288
Less Reserve Bank settlement cash and Reserve Bank bills	(7,955)	(8,881)	(7,145)	(7,145)	(7,145)	(7,145)	(7,145)
Add back changes to DMO borrowing owing to settlement cash[7]	1,600	1,600	1,600	1,600	1,600	1,600	1,600
Gross sovereign-issued debt excluding Reserve Bank settlement cash and Reserve Bank bills[4]	**86,928**	**93,880**	**91,970**	**89,311**	**84,127**	**82,297**	**76,743**

Notes on borrowings

Total borrowings can be split into sovereign-guaranteed and non-sovereign-guaranteed debt. This split reflects the fact that borrowings by SOEs and Crown entities are not explicitly guaranteed by the Crown. No debt of SOEs and Crown entities is currently guaranteed by the Crown.

1. Core Crown borrowings in this instance include unsettled purchases of securities (classified as accounts payable in the Statement of Financial Position).
2. Gross sovereign-issued debt (GSID) represents debt issued by the sovereign (the core Crown) and includes any government stock held by the other Crown reporting entities. (eg, New Zealand Superannuation Fund, ACC and EQC).
3. Core Crown financial assets exclude receivables.
4. Net core Crown debt represents GSID less financial assets. This can provide information about the sustainability of the Government's accounts, and is used by some international agencies when determining the creditworthiness of a country.
5. Adding back the NZS Fund assets provides the financial liabilities less financial assets of the core Crown, excluding those assets set aside to meet part of the future cost of New Zealand Superannuation.
6. Net core Crown debt (excluding NZS Fund and advances) excludes financial assets which are held for public policy rather than treasury management purposes.
7. The Reserve Bank has used $1.6 billion of settlement cash to purchase reserves that were to have been funded by the NZDMO borrowing. Therefore, the impact of settlement cash on GSID is adjusted by this amount.

The accompanying notes and accounting policies are an integral part of these Statements.

Statement of Actual Commitments

	As at 31 Oct 2016 $m	As at 30 June 2016 $m
Capital Commitments		
State highways	5,657	5,398
Specialist military equipment	617	235
Land and buildings	2,445	2,200
Other property, plant and equipment	2,582	2,578
Other capital commitments	244	246
Tertiary education institutions	533	533
Total capital commitments	**12,078**	**11,190**
Operating Lease Commitments		
Non-cancellable accommodation leases	3,188	3,197
Other non-cancellable leases	2,342	2,411
Tertiary education institutions	730	730
Total operating lease commitments	**6,260**	**6,338**
Total commitments	**18,338**	**17,528**
Total Commitments by Segment		
Core Crown	6,078	5,102
Crown entities	8,615	8,392
State-owned Enterprises	4,822	4,826
Inter-segment eliminations	(1,177)	(792)
Total commitments	**18,338**	**17,528**

Statement of Actual Contingent Liabilities and Assets

	As at 31 Oct 2016 $m	As at 30 June 2016 $m
Quantifiable Contingent Liabilities		
Uncalled capital	7,885	7,910
Guarantees and indemnities	286	288
Legal proceedings and disputes	295	221
Other contingent liabilities	275	314
Total quantifiable contingent liabilities	**8,741**	**8,733**
Total Quantifiable Contingent Liabilities by Segment		
Core Crown	8,622	8,593
Crown entities	19	40
State-owned Enterprises	100	100
Inter-segment eliminations	-	-
Total quantifiable contingent liabilities	**8,741**	**8,733**
Quantifiable Contingent Assets by Segment		
Core Crown	51	51
Crown entities	1	1
State-owned Enterprises	21	21
Total quantifiable contingent assets	**73**	**73**

More information on contingent liabilities (quantified and unquantified) is outlined in the Specific Fiscal Risks chapter.

The accompanying notes and accounting policies are an integral part of these Statements.

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 1: Sovereign Revenue (Accrual)							
Taxation Revenue (accrual)							
Individuals							
Source deductions	27,019	27,778	28,406	29,598	31,036	32,616	34,256
Other persons	5,786	5,865	6,275	6,622	6,947	7,084	7,228
Refunds	(1,739)	(1,712)	(1,635)	(1,665)	(1,655)	(1,664)	(1,694)
Fringe benefit tax	502	547	528	548	571	595	618
Total individuals	**31,568**	**32,478**	**33,574**	**35,103**	**36,899**	**38,631**	**40,408**
Corporate Tax							
Gross companies tax	10,566	10,645	11,171	12,032	12,729	13,323	13,968
Refunds	(238)	(207)	(202)	(204)	(224)	(222)	(231)
Non-resident withholding tax	734	504	528	615	662	731	798
Foreign-source dividend w/holding payments	(8)	2	(10)	-	-	-	-
Total corporate tax	**11,054**	**10,944**	**11,487**	**12,443**	**13,167**	**13,832**	**14,535**
Other Direct Income Tax							
Resident w/holding tax on interest income	1,667	1,629	1,433	1,409	1,557	2,009	2,721
Resident w/holding tax on dividend income	626	604	716	726	751	780	809
Total other direct income tax	**2,293**	**2,233**	**2,149**	**2,135**	**2,308**	**2,789**	**3,530**
Total direct income tax	**44,915**	**45,655**	**47,210**	**49,681**	**52,374**	**55,252**	**58,473**
Goods and Services Tax							
Gross goods and services tax	29,366	29,855	30,975	32,599	34,111	35,323	36,817
Refunds	(11,158)	(10,801)	(11,295)	(11,732)	(12,244)	(12,667)	(13,362)
Total goods and services tax	**18,208**	**19,054**	**19,680**	**20,867**	**21,867**	**22,656**	**23,455**
Other Indirect Taxation							
Road user charges	1,381	1,361	1,432	1,469	1,520	1,565	1,603
Petroleum fuels excise – domestic production	1,185	1,176	1,232	1,254	1,267	1,274	1,279
Alcohol excise – domestic production	671	666	678	702	725	750	771
Tobacco excise – domestic production	362	345	358	366	379	393	407
Petroleum fuels excise – imports[1]	691	660	696	707	715	719	721
Alcohol excise – imports[1]	276	265	270	273	282	292	300
Tobacco excise – imports[1]	1,348	1,342	1,318	1,349	1,402	1,459	1,515
Other customs duty	127	175	152	152	152	152	152
Gaming duties	220	220	230	231	232	233	234
Motor vehicle fees	214	225	240	226	229	232	235
Approved issuer levy and cheque duty	42	46	40	43	52	60	60
Energy resources levies	28	31	31	30	30	30	30
Total other indirect taxation	**6,545**	**6,512**	**6,677**	**6,802**	**6,985**	**7,159**	**7,307**
Total indirect taxation	**24,753**	**25,566**	**26,357**	**27,669**	**28,852**	**29,815**	**30,762**
Total taxation revenue	**69,668**	**71,221**	**73,567**	**77,350**	**81,226**	**85,067**	**89,235**
Other Sovereign Revenue (accrual)							
ACC levies	2,819	2,668	2,733	2,617	2,744	3,088	3,213
Fire Service levies	372	363	372	487	500	514	520
EQC levies	280	290	283	286	289	292	295
Child support and working for families penalties	278	274	272	271	270	272	276
Court fines	100	111	111	112	112	112	112
Other miscellaneous items	794	887	1,019	1,157	1,295	1,315	1,328
Total other sovereign revenue	**4,643**	**4,593**	**4,790**	**4,930**	**5,210**	**5,593**	**5,744**
Total sovereign revenue	**74,311**	**75,814**	**78,357**	**82,280**	**86,436**	**90,660**	**94,979**

1. Customs excise-equivalent duty.

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 1 (continued): Sovereign Receipts (Cash)							
Taxation Receipts (cash)							
Individuals							
Source deductions	26,851	27,664	28,295	29,485	30,917	32,497	34,137
Other persons	6,170	6,196	6,709	7,134	7,524	7,617	7,677
Refunds	(2,540)	(2,438)	(2,509)	(2,534)	(2,586)	(2,589)	(2,537)
Fringe benefit tax	506	546	527	547	570	594	617
Total individuals	**30,987**	**31,968**	**33,022**	**34,632**	**36,425**	**38,119**	**39,894**
Corporate Tax							
Gross companies tax	11,287	10,739	11,468	11,718	12,998	13,592	14,307
Refunds	(905)	(613)	(579)	(613)	(675)	(721)	(749)
Non-resident withholding tax	636	504	571	615	662	731	798
Foreign-source dividend w/holding payments	(5)	2	3	-	-	-	-
Total corporate tax	**11,013**	**10,632**	**11,463**	**11,720**	**12,985**	**13,602**	**14,356**
Other Direct Income Tax							
Resident w/holding tax on interest income	1,727	1,628	1,432	1,408	1,556	2,008	2,720
Resident w/holding tax on dividend income	620	604	716	726	751	780	809
Total other direct income tax	**2,347**	**2,232**	**2,148**	**2,134**	**2,307**	**2,788**	**3,529**
Total direct income tax	**44,347**	**44,832**	**46,633**	**48,486**	**51,717**	**54,509**	**57,779**
Goods and Services Tax							
Gross goods and services tax	28,962	29,283	30,366	32,004	33,508	34,736	36,231
Refunds	(10,973)	(10,551)	(11,045)	(11,482)	(11,994)	(12,417)	(13,112)
Total goods and services tax	**17,989**	**18,732**	**19,321**	**20,522**	**21,514**	**22,319**	**23,119**
Other Indirect Taxation							
Road user charges	1,379	1,361	1,432	1,469	1,520	1,565	1,603
Petroleum fuels excise – domestic production	1,187	1,176	1,232	1,254	1,267	1,274	1,279
Alcohol excise – domestic production	667	666	678	702	725	750	771
Tobacco excise – domestic production	370	345	358	366	379	393	407
Customs duty	2,553	2,424	2,443	2,470	2,545	2,616	2,683
Gaming duties	220	220	229	231	232	233	234
Motor vehicle fees	240	225	240	226	229	232	235
Approved issuer levy and cheque duty	47	46	40	43	52	60	60
Energy resources levies	28	31	31	30	30	30	30
Total other indirect taxation	**6,691**	**6,494**	**6,683**	**6,791**	**6,979**	**7,153**	**7,302**
Total indirect taxation	**24,680**	**25,226**	**26,004**	**27,313**	**28,493**	**29,472**	**30,421**
Total taxation receipts	**69,027**	**70,058**	**72,637**	**75,799**	**80,210**	**83,981**	**88,200**
Other Sovereign Receipts (cash)							
ACC levies	3,137	2,602	2,704	2,619	2,633	3,067	3,176
Fire Service levies	371	362	374	488	494	515	519
EQC levies	282	289	282	286	289	292	295
Child support and working for families penalties	211	212	214	212	211	212	216
Court fines	129	152	139	142	139	139	139
Other miscellaneous items	555	537	554	560	566	528	528
Total other sovereign receipts	**4,685**	**4,154**	**4,267**	**4,307**	**4,332**	**4,753**	**4,873**
Total sovereign receipts	**73,712**	**74,212**	**76,904**	**80,106**	**84,542**	**88,734**	**93,073**

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 2: Interest Revenue and Dividends							
By type							
Interest revenue	2,788	3,431	2,892	3,042	3,205	3,159	3,425
Dividends	815	836	929	930	971	1,010	1,057
Total interest revenue and dividends	**3,603**	**4,267**	**3,821**	**3,972**	**4,176**	**4,169**	**4,482**
By source							
Core Crown	2,389	3,254	2,766	2,485	2,623	2,872	3,240
Crown entities	1,484	1,411	1,463	1,407	1,440	1,474	1,498
State-owned Enterprises	997	1,114	1,111	1,260	1,337	1,132	1,138
Inter-segment eliminations	(1,267)	(1,512)	(1,519)	(1,180)	(1,224)	(1,309)	(1,394)
Total interest revenue and dividends	**3,603**	**4,267**	**3,821**	**3,972**	**4,176**	**4,169**	**4,482**
NOTE 3: Transfer Payments and Subsidies							
New Zealand superannuation	12,267	12,912	13,040	13,669	14,357	15,188	16,047
Family tax credit	1,793	1,797	1,780	1,779	1,771	1,833	1,853
Jobseeker support and emergency benefit	1,671	1,677	1,689	1,612	1,559	1,558	1,591
Supported living payment	1,523	1,515	1,529	1,532	1,552	1,580	1,597
Accommodation assistance	1,164	1,149	1,136	1,148	1,160	1,171	1,187
Sole parent support	1,153	1,199	1,166	1,130	1,141	1,174	1,201
Income related rent subsidy	755	827	850	901	989	1,050	1,105
KiwiSaver subsidies	698	738	774	798	840	884	933
Other working for families tax credits	559	645	612	606	600	606	610
Official development assistance	534	592	588	595	586	586	586
Student allowances	486	510	481	497	499	505	515
Disability assistance	377	376	378	379	381	384	386
Other social assistance benefits	1,332	1,458	1,543	1,577	1,624	1,614	1,654
Total transfer payments and subsidies	**24,312**	**25,395**	**25,566**	**26,223**	**27,059**	**28,133**	**29,265**
NOTE 4: Personnel Expenses							
By source							
Core Crown	6,666	6,899	7,018	6,911	6,926	6,900	6,873
Crown entities	12,205	12,413	12,618	12,838	12,906	12,935	13,093
State-owned Enterprises	2,921	2,855	2,856	2,908	2,997	3,075	3,154
Inter-segment eliminations	(29)	(23)	(26)	(26)	(26)	(26)	(26)
Total personnel expenses	**21,763**	**22,144**	**22,466**	**22,631**	**22,803**	**22,884**	**23,094**
NOTE 5: Depreciation and Amortisation							
By source							
Core Crown	1,529	1,586	1,609	1,700	1,762	1,818	1,848
Crown entities	1,686	1,929	1,780	1,822	1,884	1,891	1,912
State-owned Enterprises	1,660	1,685	1,727	1,761	1,853	1,874	1,874
Inter-segment eliminations	-	-	-	-	-	-	-
Total depreciation and amortisation	**4,875**	**5,200**	**5,116**	**5,283**	**5,499**	**5,583**	**5,634**
NOTE 6: Other Operating Expenses							
By source							
Core Crown	37,832	40,316	41,105	40,366	40,142	40,251	40,264
Crown entities	18,613	19,023	19,469	19,366	19,202	19,137	19,044
State-owned Enterprises	8,464	9,332	9,056	9,393	9,842	10,161	10,477
Inter-segment eliminations	(29,040)	(30,005)	(30,108)	(30,465)	(30,520)	(30,570)	(30,709)
Total other operating expenses	**35,869**	**38,666**	**39,522**	**38,660**	**38,666**	**38,979**	**39,076**

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 7: Finance Costs							
By type							
Interest on financial liabilities	4,297	4,502	4,384	4,443	4,437	4,166	4,173
Interest unwind on provisions	39	64	-	(2)	4	9	10
Total finance costs	**4,336**	**4,566**	**4,384**	**4,441**	**4,441**	**4,175**	**4,183**
By source							
Core Crown	3,590	3,682	3,632	3,501	3,475	3,456	3,518
Crown entities	215	209	109	67	68	76	86
State-owned Enterprises	1,154	1,276	1,255	1,369	1,391	1,148	1,101
Inter-segment eliminations	(623)	(601)	(612)	(496)	(493)	(505)	(522)
Total finance costs	**4,336**	**4,566**	**4,384**	**4,441**	**4,441**	**4,175**	**4,183**
NOTE 8: Insurance Expenses							
By entity							
ACC	4,166	4,251	4,682	4,643	4,643	4,985	5,330
EQC	337	34	622	130	200	200	200
Southern Response	200	(56)	(6)	(38)	(11)	-	-
Other (incl. inter-segment eliminations)	22	10	9	9	9	9	11
Total insurance expenses	**4,725**	**4,239**	**5,307**	**4,744**	**4,841**	**5,194**	**5,541**

NOTE 9: Forecast New Spending and Top-down Expense Adjustment

	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Forecast New Operating Spending					
Unallocated contingencies	368	704	808	891	866
Forecast new spending for Budget 2017	-	1,282	1,230	1,163	1,049
Forecast new spending for Budget 2018	-	-	1,500	1,500	1,500
Forecast new spending for Budget 2019	-	-	-	1,500	1,500
Forecast new spending for Budget 2020	-	-	-	-	1,500
Total forecast new operating spending	**368**	**1,986**	**3,538**	**5,054**	**6,415**
Operating top-down adjustment	**(1,025)**	**(575)**	**(500)**	**(400)**	**(400)**

Unallocated contingencies represent expenses included in Budget 2016 and previous Budgets that have yet to be allocated. Forecast new spending indicates the expected spending increases from future Budgets.

The forecast for new operating spending for Budget 2017 is $1.5 billion. Some of this allowance has been pre-committed as at the forecast finalisation date of 21 November 2016, with only the unallocated portion of the allowance included in this note.

	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m	Post-2021 Forecast $m	Total Forecast $m
Forecast New Capital Spending (annual)							
Unallocated contingencies	209	196	167	361	168	-	1,101
Forecast new spending for Budget 2017	256	654	562	151	89	-	1,712
Forecast new spending for Budget 2018	-	156	469	469	313	157	1,564
Forecast new spending for Budget 2019	-	-	156	469	469	470	1,564
Forecast new spending for Budget 2020	-	-	-	156	469	939	1,564
Forecast new spending for Budget 2021	-	-	-	-	150	1,850	2,000
Total forecast new capital spending	**465**	**1,006**	**1,354**	**1,606**	**1,658**	**3,416**	**9,505**
Forecast new capital spending (cumulative)	**465**	**1,471**	**2,825**	**4,431**	**6,089**		
Capital top-down adjustment (cumulative)	**(500)**	**(650)**	**(700)**	**(750)**	**(800)**		

Unallocated contingencies represent capital spending from Budget 2016 and previous and future Budgets that has yet to be allocated. Forecast new spending indicates the expected capital spending increases from future Budgets.

The forecast for new capital spending for Budget 2017 is $3.0 billion and for Budgets 2018 - 2020 is $2.0 billion. Some of these allowances have been allocated as at the forecast finalisation date of 21 November 2016, with only the unallocated portion of the allowance included in this note.

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 10: Net Gains and Losses on Financial Instruments							
By source							
Core Crown	299	1,971	3,209	2,286	2,398	2,647	2,871
Crown entities	1,793	294	853	292	321	347	368
State-owned Enterprises	(51)	30	79	97	59	52	51
Inter-segment eliminations	(924)	(184)	(61)	(81)	(82)	(92)	(106)
Net gains/(losses) on financial instruments	**1,117**	**2,111**	**4,080**	**2,594**	**2,696**	**2,954**	**3,184**
NOTE 11: Net Gains and Losses on Non-Financial Instruments							
By type							
Actuarial gains/(losses) on ACC outstanding claims	(5,099)	-	(798)	-	-	-	-
Actuarial gains/(losses) on GSF liability	(2,028)	-	26	-	-	-	-
Gains/(losses) on the Emissions Trading Scheme	(1,503)	-	(139)	-	-	-	-
Other	(6)	(54)	(81)	(90)	(89)	(72)	(63)
Net gains/(losses) on non-financial instruments	**(8,636)**	**(54)**	**(992)**	**(90)**	**(89)**	**(72)**	**(63)**
By source							
Core Crown	(3,558)	(3)	(145)	(10)	(10)	(10)	(10)
Crown entities	(5,093)	(51)	(844)	(80)	(79)	(62)	(60)
State-owned Enterprises	57	-	-	-	-	-	-
Inter-segment eliminations	(42)	-	(3)	-	-	-	7
Net gains/(losses) on non-financial instruments	**(8,636)**	**(54)**	**(992)**	**(90)**	**(89)**	**(72)**	**(63)**
NOTE 12: Operating Balance (excluding Minority Interests)							
By source							
Core Crown	(912)	3,217	5,353	6,480	8,528	10,115	12,252
Crown entities	(3,480)	178	(1,251)	(421)	(165)	(38)	(160)
State-owned Enterprises	720	767	643	748	741	795	800
Inter-segment eliminations	(1,697)	(1,104)	(950)	(758)	(891)	(972)	(975)
Total operating balance	**(5,369)**	**3,058**	**3,795**	**6,049**	**8,213**	**9,900**	**11,917**
NOTE 13: Financial Assets (including receivables)							
Cash and cash equivalents	15,617	15,168	13,280	13,674	14,405	15,265	16,013
Tax receivables	9,161	9,263	9,054	9,534	9,500	9,564	9,701
Trade and other receivables	7,628	8,221	7,815	7,693	8,328	8,625	8,972
Student loans (refer note 14)	8,982	9,260	9,093	9,176	9,179	9,108	8,957
Kiwibank loans and advances	16,689	17,753	17,784	18,990	20,239	21,538	22,837
Long-term deposits	4,791	4,875	3,017	2,924	2,950	2,924	2,893
IMF financial assets	1,897	2,299	1,860	1,862	1,882	1,902	1,922
Other advances	2,563	1,766	1,899	2,449	2,991	3,030	2,891
Share investments	24,217	26,617	28,435	29,927	31,494	33,208	34,950
Derivatives in gain	5,888	2,758	4,824	4,265	4,261	4,269	4,369
Other marketable securities	40,822	43,357	45,522	42,392	39,669	42,025	42,994
Total financial assets (including receivables)	**138,255**	**141,337**	**142,583**	**142,886**	**144,898**	**151,458**	**156,499**
Financial Assets by Entity							
NZDMO	22,258	23,832	22,836	18,085	14,124	14,793	14,282
Reserve Bank of New Zealand	20,079	21,487	18,665	18,248	18,723	18,943	19,178
NZS Fund	30,561	32,759	33,871	35,739	38,086	40,599	46,349
Other core Crown	23,609	22,311	23,323	23,806	23,480	23,503	20,685
Intra-segment eliminations	(8,493)	(7,575)	(8,008)	(6,474)	(6,322)	(6,117)	(6,226)
Total core Crown segment	**88,014**	**92,814**	**90,687**	**89,404**	**88,091**	**91,721**	**94,268**
ACC portfolio	37,840	38,067	40,128	40,899	41,973	43,118	44,134
EQC portfolio	1,996	670	207	142	128	131	149
Other Crown entities	10,660	8,404	9,801	8,867	9,032	9,301	9,471
Intra-segment eliminations	(3,011)	(2,246)	(2,723)	(2,229)	(2,152)	(2,236)	(2,394)
Total Crown entities segment	**47,485**	**44,895**	**47,413**	**47,679**	**48,981**	**50,314**	**51,360**
Total State-owned Enterprises segment	**24,237**	**24,167**	**24,718**	**26,552**	**28,472**	**30,452**	**32,123**
Inter-segment eliminations	(21,481)	(20,539)	(20,235)	(20,749)	(20,646)	(21,029)	(21,252)
Total financial assets (including receivables)	**138,255**	**141,337**	**142,583**	**142,886**	**144,898**	**151,458**	**156,499**

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 14: Student Loans							
Nominal value (including accrued interest)	15,340	15,709	15,693	15,990	16,205	16,359	16,458
Opening book value	8,864	9,097	8,982	9,093	9,176	9,179	9,108
Net new lending (excluding fees)	1,512	1,580	1,514	1,535	1,546	1,574	1,610
New lending - establishment fee	10	11	11	9	10	11	10
Less initial write-down to fair value	(659)	(689)	(634)	(616)	(620)	(632)	(646)
Repayments made during the year	(1,208)	(1,247)	(1,270)	(1,339)	(1,429)	(1,516)	(1,608)
Interest unwind	603	608	590	594	596	592	583
Impairment	(140)	(100)	(100)	(100)	(100)	(100)	(100)
Closing book value	**8,982**	**9,260**	**9,093**	**9,176**	**9,179**	**9,108**	**8,957**
NOTE 15: Property, Plant and Equipment							
Net Carrying Value[1]							
By class of asset							
Land	44,959	40,046	45,088	45,201	45,249	44,892	44,900
Buildings	31,490	31,070	32,915	33,267	33,354	33,622	33,654
State highways	22,347	23,686	24,217	25,939	27,596	29,152	30,507
Electricity generation assets	15,719	14,398	15,516	15,227	14,968	14,687	14,327
Electricity distribution network (cost)	4,073	4,313	4,126	4,253	4,323	4,395	4,447
Aircraft (excluding military)	3,860	4,744	4,439	4,896	5,168	5,042	4,924
Specialist military equipment	3,070	3,319	3,459	3,513	3,455	3,303	3,264
Specified cultural and heritage assets	3,035	3,007	3,030	3,027	3,029	3,032	3,037
Rail network	959	1,194	1,023	1,099	1,124	1,148	1,173
Other plant and equipment (cost)	4,987	5,323	5,074	5,197	5,207	5,134	4,857
Total property, plant and equipment	**134,499**	**131,100**	**138,887**	**141,619**	**143,473**	**144,407**	**145,090**
By source							
Core Crown	35,697	34,734	37,095	37,863	38,172	38,057	37,983
Crown entities	66,769	64,898	69,713	71,594	73,366	75,036	76,472
State-owned Enterprises	32,033	31,468	32,079	32,162	31,935	31,314	30,635
Inter-segment eliminations	-	-	-	-	-	-	-
Total property, plant and equipment	**134,499**	**131,100**	**138,887**	**141,619**	**143,473**	**144,407**	**145,090**
Land breakdown by usage							
Housing stock	15,632	13,066	15,690	15,652	15,568	15,391	15,339
State highway corridor land	9,757	9,343	9,757	9,757	9,757	9,757	9,757
Conservation estate	5,691	5,515	5,694	5,705	5,715	5,726	5,736
Rail network corridor	3,354	3,316	3,324	3,312	3,304	3,302	3,299
Schools	4,770	3,433	4,789	4,825	4,843	4,855	4,885
Commercial (SOEs) excluding Rail	1,306	1,675	1,222	1,243	1,254	1,282	1,312
Other	4,449	3,698	4,612	4,707	4,808	4,579	4,572
Total land	**44,959**	**40,046**	**45,088**	**45,201**	**45,249**	**44,892**	**44,900**

1. Using a revaluation methodology unless otherwise stated.

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 15: Property, Plant and Equipment							
Schedule of Movements							
Cost or Valuation							
Opening balance	138,681	145,209	149,806	157,520	164,705	171,207	176,862
Additions	7,608	9,421	9,602	8,075	7,403	6,766	6,310
Disposals	(1,747)	(1,722)	(1,886)	(876)	(878)	(1,124)	(873)
Net revaluations	6,371	-	14	-	-	-	-
Other[1]	(1,107)	(106)	(16)	(14)	(23)	13	15
Total cost or valuation	**149,806**	**152,802**	**157,520**	**164,705**	**171,207**	**176,862**	**182,314**
Accumulated Depreciation and Impairment							
Opening balance	14,123	18,208	15,307	18,633	23,086	27,734	32,455
Eliminated on disposal	(399)	(962)	(1,124)	(115)	(106)	(105)	(112)
Eliminated on revaluation	(2,475)	-	-	-	-	-	-
Impairment losses charged to operating balance	288	-	-	-	-	-	-
Depreciation expense	3,912	4,456	4,445	4,565	4,754	4,822	4,879
Other[1]	(142)	-	5	3	-	4	2
Total accumulated depreciation and impairment	**15,307**	**21,702**	**18,633**	**23,086**	**27,734**	**32,455**	**37,224**
Total property, plant and equipment	**134,499**	**131,100**	**138,887**	**141,619**	**143,473**	**144,407**	**145,090**

1. Other mainly includes transfers to/from other asset categories.

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 16: Intangible Assets and Goodwill							
By type							
Goodwill	602	600	602	602	602	602	602
Other intangible assets	2,594	3,043	2,866	3,042	3,132	3,103	2,999
Total intangible assets and goodwill	**3,196**	**3,643**	**3,468**	**3,644**	**3,734**	**3,705**	**3,601**
By source							
Core Crown	1,351	1,601	1,542	1,646	1,734	1,740	1,665
Crown entities	544	690	603	673	671	635	597
State-owned Enterprises	1,301	1,352	1,323	1,325	1,329	1,330	1,339
Inter-segment eliminations	-	-	-	-	-	-	-
Total intangible assets and goodwill	**3,196**	**3,643**	**3,468**	**3,644**	**3,734**	**3,705**	**3,601**

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 17: NZ Superannuation Fund							
Revenue	752	800	783	852	915	983	1,056
Less current tax expense	512	610	870	683	732	785	841
Less other expenses	138	170	158	181	191	202	214
Add gains/(losses)	(76)	1,927	3,166	2,185	2,333	2,492	2,662
Operating balance	**26**	**1,947**	**2,921**	**2,173**	**2,325**	**2,488**	**2,663**
Opening net worth	29,522	29,042	29,527	32,454	34,648	36,999	39,516
Gross contribution from the Crown	-	-	-	-	-	-	3,058
Operating balance	26	1,947	2,921	2,173	2,325	2,488	2,663
Other movements in reserves	(21)	17	6	21	26	29	34
Closing net worth	**29,527**	**31,006**	**32,454**	**34,648**	**36,999**	**39,516**	**45,271**
Comprising:							
Financial assets	30,561	32,759	33,871	35,739	38,086	40,599	46,349
Financial liabilities	(2,580)	(2,827)	(3,003)	(2,737)	(2,792)	(2,851)	(2,914)
Net other assets	1,546	1,074	1,586	1,646	1,705	1,768	1,836
Closing net worth	**29,527**	**31,006**	**32,454**	**34,648**	**36,999**	**39,516**	**45,271**
NOTE 18: Payables							
By type							
Accounts payable	7,508	7,409	8,881	8,177	8,581	8,241	7,949
Taxes repayable	4,521	4,873	4,560	4,564	4,586	4,609	4,632
Total payables	**12,029**	**12,282**	**13,441**	**12,741**	**13,167**	**12,850**	**12,581**
By source							
Core Crown	8,158	8,804	8,928	8,178	8,289	8,108	7,965
Crown entities	5,734	4,902	6,241	6,129	6,247	6,127	5,980
State-owned Enterprises	5,128	5,020	5,350	5,481	5,587	5,638	5,766
Inter-segment eliminations	(6,991)	(6,444)	(7,078)	(7,047)	(6,956)	(7,023)	(7,130)
Total payables	**12,029**	**12,282**	**13,441**	**12,741**	**13,167**	**12,850**	**12,581**

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 19: Insurance Liabilities							
By entity							
ACC	39,106	38,250	41,478	42,970	44,385	45,822	47,338
EQC	2,485	750	795	269	221	191	166
Southern Response	807	215	304	49	-	-	-
Other (incl. inter-segment eliminations)	(272)	66	(273)	(272)	52	52	56
Total insurance liabilities	**42,126**	**39,281**	**42,304**	**43,016**	**44,658**	**46,065**	**47,560**

ACC liability

Calculation information

PwC NZ has prepared an independent actuarial estimate of the ACC outstanding claims liability as at 30 June 2016. This estimate includes the expected future payments relating to accidents that occurred prior to balance date (whether or not the associated claims have been reported to, or accepted by, ACC) and also the expected future administrative expenses of managing these claims. The assumptions underpinning this valuation form the basis of the five-year forecast of the outstanding claims liability.

The key economic variables that impact on changes to the valuation are the long-term Labour Cost Index (LCI), average weekly earnings and the discount rate. Discount rates were derived from the yield curve for New Zealand Government bonds. For these forecast statements, the claims liability has been updated for the latest discount rates as at 30 September 2016. The equivalent single effective discount rate, taking into account ACC's projected future cash flow patterns, is 3.78% and allows for a long-term discount rate of 4.75% from 2054.

Other key variables in each valuation are the forecast increases in claim costs over and above the economic variables above, and the assumed rate at which long-term claimants will leave the scheme over the period. This assessment is largely based on scheme history.

Presentation approach

ACC has available to it a portfolio of assets that offset the claims liability. The assets below (less cross-holdings of NZ Government stock) are included as assets in the Statement of Financial Position.

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Gross ACC Liability							
Opening gross liability	32,518	36,976	39,106	41,478	42,970	44,385	45,822
Net change	6,588	1,274	2,372	1,492	1,415	1,437	1,516
Closing gross liability	**39,106**	**38,250**	**41,478**	**42,970**	**44,385**	**45,822**	**47,338**
Less Net Assets Available to ACC							
Opening net asset value	34,021	36,375	37,241	38,970	39,957	41,115	42,328
Net change	3,220	1,139	1,729	987	1,158	1,213	1,078
Closing net asset value	**37,241**	**37,514**	**38,970**	**39,957**	**41,115**	**42,328**	**43,406**
Net ACC Reserves (Net Liability)							
Opening reserves position	1,503	(601)	(1,865)	(2,508)	(3,013)	(3,270)	(3,494)
Net change	(3,368)	(135)	(643)	(505)	(257)	(224)	(438)
Closing reserves position (net liability)/net asset	**(1,865)**	**(736)**	**(2,508)**	**(3,013)**	**(3,270)**	**(3,494)**	**(3,932)**

Notes to the Forecast Financial Statements

NOTE 19: Insurance Liabilities (continued)

EQC liability

Calculation information

Melville Jessup Weaver prepared an independent actuarial estimate of the EQC outstanding claims liability at 30 June 2016 by estimating the projected ultimate claims costs then deducting the payments made in relation to those claims on or before that date. Each component of the claims liability was split into separate groups depending upon the Canterbury earthquake event grouping or other "business as usual" claims. These event groups were further split into sub-claim valuation groups being land claims, building claims or contents claims. The assumptions underpinning the 30 June 2016 valuation form the basis of the five-year forecast of the outstanding claims liability.

Critical assumptions used in projecting the ultimate costs include apportionment of costs across earthquake events, the profile of claims settlement, claims inflation rate per annum, risk margins and claims handling costs.

There is a high level of uncertainty associated with the valuation of the outstanding claims liability, reinsurance recoveries and unexpired risk liability. Some of the key uncertainties are: a complex land claims environment, complexity of the remaining dwelling claims and the expectation that some claims will need to be reopened to rectify outstanding issues.

The actual claims outcome may differ from the one currently forecast.

Presentation approach

EQC reinsurance recoveries are included in receivables in the Statement of Financial Position.

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
EQC Liability							
Opening gross liability	2,965	1,908	2,485	795	269	221	191
Net change	(480)	(1,158)	(1,690)	(526)	(48)	(30)	(25)
Closing gross liability	**2,485**	**750**	**795**	**269**	**221**	**191**	**166**
Less Reinsurance Receivable							
Opening reinsurance receivable	962	390	515	19	1	-	-
Net change	(447)	(245)	(496)	(18)	(1)	-	-
Closing reinsurance receivable	**515**	**145**	**19**	**1**	**-**	**-**	**-**
Net EQC Liability							
Opening net position	(2,003)	(1,518)	(1,970)	(776)	(268)	(221)	(191)
Net change	33	913	1,194	508	47	30	25
Closing net position (net liability)	**(1,970)**	**(605)**	**(776)**	**(268)**	**(221)**	**(191)**	**(166)**

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 20: Retirement Plan Liabilities							
Government Superannuation Fund	12,441	10,792	11,910	11,349	10,768	10,177	9,585
Other funds	1	(10)	1	1	1	1	1
Total retirement plan liabilities	**12,442**	**10,782**	**11,911**	**11,350**	**10,769**	**10,178**	**9,586**

The net liability of the Government Superannuation Fund (GSF) was calculated by GSF's actuary as at 30 September 2016. The liability arises from closed schemes for past and present public sector employees as set out in the Government Superannuation Fund Act 1956. A Projected Unit Credit method was used to calculate the liability as at 30 September 2016, based on membership data as at 30 June 2016 with adjustments for cash flows to 30 September 2016. The funding method requires the benefits payable from GSF in respect of past service to be calculated and then discounted back to the valuation date.

For these Forecast Financial Statements, the net GSF liability was updated for the latest discount rates derived from the market yield curve for New Zealand Government bonds as at 30 September 2016.

Other principal long-term financial assumptions were an inflation rate, as measured by the Consumers Price Index (CPI), of 1.46% for the 21 years to 30 June 2037, then increasing gradually each year to 2.0% in the year ended 30 June 2054 and remaining at 2.0% p.a. for all years after that. In addition an annual salary growth rate, before any promotional effects, of 2.5% (unchanged from 30 June 2016).

The 2016/17 projected decrease in the net GSF liability is $531 million, reflecting a decrease in the GSF liability of $446 million and an increase in the GSF net assets of $85 million.

The decrease in the GSF liability of $446 million includes an actuarial loss between 1 July 2016 and 30 September 2016, of $45 million, owing to movements in the discount rates and partly offset by the impact of movements in CPI rates.
The remaining $491 million reduction is owing to the current service cost and interest unwind (increases the liability) offset by the (lower than expected) benefits to members (reduced the liability).

The increase in the value of the net assets of GSF of $85 million includes a gain of $71 million reflecting the updated market value of assets at 30 September 2016. The balance of $14 million is the total of the expected investment returns and contributions received, offset by the benefits paid to members.

The changes in the projected net GSF liability from 2016/17 onwards reflect the net of the expected current service cost, interest cost, investment returns and contributions.

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
GSF Liability							
Opening GSF liability	14,932	15,249	16,406	15,960	15,419	14,857	14,281
Net projected change	1,474	(482)	(446)	(541)	(562)	(576)	(579)
Closing GSF liability	**16,406**	**14,767**	**15,960**	**15,419**	**14,857**	**14,281**	**13,702**
Less Net Assets Available to GSF							
Opening net asset value	4,087	3,952	3,965	4,050	4,070	4,089	4,104
Investment valuation changes	38	212	265	198	199	200	201
Contribution and other income less pension payments	(160)	(189)	(180)	(178)	(180)	(185)	(188)
Closing net asset value	**3,965**	**3,975**	**4,050**	**4,070**	**4,089**	**4,104**	**4,117**
Net GSF Liability							
Opening unfunded liability	10,845	11,297	12,441	11,910	11,349	10,768	10,177
Net projected change	1,596	(505)	(531)	(561)	(581)	(591)	(592)
Closing unfunded liability	**12,441**	**10,792**	**11,910**	**11,349**	**10,768**	**10,177**	**9,585**

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 21: Provisions							
Provision for employee entitlements	3,604	3,492	3,519	3,548	3,569	3,562	3,657
Provision for ETS credits	2,250	1,169	2,272	2,186	1,911	1,606	1,294
Provision for National Provident Fund guarantee	918	797	863	806	748	690	632
Other provisions	1,940	1,461	1,762	1,625	1,561	1,643	1,901
Total provisions	**8,712**	**6,919**	**8,416**	**8,165**	**7,789**	**7,501**	**7,484**
By source							
Core Crown	6,633	4,174	6,237	5,782	5,275	4,737	4,497
Crown entities	2,139	2,118	2,158	2,179	2,196	2,219	2,225
State-owned Enterprises	1,271	934	911	929	1,036	1,134	1,224
Inter-segment eliminations	(1,331)	(307)	(890)	(725)	(718)	(589)	(462)
Total provisions	**8,712**	**6,919**	**8,416**	**8,165**	**7,789**	**7,501**	**7,484**

Provision for ETS credits

The Emissions Trading Scheme (ETS) was established to assist New Zealand in meeting its international climate change obligations and to reduce New Zealand's net emissions of greenhouse gases to below business-as-usual levels. The ETS creates a limited number of tradable New Zealand Units (NZUs) which the Government can allocate.

The allocation of NZUs creates a provision if allocated for free; the provision is reduced, and revenue recognised, as NZUs are surrendered to the Crown by emitters.

The prices for NZUs used to calculate the ETS provision are assumed to remain constant over the forecast period and are based on market prices during the last week of September 2016.

The ETS impact on the fiscal forecast is as follows:

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
Revenue	271	350	464	596	728	786	799
Expenses	(163)	(216)	(347)	(510)	(453)	(481)	(487)
Gains/(losses)	(1,503)	-	(139)	-	-	-	-
Operating balance	**(1,395)**	**134**	**(22)**	**86**	**275**	**305**	**312**

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 22: Changes in Net Worth							
Taxpayers' funds	13,932	20,087	17,957	24,150	32,554	42,846	55,003
Property, plant and equipment revaluation reserve	75,626	66,623	75,239	75,110	74,953	74,612	74,425
Investment revaluation reserve	86	108	94	102	110	119	129
Intangible asset reserve	8	-	8	8	8	8	8
Cash flow hedge reserve	(227)	(89)	(198)	(199)	(194)	(182)	(173)
Foreign currency translation reserve	(59)	(88)	(66)	(66)	(66)	(66)	(66)
Net worth attributable to minority interests	6,155	5,784	5,892	5,848	5,782	5,666	5,493
Total net worth	**95,521**	**92,425**	**98,926**	**104,953**	**113,147**	**123,003**	**134,819**
Taxpayers' funds							
Opening taxpayers' funds	19,354	16,807	13,932	17,957	24,150	32,554	42,846
Operating balance excluding minority interest	(5,369)	3,058	3,795	6,049	8,213	9,900	11,917
Transfers from/(to) other reserves	(106)	222	234	157	199	402	253
Other movements	53	-	(4)	(13)	(8)	(10)	(13)
Closing taxpayers' funds	**13,932**	**20,087**	**17,957**	**24,150**	**32,554**	**42,846**	**55,003**
Property, Plant and Equipment Revaluation Reserve							
Opening revaluation reserve	67,107	66,831	75,626	75,239	75,110	74,953	74,612
Net revaluations	8,413	-	(153)	-	-	-	-
Transfers from/(to) other reserves	106	(208)	(234)	(129)	(157)	(341)	(187)
Closing property, plant and equipment revaluation reserve	**75,626**	**66,623**	**75,239**	**75,110**	**74,953**	**74,612**	**74,425**

Notes to the Forecast Financial Statements

	2016 Actual $m	2017 Previous Budget $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m
NOTE 23: Core Crown Residual Cash							
Core Crown Cash Flows from Operations							
Tax receipts	69,750	71,177	74,194	77,131	81,626	85,459	89,569
Other sovereign receipts	835	846	836	843	845	809	814
Interest, profits and dividends	1,699	2,030	1,878	1,375	1,384	1,616	1,962
Sale of goods and services and other receipts	2,026	2,313	2,037	2,126	2,469	2,156	2,154
Transfer payments and subsidies	(24,338)	(25,384)	(25,579)	(26,285)	(27,097)	(28,497)	(29,647)
Personnel and operating costs	(43,103)	(45,728)	(45,971)	(45,999)	(45,338)	(45,449)	(44,980)
Interest payments	(3,604)	(3,819)	(3,654)	(3,538)	(3,494)	(3,202)	(3,219)
Forecast for future new operating spending	-	(534)	(368)	(1,986)	(3,538)	(5,054)	(6,415)
Top-down expense adjustment	-	1,025	1,025	575	500	400	400
Net core Crown operating cash flows	**3,265**	**1,926**	**4,398**	**4,242**	**7,357**	**8,238**	**10,638**
Core Crown Capital Cash Flows							
Net purchase of physical assets	(1,971)	(3,430)	(3,209)	(2,316)	(1,853)	(1,533)	(1,626)
Net increase in advances	(468)	(616)	(589)	(1,066)	(524)	7	157
Net purchase of investments	(2,148)	(2,080)	(2,827)	(2,085)	(2,237)	(2,126)	(1,919)
Contribution to NZS Fund	-	-	-	-	-	-	(3,058)
Forecast for future new capital spending	-	(587)	(465)	(1,006)	(1,354)	(1,606)	(1,658)
Top-down capital adjustment	-	625	500	150	50	50	50
Net core Crown capital cash flows	**(4,587)**	**(6,088)**	**(6,590)**	**(6,323)**	**(5,918)**	**(5,208)**	**(8,054)**
Residual cash (deficit)/surplus	**(1,322)**	**(4,162)**	**(2,192)**	**(2,081)**	**1,439**	**3,030**	**2,584**
The residual cash (deficit)/surplus is funded or invested as follows:							
Debt Programme Cash Flows							
Market:							
Issue of government bonds	8,079	7,893	8,278	6,732	6,322	5,325	5,324
Repayment of government bonds	(1,779)	-	(2,371)	(9,062)	(11,455)	(7,290)	(11,059)
Net issue/(repayment) of short-term borrowing[1]	(3,513)	400	360	(100)	-	-	-
Total market debt cash flows	2,787	8,293	6,267	(2,430)	(5,133)	(1,965)	(5,735)
Non-market:							
Repayment of government bonds	(139)	(665)	(835)	-	-	-	-
Net issue/(repayment) of short-term borrowing	(100)	-	-	-	-	-	-
Total non-market debt cash flows	(239)	(665)	(835)	-	-	-	-
Total debt programme cash flows	**2,548**	**7,628**	**5,432**	**(2,430)**	**(5,133)**	**(1,965)**	**(5,735)**
Other Borrowing Cash Flows							
Net (repayment)/issue of other New Zealand dollar borrowing	(3,546)	559	1,589	772	(4)	(35)	(39)
Net (repayment)/issue of foreign currency borrowing	3,176	(590)	(2,275)	(720)	9	27	20
Total other borrowing cash flows	**(370)**	**(31)**	**(686)**	**52**	**5**	**(8)**	**(19)**
Investing Cash Flows							
Net sale/(purchase) of marketable securities and deposits	685	(3,603)	(3,790)	4,292	3,515	(1,235)	2,986
Issues of circulating currency	378	175	30	170	175	180	186
Decrease/(increase) in cash	(1,919)	(7)	1,206	(3)	(1)	(2)	(2)
Total investing cash flows	**(856)**	**(3,435)**	**(2,554)**	**4,459**	**3,689**	**(1,057)**	**3,170**
Residual cash deficit/(surplus) funding/(investing)	**1,322**	**4,162**	**2,192**	**2,081**	**(1,439)**	**(3,030)**	**(2,584)**

1. Short-term borrowing consists of Treasury Bills and may include Euro-Commercial Paper.

Notes to the Forecast Financial Statements

NOTE 24: Net Canterbury earthquake expenses (operating and capital)

These net earthquake costs are the latest estimates of the net impact on the Crown of the Canterbury earthquakes in 2010 and 2011. These estimates reflect the known costs under current policy settings. They do not include future decisions the Government may take regarding the Canterbury rebuild and do not include any costs relating to the recent North Canterbury earthquakes).

The forecasts assume that any additional costs to the Crown will be met within budget allowances.

	2011-16 Actual $m	2017 Forecast $m	2018 Forecast $m	2019 Forecast $m	2020 Forecast $m	2021 Forecast $m	Outside forecast period $m	*Total Half Year Update $m*	*Total Budget Update $m*
Local infrastructure	1,637	195	-	-	-	-	-	1,832	*1,853*
Crown assets[1]	969	599	409	185	99	58	98	2,417	*2,382*
Land zoning	1,087	134	-	-	-	-	-	1,221	*1,144*
Christchurch central city rebuild[2]	920	276	222	127	90	(12)	-	1,623	*1,562*
Welfare support	301	3	2	-	-	-	-	306	*306*
Southern Response support package	1,111	14	(22)	(4)	-	-	-	1,099	*987*
Other costs	842	80	49	75	80	16	-	1,142	*1,123*
Core Crown Canterbury earthquake recovery costs	**6,867**	**1,301**	**660**	**383**	**269**	**62**	**98**	**9,640**	***9,357***
EQC (net of reinsurance proceeds)	7,334	(261)	(92)	-	-	-	-	6,981	*6,927*
Other SOE and Crown entities	99	245	181	110	117	44	41	837	*897*
Total Crown	**14,300**	**1,285**	**749**	**493**	**386**	**106**	**139**	**17,458**	***17,181***
Operating and Capital expenses									
Operating expenditure (OBEGAL)	12,084	331	74	124	124	56	6	12,799	*12,660*
Capital expenditure	2,216	954	675	369	262	50	133	4,659	*4,521*
Total Crown	**14,300**	**1,285**	**749**	**493**	**386**	**106**	**139**	**17,458**	***17,181***
Total cash payments[3]	**11,570**	**3,038**	**1,131**	**547**	**439**	**135**	**140**	**17,000**	***16,593***

Notes: 1. Crown assets includes capital expenditure on Canterbury hospitals, schools, Tertiary Education Institutions, housing and the Justice and Emergency Services Precinct.
2. Central city rebuild costs include land acquisition and are net of expected recoveries and contributions from third parties.
3. Some expenses are non-cash (eg, asset write-offs and impairments) and therefore do not have a cash element to them.

Forecast Statement of Segments

	Core Crown 2016 Actual $m	Crown entities 2016 Actual $m	State-owned Enterprises 2016 Actual $m	Inter-segment eliminations 2016 Actual $m	Total Crown 2016 Actual $m
Statement of Financial Performance for the year ended 30 June 2016					
Revenue					
Taxation revenue	70,445	-	-	(777)	69,668
Other sovereign revenue	1,116	4,712	-	(1,185)	4,643
Revenue from core Crown funding	-	26,197	113	(26,310)	-
Sales of goods and services	1,453	1,938	13,538	(565)	16,364
Interest revenue and dividends	2,389	1,484	997	(1,267)	3,603
Other revenue	718	2,807	729	(373)	3,881
Total revenue (excluding gains)	**76,121**	**37,138**	**15,377**	**(30,477)**	**98,159**
Expenses					
Social assistance and official development assistance	24,312	-	-	-	24,312
Personnel expenses	6,666	12,205	2,921	(29)	21,763
Other operating expenses	39,361	20,299	10,124	(29,040)	40,744
Interest expenses	3,590	215	1,154	(623)	4,336
Insurance expenses	-	4,705	9	11	4,725
Forecast for future new spending and top-down adjustment	-	-	-	-	-
Total expenses (excluding losses)	**73,929**	**37,424**	**14,208**	**(29,681)**	**95,880**
Minority interests share of operating balance before gains/(losses)	-	14	(474)	12	(448)
Operating balance before gains/(losses)	**2,192**	**(272)**	**695**	**(784)**	**1,831**
Total gains/(losses)	(3,259)	(3,300)	6	(954)	(7,507)
Net surplus/(deficit) from associates and joint ventures	155	92	19	41	307
Operating balance	**(912)**	**(3,480)**	**720**	**(1,697)**	**(5,369)**
Expenses by functional classification					
Social security and welfare	*24,081*	*5,360*	-	*(540)*	*28,901*
Health	*15,626*	*13,347*	-	*(13,813)*	*15,160*
Education	*13,158*	*10,160*	-	*(9,509)*	*13,809*
Transport and communications	*2,178*	*2,658*	*7,059*	*(2,495)*	*9,400*
Other	*15,296*	*5,684*	*5,995*	*(2,701)*	*24,274*
Finance costs	*3,590*	*215*	*1,154*	*(623)*	*4,336*
Forecast for future new spending and top-down adjustment	-	-	-	-	-
Total expenses (excluding losses)	***73,929***	***37,424***	***14,208***	***(29,681)***	***95,880***
Statement of Financial Position as at 30 June 2016					
Assets					
Cash and cash equivalents	11,859	2,774	1,516	(532)	15,617
Receivables	12,242	5,757	1,754	(2,964)	16,789
Other financial assets	63,913	38,954	20,967	(17,985)	105,849
Property, plant and equipment	35,697	66,770	32,033	(1)	134,499
Equity accounted investments	38,376	10,819	228	(36,718)	12,705
Intangible assets and goodwill	1,351	544	1,301	-	3,196
Inventory and other assets	1,732	1,251	1,120	(79)	4,024
Forecast for new capital spending and top-down adjustment	-	-	-	-	-
Total assets	**165,170**	**126,869**	**58,919**	**(58,279)**	**292,679**
Liabilities					
Borrowings	95,036	5,961	29,813	(16,854)	113,956
Other liabilities	33,515	50,615	7,848	(8,776)	83,202
Total liabilities	**128,551**	**56,576**	**37,661**	**(25,630)**	**197,158**
Total assets less total liabilities	**36,619**	**70,293**	**21,258**	**(32,649)**	**95,521**
Net worth					
Taxpayers' funds	15,915	30,966	3,890	(36,839)	13,932
Reserves	20,704	39,179	11,022	4,529	75,434
Net worth attributable to minority interests	-	148	6,346	(339)	6,155
Total net worth	**36,619**	**70,293**	**21,258**	**(32,649)**	**95,521**

Forecast Statement of Segments (continued)

	Core Crown 2017 Forecast $m	Crown entities 2017 Forecast $m	State-owned Enterprises 2017 Forecast $m	Inter-segment eliminations 2017 Forecast $m	Total Crown 2017 Forecast $m
Statement of Financial Performance for the year ended 30 June 2017					
Revenue					
Taxation revenue	74,224	-	-	(657)	73,567
Other sovereign revenue	1,343	4,771	-	(1,324)	4,790
Revenue from core Crown funding	-	27,242	114	(27,356)	-
Sales of goods and services	1,595	1,995	13,884	(569)	16,905
Interest revenue and dividends	2,766	1,463	1,111	(1,519)	3,821
Other revenue	527	2,413	843	(234)	3,549
Total revenue (excluding gains)	**80,455**	**37,884**	**15,952**	**(31,659)**	**102,632**
Expenses					
Social assistance and official development assistance	25,566	-	-	-	25,566
Personnel expenses	7,018	12,618	2,856	(26)	22,466
Other operating expenses	42,714	21,249	10,783	(30,108)	44,638
Interest expenses	3,632	109	1,255	(612)	4,384
Insurance expenses	3	5,300	6	(2)	5,307
Forecast for future new spending and top-down adjustment	(657)	-	-	-	(657)
Total expenses (excluding losses)	**78,276**	**39,276**	**14,900**	**(30,748)**	**101,704**
Minority interests share of operating balance before gains/(losses)	-	(2)	(478)	25	(455)
Operating balance before gains/(losses)	**2,179**	**(1,394)**	**574**	**(886)**	**473**
Total gains/(losses)	3,064	9	65	(64)	3,074
Net surplus/(deficit) from associates and joint ventures	110	134	4	-	248
Operating balance	**5,353**	**(1,251)**	**643**	**(950)**	**3,795**
Expenses by functional classification					
Social security and welfare	*25,264*	*5,894*	-	*(548)*	*30,610*
Health	*16,490*	*13,879*	-	*(14,380)*	*15,989*
Education	*13,526*	*10,323*	-	*(9,539)*	*14,310*
Transport and communications	*2,266*	*2,794*	*7,176*	*(2,574)*	*9,662*
Other	*17,755*	*6,277*	*6,469*	*(3,095)*	*27,406*
Finance costs	*3,632*	*109*	*1,255*	*(612)*	*4,384*
Forecast for future new spending and top-down adjustment	*(657)*	-	-	-	*(657)*
Total expenses (excluding losses)	***78,276***	***39,276***	***14,900***	***(30,748)***	***101,704***
Statement of Financial Position as at 30 June 2017					
Assets					
Cash and cash equivalents	10,201	2,308	1,233	(462)	13,280
Receivables	12,309	5,369	1,829	(2,638)	16,869
Other financial assets	68,177	39,736	21,656	(17,135)	112,434
Property, plant and equipment	37,095	69,713	32,079	-	138,887
Equity accounted investments	43,481	11,009	220	(41,617)	13,093
Intangible assets and goodwill	1,542	603	1,323	-	3,468
Inventory and other assets	1,617	748	948	(26)	3,287
Forecast for new capital spending and top-down adjustment	(35)	-	-	-	(35)
Total assets	**174,387**	**129,486**	**59,288**	**(61,878)**	**301,283**
Liabilities					
Borrowings	99,192	4,679	30,705	(16,171)	118,405
Other liabilities	33,345	51,244	7,713	(8,350)	83,952
Total liabilities	**132,537**	**55,923**	**38,418**	**(24,521)**	**202,357**
Total assets less total liabilities	**41,850**	**73,563**	**20,870**	**(37,357)**	**98,926**
Net worth					
Taxpayers' funds	21,261	34,626	3,643	(41,573)	17,957
Reserves	20,589	38,937	11,020	4,531	75,077
Net worth attributable to minority interests	-	-	6,207	(315)	5,892
Total net worth	**41,850**	**73,563**	**20,870**	**(37,357)**	**98,926**

Forecast Statement of Segments (continued)

	Core Crown 2018 Forecast $m	Crown entities 2018 Forecast $m	State-owned Enterprises 2018 Forecast $m	Inter-segment eliminations 2018 Forecast $m	Total Crown 2018 Forecast $m
Statement of Financial Performance for the year ended 30 June 2018					
Revenue					
Taxation revenue	78,028	-	-	(678)	77,350
Other sovereign revenue	1,475	4,843	-	(1,388)	4,930
Revenue from core Crown funding	-	27,429	106	(27,535)	-
Sales of goods and services	1,617	1,987	14,336	(573)	17,367
Interest revenue and dividends	2,485	1,407	1,260	(1,180)	3,972
Other revenue	614	2,409	866	(333)	3,556
Total revenue (excluding gains)	**84,219**	**38,075**	**16,568**	**(31,687)**	**107,175**
Expenses					
Social assistance and official development assistance	26,223	-	-	-	26,223
Personnel expenses	6,911	12,838	2,908	(26)	22,631
Other operating expenses	42,066	21,188	11,154	(30,465)	43,943
Interest expenses	3,501	67	1,369	(496)	4,441
Insurance expenses	-	4,738	6	-	4,744
Forecast for future new spending and top-down adjustment	1,411	-	-	-	1,411
Total expenses (excluding losses)	**80,112**	**38,831**	**15,437**	**(30,987)**	**103,393**
Minority interests share of operating balance before gains/(losses)	-	-	(465)	23	(442)
Operating balance before gains/(losses)	**4,107**	**(756)**	**666**	**(677)**	**3,340**
Total gains/(losses)	2,276	212	76	(81)	2,483
Net surplus/(deficit) from associates and joint ventures	97	123	6	-	226
Operating balance	**6,480**	**(421)**	**748**	**(758)**	**6,049**
Expenses by functional classification					
Social security and welfare	*25,930*	*5,875*	-	*(563)*	*31,242*
Health	*16,332*	*13,858*	-	*(14,519)*	*15,671*
Education	*13,654*	*10,425*	-	*(9,673)*	*14,406*
Transport and communications	*2,267*	*2,645*	*7,384*	*(2,575)*	*9,721*
Other	*17,017*	*5,961*	*6,684*	*(3,161)*	*26,501*
Finance costs	*3,501*	*67*	*1,369*	*(496)*	*4,441*
Forecast for future new spending and top-down adjustment	*1,411*	-	-	-	*1,411*
Total expenses (excluding losses)	***80,112***	***38,831***	***15,437***	***(30,987)***	***103,393***
Statement of Financial Position as at 30 June 2018					
Assets					
Cash and cash equivalents	10,306	2,250	1,606	(488)	13,674
Receivables	12,788	5,030	1,886	(2,477)	17,227
Other financial assets	66,310	40,399	23,060	(17,784)	111,985
Property, plant and equipment	37,863	71,594	32,162	-	141,619
Equity accounted investments	45,298	11,179	215	(43,336)	13,356
Intangible assets and goodwill	1,646	673	1,325	-	3,644
Inventory and other assets	1,601	724	907	(26)	3,206
Forecast for new capital spending and top-down adjustment	821	-	-	-	821
Total assets	**176,633**	**131,849**	**61,161**	**(64,111)**	**305,532**
Liabilities					
Borrowings	96,550	5,086	32,482	(16,878)	117,240
Other liabilities	31,723	51,867	7,901	(8,152)	83,339
Total liabilities	**128,273**	**56,953**	**40,383**	**(25,030)**	**200,579**
Total assets less total liabilities	**48,360**	**74,896**	**20,778**	**(39,081)**	**104,953**
Net worth					
Taxpayers' funds	27,741	36,117	3,618	(43,326)	24,150
Reserves	20,619	38,779	11,002	4,555	74,955
Net worth attributable to minority interests	-	-	6,158	(310)	5,848
Total net worth	**48,360**	**74,896**	**20,778**	**(39,081)**	**104,953**

Forecast Statement of Segments (continued)

	Core Crown 2019 Forecast $m	Crown entities 2019 Forecast $m	State-owned Enterprises 2019 Forecast $m	Inter-segment eliminations 2019 Forecast $m	Total Crown 2019 Forecast $m
Statement of Financial Performance for the year ended 30 June 2019					
Revenue					
Taxation revenue	81,970	-	-	(744)	81,226
Other sovereign revenue	1,614	5,081	-	(1,485)	5,210
Revenue from core Crown funding	-	27,389	106	(27,495)	-
Sales of goods and services	1,653	2,020	14,909	(581)	18,001
Interest revenue and dividends	2,623	1,440	1,337	(1,224)	4,176
Other revenue	585	2,414	907	(342)	3,564
Total revenue (excluding gains)	**88,445**	**38,344**	**17,259**	**(31,871)**	**112,177**
Expenses					
Social assistance and official development assistance	27,059	-	-	-	27,059
Personnel expenses	6,926	12,906	2,997	(26)	22,803
Other operating expenses	41,904	21,086	11,695	(30,520)	44,165
Interest expenses	3,475	68	1,391	(493)	4,441
Insurance expenses	5	4,834	6	(4)	4,841
Forecast for future new spending and top-down adjustment	3,038	-	-	-	3,038
Total expenses (excluding losses)	**82,407**	**38,894**	**16,089**	**(31,043)**	**106,347**
Minority interests share of operating balance before gains/(losses)	-	-	(487)	23	(464)
Operating balance before gains/(losses)	**6,038**	**(550)**	**683**	**(805)**	**5,366**
Total gains/(losses)	2,388	242	51	(82)	2,599
Net surplus/(deficit) from associates and joint ventures	102	143	7	(4)	248
Operating balance	**8,528**	**(165)**	**741**	**(891)**	**8,213**
Expenses by functional classification					
Social security and welfare	*26,628*	*5,893*	*-*	*(580)*	*31,941*
Health	*16,414*	*13,874*	*-*	*(14,628)*	*15,660*
Education	*13,733*	*10,439*	*-*	*(9,678)*	*14,494*
Transport and communications	*2,275*	*2,603*	*7,734*	*(2,584)*	*10,028*
Other	*16,844*	*6,017*	*6,964*	*(3,080)*	*26,745*
Finance costs	*3,475*	*68*	*1,391*	*(493)*	*4,441*
Forecast for future new spending and top-down adjustment	*3,038*	*-*	*-*	*-*	*3,038*
Total expenses (excluding losses)	***82,407***	***38,894***	***16,089***	***(31,043)***	***106,347***
Statement of Financial Position as at 30 June 2019					
Assets					
Cash and cash equivalents	10,637	2,203	2,018	(453)	14,405
Receivables	12,550	5,516	1,937	(2,175)	17,828
Other financial assets	64,903	41,262	24,517	(18,017)	112,665
Property, plant and equipment	38,172	73,366	31,935	-	143,473
Equity accounted investments	47,461	11,418	215	(45,174)	13,920
Intangible assets and goodwill	1,734	671	1,329	-	3,734
Inventory and other assets	1,610	737	880	(24)	3,203
Forecast for new capital spending and top-down adjustment	2,125	-	-	-	2,125
Total assets	**179,192**	**135,173**	**62,831**	**(65,843)**	**311,353**
Liabilities					
Borrowings	91,383	5,236	34,035	(17,099)	113,555
Other liabilities	30,894	53,319	8,168	(7,730)	84,651
Total liabilities	**122,277**	**58,555**	**42,203**	**(24,829)**	**198,206**
Total assets less total liabilities	**56,915**	**76,618**	**20,628**	**(41,014)**	**113,147**
Net worth					
Taxpayers' funds	36,269	38,040	3,545	(45,300)	32,554
Reserves	20,646	38,578	10,997	4,590	74,811
Net worth attributable to minority interests	-	-	6,086	(304)	5,782
Total net worth	**56,915**	**76,618**	**20,628**	**(41,014)**	**113,147**

Forecast Statement of Segments (continued)

	Core Crown 2020 Forecast $m	Crown entities 2020 Forecast $m	State-owned Enterprises 2020 Forecast $m	Inter-segment eliminations 2020 Forecast $m	Total Crown 2020 Forecast $m
Statement of Financial Performance for the year ended 30 June 2020					
Revenue					
Taxation revenue	85,820	-	-	(753)	85,067
Other sovereign revenue	1,637	5,442	-	(1,486)	5,593
Revenue from core Crown funding	-	27,416	106	(27,522)	-
Sales of goods and services	1,673	2,022	15,319	(587)	18,427
Interest revenue and dividends	2,872	1,474	1,132	(1,309)	4,169
Other revenue	590	2,407	946	(347)	3,596
Total revenue (excluding gains)	**92,592**	**38,761**	**17,503**	**(32,004)**	**116,852**
Expenses					
Social assistance and official development assistance	28,133	-	-	-	28,133
Personnel expenses	6,900	12,935	3,075	(26)	22,884
Other operating expenses	42,069	21,028	12,035	(30,570)	44,562
Interest expenses	3,456	76	1,148	(505)	4,175
Insurance expenses	3	5,187	6	(2)	5,194
Forecast for future new spending and top-down adjustment	4,654	-	-	-	4,654
Total expenses (excluding losses)	**85,215**	**39,226**	**16,264**	**(31,103)**	**109,602**
Minority interests share of operating balance before gains/(losses)	-	-	(502)	24	(478)
Operating balance before gains/(losses)	**7,377**	**(465)**	**737**	**(877)**	**6,772**
Total gains/(losses)	2,637	285	48	(92)	2,878
Net surplus/(deficit) from associates and joint ventures	101	142	10	(3)	250
Operating balance	**10,115**	**(38)**	**795**	**(972)**	**9,900**
Expenses by functional classification					
Social security and welfare	*27,682*	*6,234*	*-*	*(596)*	*33,320*
Health	*16,409*	*13,890*	*-*	*(14,614)*	*15,685*
Education	*13,791*	*10,416*	*-*	*(9,652)*	*14,555*
Transport and communications	*2,315*	*2,573*	*7,988*	*(2,627)*	*10,249*
Other	*16,908*	*6,037*	*7,128*	*(3,109)*	*26,964*
Finance costs	*3,456*	*76*	*1,148*	*(505)*	*4,175*
Forecast for future new spending and top-down adjustment	*4,654*	*-*	*-*	*-*	*4,654*
Total expenses (excluding losses)	***85,215***	***39,226***	***16,264***	***(31,103)***	***109,602***
Statement of Financial Position as at 30 June 2020					
Assets					
Cash and cash equivalents	10,994	2,295	2,429	(453)	15,265
Receivables	12,747	5,667	1,986	(2,211)	18,189
Other financial assets	67,980	42,352	26,037	(18,365)	118,004
Property, plant and equipment	38,057	75,036	31,314	-	144,407
Equity accounted investments	49,570	11,567	210	(46,876)	14,471
Intangible assets and goodwill	1,740	635	1,330	-	3,705
Inventory and other assets	1,599	710	858	(24)	3,143
Forecast for new capital spending and top-down adjustment	3,681	-	-	-	3,681
Total assets	**186,368**	**138,262**	**64,164**	**(67,929)**	**320,865**
Liabilities					
Borrowings	89,564	5,322	35,381	(17,463)	112,804
Other liabilities	29,737	54,629	8,360	(7,668)	85,058
Total liabilities	**119,301**	**59,951**	**43,741**	**(25,131)**	**197,862**
Total assets less total liabilities	**67,067**	**78,311**	**20,423**	**(42,798)**	**123,003**
Net worth					
Taxpayers' funds	46,384	40,135	3,451	(47,124)	42,846
Reserves	20,683	38,176	11,009	4,623	74,491
Net worth attributable to minority interests	-	-	5,963	(297)	5,666
Total net worth	**67,067**	**78,311**	**20,423**	**(42,798)**	**123,003**

Forecast Statement of Segments (continued)

	Core Crown 2021 Forecast $m	Crown entities 2021 Forecast $m	State-owned Enterprises 2021 Forecast $m	Inter-segment eliminations 2021 Forecast $m	Total Crown 2021 Forecast $m
Statement of Financial Performance for the year ended 30 June 2021					
Revenue					
Taxation revenue	89,910	-	-	(675)	89,235
Other sovereign revenue	1,656	5,576	-	(1,488)	5,744
Revenue from core Crown funding	-	27,552	106	(27,658)	-
Sales of goods and services	1,681	2,033	15,651	(588)	18,777
Interest revenue and dividends	3,240	1,498	1,138	(1,394)	4,482
Other revenue	589	2,394	970	(348)	3,605
Total revenue (excluding gains)	**97,076**	**39,053**	**17,865**	**(32,151)**	**121,843**
Expenses					
Social assistance and official development assistance	29,265	-	-	-	29,265
Personnel expenses	6,873	13,093	3,154	(26)	23,094
Other operating expenses	42,112	20,956	12,351	(30,709)	44,710
Interest expenses	3,518	86	1,101	(522)	4,183
Insurance expenses	-	5,533	6	2	5,541
Forecast for future new spending and top-down adjustment	6,015	-	-	-	6,015
Total expenses (excluding losses)	**87,783**	**39,668**	**16,612**	**(31,255)**	**112,808**
Minority interests share of operating balance before gains/(losses)	-	8	(510)	16	(486)
Operating balance before gains/(losses)	**9,293**	**(607)**	**743**	**(880)**	**8,549**
Total gains/(losses)	2,861	308	46	(99)	3,116
Net surplus/(deficit) from associates and joint ventures	98	139	11	4	252
Operating balance	**12,252**	**(160)**	**800**	**(975)**	**11,917**
Expenses by functional classification					
Social security and welfare	*28,772*	*6,601*	-	*(614)*	*34,759*
Health	*16,409*	*13,890*	-	*(14,597)*	*15,702*
Education	*13,967*	*10,553*	-	*(9,788)*	*14,732*
Transport and communications	*2,306*	*2,537*	*8,269*	*(2,608)*	*10,504*
Other	*16,796*	*6,001*	*7,242*	*(3,126)*	*26,913*
Finance costs	*3,518*	*86*	*1,101*	*(522)*	*4,183*
Forecast for future new spending and top-down adjustment	*6,015*	-	-	-	*6,015*
Total expenses (excluding losses)	***87,783***	***39,668***	***16,612***	***(31,255)***	***112,808***
Statement of Financial Position as at 30 June 2021					
Assets					
Cash and cash equivalents	11,378	2,560	2,526	(451)	16,013
Receivables	12,993	5,835	2,043	(2,198)	18,673
Other financial assets	69,897	42,965	27,554	(18,603)	121,813
Property, plant and equipment	37,983	76,472	30,635	-	145,090
Equity accounted investments	51,500	11,710	205	(48,423)	14,992
Intangible assets and goodwill	1,665	597	1,339	-	3,601
Inventory and other assets	1,592	711	866	(25)	3,144
Forecast for new capital spending and top-down adjustment	5,289	-	-	-	5,289
Total assets	**192,297**	**140,850**	**65,168**	**(69,700)**	**328,615**
Liabilities					
Borrowings	84,015	5,148	36,458	(17,707)	107,914
Other liabilities	28,923	55,982	8,625	(7,648)	85,882
Total liabilities	**112,938**	**61,130**	**45,083**	**(25,355)**	**193,796**
Total assets less total liabilities	**79,359**	**79,720**	**20,085**	**(44,345)**	**134,819**
Net worth					
Taxpayers' funds	58,636	41,796	3,287	(48,716)	55,003
Reserves	20,723	37,924	11,019	4,657	74,323
Net worth attributable to minority interests	-	-	5,779	(286)	5,493
Total net worth	**79,359**	**79,720**	**20,085**	**(44,345)**	**134,819**

6

Core Crown Expense Tables

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Social security and welfare	21,956	22,459	23,026	23,523	24,081	25,264	25,930	26,628	27,682	28,772
Health	14,160	14,498	14,898	15,058	15,626	16,490	16,332	16,414	16,409	16,409
Education	11,654	12,504	12,300	12,879	13,158	13,526	13,654	13,733	13,791	13,967
Core government services	5,428	4,294	4,502	4,134	4,102	5,096	4,619	4,505	4,423	4,257
Law and order	3,338	3,394	3,463	3,515	3,648	3,873	3,874	3,849	3,871	3,882
Transport and communications	2,232	2,255	2,237	2,291	2,178	2,266	2,267	2,275	2,315	2,306
Economic and industrial services	2,073	1,978	2,058	2,228	2,107	2,808	2,735	2,749	2,803	2,825
Defence	1,736	1,804	1,811	1,961	2,026	2,179	2,241	2,246	2,254	2,265
Heritage, culture and recreation	863	804	842	778	787	861	847	834	879	875
Primary services	648	659	676	667	749	750	636	625	621	618
Housing and community development	(46)	283	347	320	558	650	548	572	531	545
Environmental protection	769	530	533	723	587	880	992	931	999	1,003
GSF pension expenses	192	278	282	358	271	213	168	152	146	145
Other	425	603	579	145	461	445	357	381	381	381
Finance costs	3,511	3,619	3,620	3,783	3,590	3,632	3,501	3,475	3,456	3,518
Forecast new operating spending	..	..	..	..	..	368	1,986	3,538	5,054	6,415
Top-down expense adjustment	..	..	..	..	..	(1,025)	(575)	(500)	(400)	(400)
Core Crown expenses	**68,939**	**69,962**	**71,174**	**72,363**	**73,929**	**78,276**	**80,112**	**82,407**	**85,215**	**87,783**

1. The classifications of the functions of the Government reflect current approved baselines. Forecast new operating spending is shown as a separate line item in the above analysis and will be allocated to functions of the Government once decisions are made in future Budgets.

Source: The Treasury

Table 6.1 – Social security and welfare expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Welfare benefits (see below)	20,375	20,789	21,187	21,680	22,441	23,439	24,062	24,836	25,896	26,952
Social rehabilitation and compensation	81	107	173	142	151	220	163	176	176	176
Departmental expenses	1,122	1,168	1,204	1,319	1,339	1,419	1,357	1,323	1,320	1,327
Other non-departmental expenses[1]	378	395	462	382	150	186	348	293	290	317
Social security and welfare expenses	**21,956**	**22,459**	**23,026**	**23,523**	**24,081**	**25,264**	**25,930**	**26,628**	**27,682**	**28,772**

1. From 2016 some non-departmental expenses spending has been reclassified to community services in housing and community development expenses.

Source: The Treasury

Table 6.2 – Welfare benefit expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
New Zealand Superannuation	9,584	10,235	10,913	11,591	12,267	13,040	13,669	14,357	15,188	16,047
Jobseeker Support and Emergency Benefit[1]	..	..	1,691	1,684	1,671	1,689	1,612	1,559	1,558	1,591
Supported living payment[1]	..	..	1,422	1,515	1,523	1,529	1,532	1,552	1,580	1,597
Sole parent support[1]	..	..	1,222	1,186	1,153	1,166	1,130	1,141	1,174	1,201
Domestic Purposes Benefit[1]	1,811	1,738	63	..	..	..	..	..	..	..
Invalid's Benefit[1]	1,325	1,330	52	..	..	..	..	..	..	..
Sickness Benefit[1]	775	782	29	..	..	..	..	..	..	..
Unemployment Benefit[1]	883	812	29	..	..	..	..	..	..	..
Family Tax Credit	2,071	2,018	1,965	1,854	1,793	1,780	1,779	1,771	1,833	1,853
Other working for families tax credits	599	575	567	549	559	612	606	600	606	610
Accommodation Assistance	1,195	1,177	1,146	1,129	1,164	1,136	1,148	1,160	1,171	1,187
Income-Related Rents	580	611	660	703	755	850	901	989	1,050	1,105
Disability Assistance	401	384	379	377	377	378	379	381	384	386
Benefits paid in Australia	37	22	19	15	40	..	..	..	..	..
Paid Parental Leave	158	165	165	180	217	282	315	326	335	345
Childcare Assistance	188	186	186	183	182	197	199	201	204	207
Veterans Support Entitlement[2]	128	123	119	115	107	98	91	86	82	76
Veteran's Pension	177	171	165	178	186	175	165	156	148	139
Other benefits	463	460	395	421	447	507	536	557	583	608
Benefit expenses	**20,375**	**20,789**	**21,187**	**21,680**	**22,441**	**23,439**	**24,062**	**24,836**	**25,896**	**26,952**

Source: The Treasury

Beneficiary numbers (Thousands)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
New Zealand Superannuation	585	612	640	665	691	718	744	771	799	827
Jobseeker Support and Emergency Benefit[1]	..	..	138	133	130	131	125	118	115	116
Supported living payment[1]	..	..	96	98	98	97	97	97	97	96
Sole parent support[1]	..	..	78	72	67	64	62	62	62	62
Accommodation Assistance	311	305	297	292	292	292	293	294	295	299
Domestic Purposes Benefit[1]	114	109	..	..	..	..	..	..	..	..
Invalid's Benefit[1]	87	87	..	..	..	..	..	..	..	..
Sickness Benefit[1]	60	60	..	..	..	..	..	..	..	..
Unemployment Benefit[1]	73	67	..	..	..	..	..	..	..	..

Source: Ministry of Social Development

1. From July 2013, changes to the benefit system and existing benefit categories took place. Three new categories of benefit; Supported living payment, Sole parent support and Jobseeker support; have replaced the following existing categories: Domestic Purposes Benefit, Invalid's Benefit, Unemployment Benefit, Sickness Benefit and Widow's Benefit. Owing to the changes, there is no historical data for the new benefit categories and no forecast data for the previous categories beyond July 2013.
2. From 2015, War Disablement Pensions have been renamed Veterans Support Entitlements.

Table 6.3 – Health expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Departmental outputs	186	171	183	190	188	195	193	192	192	192
Health services purchasing (see below)	13,018	13,348	13,648	13,937	14,361	14,876	14,901	14,893	14,888	14,888
Other non-departmental outputs	119	234	330	312	356	442	442	463	473	473
Health payments to ACC	744	715	694	587	694	664	769	837	827	827
Other expenses[1]	93	30	43	32	27	313	27	29	29	29
Health expenses	**14,160**	**14,498**	**14,898**	**15,058**	**15,626**	**16,490**	**16,332**	**16,414**	**16,409**	**16,409**

1. The increase in other expenses in the 2017 forecast year relates to a one off restructuring of District Health Board balance sheets. These expenses are offset by additional revenue for the New Zealand Debt Management Office (excluded from these tables) and therefore have no impact on OBEGAL.

Source: The Treasury

Table 6.4 – Health services purchasing

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Payments to District Health Boards	11,542	11,946	12,165	12,414	12,822	13,303	13,362	13,358	13,354	13,354
National disability support services	1,029	1,028	1,087	1,126	1,167	1,166	1,164	1,164	1,164	1,164
Public health services purchasing	447	374	396	397	372	407	375	371	370	370
Health services purchasing	**13,018**	**13,348**	**13,648**	**13,937**	**14,361**	**14,876**	**14,901**	**14,893**	**14,888**	**14,888**

Source: The Treasury

Table 6.5 – Education expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Early childhood education	1,355	1,436	1,545	1,644	1,735	1,837	1,882	1,933	1,990	2,011
Primary and secondary schools (see below)	5,443	5,590	5,550	5,773	6,044	6,169	6,296	6,320	6,299	6,435
Tertiary funding (see below)	3,795	4,370	4,027	4,272	4,235	4,241	4,225	4,232	4,253	4,276
Departmental expenses	988	1,039	1,107	1,129	1,112	1,193	1,179	1,188	1,194	1,192
Other education expenses	73	69	71	61	32	86	72	60	55	53
Education expenses	**11,654**	**12,504**	**12,300**	**12,879**	**13,158**	**13,526**	**13,654**	**13,733**	**13,791**	**13,967**

Source: The Treasury

Number of places provided[1]	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Early childhood education	166,430	174,853	185,336	195,809	206,509	215,649	222,014	227,396	232,258	227,367

1. Full-time equivalent based on 1,000 funded child hours per calendar year. Note that historical place numbers have been revised so may differ from previous published *Economic and Fiscal Update* numbers.

Source: Ministry of Education

Table 6.6 – Primary and secondary schools

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Primary	2,771	2,845	2,812	2,920	3,033	3,110	3,155	3,168	3,148	3,212
Secondary	2,085	2,148	2,146	2,229	2,329	2,367	2,439	2,455	2,455	2,522
School transport	172	175	177	186	185	190	197	192	192	192
Special needs support	323	332	322	336	396	403	409	407	406	412
Professional development	85	84	87	98	96	94	91	92	92	91
Schooling improvement	7	6	6	4	5	5	5	6	6	6
Primary and secondary education expenses	**5,443**	**5,590**	**5,550**	**5,773**	**6,044**	**6,169**	**6,296**	**6,320**	**6,299**	**6,435**

Source: The Treasury

Number of places provided[1]	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Primary	489,799	493,025	497,765	507,132	517,782	522,162	525,821	526,334	524,973	520,684
Secondary	271,078	267,627	266,734	265,557	264,224	272,869	271,863	273,253	277,053	284,504

1. These are snapshots based as at 1 July for primary year levels (years 1 to 8) and 1 March for secondary year levels (years 9 to 13). These numbers exclude special school rolls, health camps, hospital schools and home schooling (prior published tables included special school rolls).
   These estimates include a new entrant adjustment to make provision for the number of new entrants likely to be enrolled between 1 March and 10 October.

Source: Ministry of Education

Table 6.7 – Tertiary funding

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Tuition	2,306	2,322	2,383	2,406	2,463	2,491	2,467	2,470	2,473	2,474
Other tertiary funding	430	432	463	484	487	535	545	543	543	541
Student allowances	644	596	539	511	486	481	497	499	505	515
Student loans	415	1,020	642	871	799	734	716	720	732	746
Tertiary education expenses	**3,795**	**4,370**	**4,027**	**4,272**	**4,235**	**4,241**	**4,225**	**4,232**	**4,253**	**4,276**

Source: The Treasury

Number of places provided[1]	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Actual delivered and estimated funded places	247,248	241,796	239,086	233,132	232,570	231,835	233,170	229,985	230,060	230,005

1. Tertiary places are the number of equivalent full time (EFT) students in: student achievement component; adult and community education; and youth guarantee programmes. Note that historical place numbers have been revised so may differ from previous published *Economic and Fiscal Update* numbers. Place numbers are based on calendar years rather than fiscal years.

Source: Tertiary Education Commission

Table 6.8 – Core government service expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Official development assistance	510	437	533	513	534	588	595	586	586	586
Indemnity and guarantee expenses	59	27	29	38	30	20	18	16	16	16
Departmental expenses	1,518	1,576	1,635	1,740	1,846	2,009	1,993	1,921	1,855	1,700
Non-departmental expenses[1,2]	524	330	689	481	381	209	468	430	403	399
Tax receivable write-down and impairments	1,003	925	1,069	873	680	1,093	1,124	1,121	1,119	1,119
Science expenses	116	115	118	121	118	91	96	104	112	112
Other expenses[1]	1,698	884	429	368	513	1,086	325	327	332	325
Core government service expenses	**5,428**	**4,294**	**4,502**	**4,134**	**4,102**	**5,096**	**4,619**	**4,505**	**4,423**	**4,257**

1. Non-departmental expenses and other expenses include costs associated with the Canterbury and Kaikōura earthquakes.
2. From 2017 onwards, biological research has been reclassified from Primary services to non-departmental expenses within core government services.

Source: The Treasury

Table 6.9 – Law and order expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Police	1,394	1,408	1,416	1,456	1,498	1,536	1,548	1,551	1,551	1,551
Ministry of Justice	375	404	433	451	468	487	487	446	445	446
Department of Corrections	988	972	1,001	1,024	1,068	1,149	1,143	1,137	1,150	1,158
NZ Customs Service	126	140	150	161	153	179	177	177	180	183
Other departments	103	98	86	100	83	123	131	142	146	145
Department expenses	**2,986**	**3,022**	**3,086**	**3,192**	**3,270**	**3,474**	**3,486**	**3,453**	**3,472**	**3,483**
Non-departmental outputs	315	317	327	320	359	374	365	370	374	375
Other expenses	37	55	50	3	19	25	23	26	25	24
Law and order expenses	**3,338**	**3,394**	**3,463**	**3,515**	**3,648**	**3,873**	**3,874**	**3,849**	**3,871**	**3,882**

Source: The Treasury

Table 6.10 – Transport and communication expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
New Zealand Transport Agency	1,744	1,819	1,880	1,992	1,982	2,022	2,031	2,061	2,118	2,119
Departmental outputs	60	40	45	43	45	55	53	52	51	51
Other non-departmental expenses	62	213	227	114	106	97	117	124	109	99
Rail funding	305	153	56	93	3	3	3	3	3	3
Other expenses	61	30	29	49	42	89	63	35	34	34
Transport and communication expenses	**2,232**	**2,255**	**2,237**	**2,291**	**2,178**	**2,266**	**2,267**	**2,275**	**2,315**	**2,306**

Source: The Treasury

Table 6.11 – Economic and industrial services expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Departmental outputs	346	350	372	391	389	460	420	419	418	416
Employment initiatives[1]	206	192	141	75	3	4	4	4	4	4
Non-departmental outputs[2]	614	618	660	742	798	1,372	1,320	1,301	1,313	1,308
KiwiSaver (includes housing deposit subsidy)	698	740	828	888	763	860	900	946	990	1,039
Other expenses	209	78	57	132	154	112	91	79	78	58
Economic and industrial services expenses	**2,073**	**1,978**	**2,058**	**2,228**	**2,107**	**2,808**	**2,735**	**2,749**	**2,803**	**2,825**

1. From 2016 some of the employment initiatives spending has been reclassified to other non-departmental expenses in housing and community development expenses.
2. From 2017 onwards, spending on new investment and research fund initiatives is included in non-departmental outputs.

Source: The Treasury

Table 6.12 – Defence expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
NZDF core expenses	1,678	1,747	1,768	1,879	1,986	2,092	2,139	2,139	2,139	2,158
Other expenses	58	57	43	82	40	87	102	107	115	107
Defence expenses	**1,736**	**1,804**	**1,811**	**1,961**	**2,026**	**2,179**	**2,241**	**2,246**	**2,254**	**2,265**

Source: The Treasury

Table 6.13 – Heritage, culture and recreation expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Departmental outputs	172	270	286	280	274	283	273	271	269	268
Non-departmental outputs	444	442	471	468	477	514	510	510	522	522
Other expenses	247	92	85	30	36	64	64	53	88	85
Heritage, culture and recreation expenses	**863**	**804**	**842**	**778**	**787**	**861**	**847**	**834**	**879**	**875**

Source: The Treasury

Table 6.14 – Primary service expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Departmental expenses	348	347	365	384	424	459	439	438	439	439
Non-departmental outputs	134	137	135	114	100	104	94	100	95	95
Biological research[1]	102	105	92	91	95	..	..	..	..	..
Other expenses	64	70	84	78	130	187	103	87	87	84
Primary service expenses	**648**	**659**	**676**	**667**	**749**	**750**	**636**	**625**	**621**	**618**

1. From 2017 onwards, biological research has been reclassified from Primary services to non-departmental expenses within core government serivces.

Source: The Treasury

Table 6.15 – Housing and community development expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Financial assistance package[1]	(407)	(60)	..	..	..	..	..	..	..	..
Housing subsidies	22	5	5	5	5	6	6	6	6	6
Community Services[2]	..	..	..	..	189	193	185	187	187	187
Departmental outputs	98	89	100	113	171	200	175	167	167	166
Other non-departmental expenses	113	117	138	117	114	215	154	184	144	160
Warm up New Zealand	84	76	49	37	22	..	..	..	..	..
Other expenses	44	56	55	48	57	36	28	28	27	26
Housing and community development expenses	**(46)**	**283**	**347**	**320**	**558**	**650**	**548**	**572**	**531**	**545**

1. Financial assistance package for 2012 and 2013 actual includes the impact of a revised estimate of the weathertight homes financial assistance package provision.
2. For 2016 onwards, community services have been reclassified from non-departmental expenses in Social Security and Welfare expenses and employment initiatives in economic expenses.

Source: The Treasury

Table 6.16 – Environmental protection expenses

($millions)	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Emissions Trading Scheme	334	55	46	133	163	347	510	453	481	487
Departmental outputs	342	335	362	360	383	394	374	377	381	383
Non-departmental outputs	46	88	48	41	1	76	62	55	91	86
Other expenses	47	52	77	189	40	63	46	46	46	47
Environmental protection expenses	**769**	**530**	**533**	**723**	**587**	**880**	**992**	**931**	**999**	**1,003**

Source: The Treasury

Glossary of Terms

Accruals basis of accounting

An accounting basis where revenue is recognised when earned and expenses when the obligations they relate to are incurred. This contrasts to cash accounting, where income is recognised when the cash is received and expenses when cash to settle an obligation is paid out.

Appropriations

Appropriations are legal authorities granted by Parliament to the Crown or an Office of Parliament to use public resources. Most appropriations are set out in Appropriation Acts.

Baselines

The level of funding approved for any given area of spending (eg, Vote Education).

Commercial portfolio

Consists of assets and liabilities held by companies with commercial objectives, predominantly State-owned Enterprises.

Consumers Price Index (CPI)

Statistics New Zealand's official index to measure the rate of change in prices of goods and services purchased by households.

Contingent assets

Income that the Crown will realise if a particular uncertain event occurs, or a present asset is unable to be measured with sufficient reliability to be recorded in the financial statements (unquantified contingent assets). Contingent assets typically comprise loans with specific events that trigger repayment and IRD pending assessments (where there is a proposed adjustment to a tax assessment).

Contingent liabilities

Costs that the Crown will have to face if a particular uncertain event occurs, or present liabilities that are unable to be measured with sufficient reliability to be recorded in the financial statements (unquantified contingent liabilities). Contingent liabilities typically comprise guarantees and indemnities, legal disputes and claims, and uncalled capital.

Core Crown

A reporting segment consisting of the Crown, departments, Offices of Parliament, the NZS Fund and the Reserve Bank. For a list of all entities included in this segment, refer to the Government Reporting Entity (pages 97 to 100).

Core Crown expenses

The day-to-day spending (eg, public servants' salaries, welfare benefit payments, finance costs and maintaining national defence etc) that does not build or purchase physical assets by the core Crown. This is an accrual measure of expenses and includes non-cash items such as depreciation on physical assets.

Core Crown revenue

Consists primarily of tax revenue collected by the Government but also includes investment income, sales of goods and services and other revenue of the core Crown.

Corporate tax

The sum of net company tax, non-resident withholding tax (NRWT) and foreign-source dividend withholding payments (FDWP).

Current account (Balance of Payments)

The current account records the value of New Zealand's transactions with the rest of the world in goods, services, income and transfers. The current account balance is the sum of all current account credits less all current account debits. When the sum of debits is greater than the sum of credits there is a current account deficit. The current account balance is commonly expressed as a percentage of nominal GDP.

Cyclically-adjusted balance (CAB) or structural balance

An estimate of the fiscal balance (operating balance before gains and losses) adjusted for fluctuations of actual GDP around trend GDP. CAB provides a picture of the underlying fiscal position and the effects of policy decisions.

Demographic changes

Changes to the structure of the population such as the age, gender or ethnic composition.

Domestic bond programme

The amount and timing of government bonds expected to be issued or redeemed.

Excise duties

A tax levied on the domestic production of alcohol, tobacco and light petroleum products (CNG, LPG and petrol).

Financial assets

Any asset that is cash, an equity instrument of another entity (shares), a contractual right to receive cash or shares (taxes receivable and ACC levies) or a right to exchange a financial asset or liability on favourable terms (derivatives in gain).

Financial liabilities

Any liability that is a contractual obligation to pay cash (government stock, accounts payable) or a right to exchange a financial asset or liability on unfavourable terms (derivatives in loss).

Financial portfolio

Consists of the assets and liabilities held by the Crown to finance or pre-fund government expenditure.

Fiscal drag

The additional personal income tax generated as an individual's average tax rate increases as their income increases.

Fiscal impulse

A summary measure of how changes in the fiscal position affect aggregate demand in the economy. To isolate discretionary changes the fiscal impulse is calculated on a cyclically-adjusted basis and excludes net interest payments. To better capture the role of capital spending, the indicator is derived from cash flow information.

Fiscal intentions (short-term)

Indications of the Government's intentions for operating expenses, operating revenues and the impact of its intentions on the operating balance, debt and net worth over (at least) the next three years. These intentions are required under the Public Finance Act 1989 (PFA).

Fiscal objectives (long-term)

The Government's long-term goals for operating expenses, operating revenue, the operating balance, debt and net worth, as required by the PFA. The objectives must be consistent with the defined principles of responsible fiscal management as outlined in the PFA and must cover a period of (at least) 10 years.

Forecast new capital spending (Capital allowance)

An amount provided in the forecasts to represent the balance sheet impact of capital initiatives expected to be introduced over the forecast period.

Forecast new operating spending (Operating allowance)

An amount included in the forecasts to provide for the operating balance (revenue and expenditure) impact of policy initiatives, changes to demographics and other forecasting changes expected to occur over the forecast period.

Gains and losses

Gains and losses typically arise from the revaluation of assets and liabilities, such as investments in financial assets and long-term liabilities for ACC and GSF. These valuation changes are reported directly as a movement in net worth (eg, asset revaluation reserves) or indirectly through the Statement of Financial Performance.

GDP deflator

An index of the general price level in the economy. It is the ratio of nominal GDP to real GDP.

Generally accepted accounting practice (GAAP)

GAAP refers to the rules and concepts used to prepare and present financial statements. GAAP is an independent set of rules and frameworks that govern the recognition, measurement and disclosure of financial elements, such as assets, liabilities, revenues and expenses.

Government Finance Statistics (GFS)

A statistical framework for government reporting developed by IMF to aid comparability of results between countries. This differs from the GAAP framework that is used for reporting by the Government in New Zealand.

Gross debt

GSID (refer below) excluding settlement cash and bank bills.

Gross domestic product (GDP)

A measure of the value-added of all goods and services produced in New Zealand. Changes in GDP measure growth or contraction in economic activity or output. GDP can be measured on either an expenditure or production basis and in either real or nominal terms. (See following definitions.)

Gross domestic product (expenditure)

The sum of total expenditure on final goods and services in the economy, including net exports (exports less imports). Expenditure GDP is calculated in both real and nominal terms.

Gross domestic product (nominal)

The value-added of goods and services produced in the economy expressed in current prices.

Gross domestic product (production)

The value-added of goods and services produced in New Zealand, after deducting the cost of goods and services used in the production process. Production GDP is calculated only in real terms.

Gross domestic product (real)

The value-added of goods and services produced in the economy expressed in the prices of a base period. The current base period is 2009/10.

Gross national expenditure (GNE)

A measure of total expenditure on final goods and services by New Zealand residents.

Gross sovereign-issued debt (GSID)

Represents debt issued by the sovereign (the core Crown) and includes government stock held by the NZS Fund, ACC and EQC.

Insurance liabilities

The gross obligation for the future cost of claims incurred prior to balance date represented in today's dollars (present value). The net liability is the gross liability less the asset reserves held to meet those claims.

Inter-segment eliminations

The amounts of transactions between different segments (core Crown, Crown entities and SOEs) that are eliminated to determine total Crown results.

Labour force participation rate

The percentage of the working-age population in work or actively looking for and available for work.

Labour productivity

Output per unit of labour input (where labour inputs, for example, might be measured as hours worked or the number of people employed).

Line-by-line consolidation

A term used to refer to the general approach to the presentation of the Financial Statements of the Government. It means that the individual line items for revenues, expenses, assets and liabilities in the Financial Statements of the Government include all departments, Offices of Parliament, the Reserve Bank, SOEs, Crown entities and other entities controlled by the Government.

Loan-to-value ratio (LVR)

A measure of how much a bank lends against residential property, compared to the value of that property. The Reserve Bank introduced LVR restrictions in October 2013 and changed them in November 2015 and again in October 2016.

Marketable securities

Assets held with financial institutions. These assets are held for both cash flow and investment purposes. Examples are bonds, commercial papers and debentures.

Minority interest

Minority interest refers to shareholders of Government reporting entities outside the Crown. Current examples include those who hold shares in the mixed ownership companies.

Monetary conditions

Aggregate monetary conditions measure the degree to which short-term interest rates and the exchange rate either support or restrict economic growth.

Monetary policy

The policies that the Reserve Bank uses to regulate money supply in New Zealand. The Reserve Bank implements its monetary policy decisions by adjusting its Official Cash Rate (OCR) in order to maintain stability in the rate of CPI inflation within a defined target range.

Tightening monetary policy means raising the OCR in order to moderate aggregate demand pressures and reduce inflationary pressures. Easing monetary policy has the reverse effect.

National saving

National disposable income less private and public consumption spending. Income excludes gains and losses on capital. Gross saving includes depreciation.

Net core Crown cash flow from operations

The cash impact of core Crown operating results. It is represented by the operating balance (before gains and losses) less retained items (eg, net surplus of SOEs, Crown entities and NZS Fund net revenue) less non-cash items (eg, depreciation).

Net core Crown debt

Net core Crown debt provides information about the sustainability of the Government's accounts, and is used by some international rating agencies when determining the creditworthiness of a country. It represents gross debt less core Crown financial assets (excluding advances and financial assets held by the NZS Fund). Advances and financial assets held by the NZS Fund are excluded as these assets are less liquid and/or they are made for public policy reasons rather than for the purposes associated with government financing.

Net international investment position (NIIP)

The net value of New Zealand's international assets and liabilities at a point in time.

Net worth

Total assets less total liabilities of all Government reporting entities. The change in net worth in any given forecast year is largely driven by the operating balance and property, plant and equipment revaluations.

Net worth attributable to the Crown

Represents the Crown's share of total assets and liabilities and excludes minority interests' share of those assets and liabilities.

Operating balance

Represents OBEGAL (refer below) plus gains and less losses. The operating balance includes gains and losses not reported directly as a movement against net worth. The impact of gains and losses on the operating balance can be subject to short-term market volatility and revaluations of long-term liabilities.

Operating balance before gains and losses (OBEGAL)

Represents total Crown revenue less total Crown expenses excluding minority interest share. OBEGAL can provide a more useful measure of underlying stewardship than the operating balance as short-term market fluctuations are not included in the calculation.

Output gap

The difference between actual and potential GDP. (See Potential output.)

Outputs

Outputs are the goods and services commissioned by Ministers from public, non-governmental and private sector producers. Outputs may include the supply of policy advice, enforcement of regulations (such as speed limits in transport), provision of a range of services (in health, education, etc), negotiation and management of contracts and administration of benefits.

Potential output

The level of output an economy can sustain without an acceleration of inflation.

Productivity

The amount of output (eg, GDP) per unit of input.

Projections

Projections relate to the period beyond the five-year forecast period and are based on long-run economic and fiscal assumptions. For example, the projections assume no economic cycle and constant long-run interest, inflation and unemployment rates.

Residual cash

The level of money the Government has available to repay debt or, alternatively, needs to borrow in any given year. Residual cash is alternatively termed “Cash available/(shortfall to be funded)”.

Residual cash is equal to net core Crown cash flow from operations excluding NZS Fund activity less core Crown capital payments (eg, purchase of assets, loans to others).

Settlement cash

This is the amount of money deposited with the Reserve Bank by registered banks. It is a liquidity mechanism used to settle wholesale obligations between registered banks and provides the basis for settling most of the retail banking transactions that occur every working day between businesses and individuals.

Social portfolio

Consists of the assets and liabilities held primarily to provide public services or to protect assets for future generations.

Specific fiscal risks

All government decisions or other circumstances known to the Government that may have a material impact on the fiscal and economic outlook, but are not certain enough in timing or amount to include in the fiscal forecasts.

System of National Accounts (SNA)

A set of macroeconomic accounts for government reporting, developed by the international community, to facilitate international comparisons of national economic statistics.

Tax revenue

The accrual, rather than the cash (“tax receipts”) measure of taxation. It is a measure of tax due at a given point in time, regardless of whether or not it has actually been paid.

Terms of trade

The terms of trade measure the volume of imports that can be funded by a fixed volume of exports, and are calculated as the ratio of the total export price index to the total import price index. New Zealand’s headline terms of trade series is derived from export and import price indices from Statistics New Zealand’s quarterly Overseas Trade Indices. The Treasury forecasts the terms of trade on an SNA basis, using implicit export and import price indices derived from quarterly national accounts data.

Top-down adjustment

An adjustment to expenditure forecasts to reflect the extent to which departments use appropriations (upper spending limits) when preparing their forecasts. As appropriations apply to the core Crown only, no adjustment is required to SOE or Crown entity forecasts.

Total borrowings

Represents the Government's total debt obligations to external parties and can be split into sovereign-guaranteed debt and non-sovereign-guaranteed debt. Non-sovereign-guaranteed debt represents the debt obligations of SOEs and Crown entities that are not guaranteed by the Crown.

Total Crown

Includes the core Crown (defined above) plus Crown entities and SOEs as defined by the Government Reporting Entity on pages 97 to 100.

Tradable/non-tradable output

The tradable sector is that part of the economy particularly exposed to foreign competition either through exports or import substitution. It includes agriculture, forestry and fishing, mining, and manufacturing industries. Non-tradable output includes the construction industry, rental, hiring and real estate services, public administration and safety, and health care and social assistance. Other industries may be classified as either tradable or non-tradable depending on the extent to which their direct or indirect outputs are exposed to foreign competition.

Trade-weighted index (TWI)

A measure of movements in the NZ dollar against the currencies of our major trading partners. Since December 2014, the TWI has been based on 17 currencies, weighted according to each country's direct bilateral trade in goods and services with New Zealand. Together these countries account for more than 80% of New Zealand's foreign trade.

Votes

When Parliament considers legislation relating to appropriations, the appropriations are grouped within "Votes". Generally, a Vote groups similar or related appropriations together (eg, Vote Health includes all health-related appropriations administered by the Ministry of Health).

Time Series of Fiscal and Economic Indicators

Fiscal Indicators

June years	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
$millions															
Revenue and expenses															
Core Crown tax revenue	53,477	56,747	54,681	50,744	51,557	55,081	58,651	61,563	66,636	70,445	74,224	78,028	81,970	85,820	89,910
Core Crown revenue	57,971	61,575	59,191	55,757	57,199	60,428	63,805	67,093	72,213	76,121	80,455	84,219	88,445	92,592	97,076
Core Crown expenses	53,764	56,753	63,711	63,554	70,099	68,939	69,962	71,174	72,363	73,929	78,276	80,112	82,407	85,215	87,783
Surpluses															
Total Crown OBEGAL	5,860	5,637	(3,893)	(6,315)	(18,396)	(9,240)	(4,414)	(2,802)	414	1,831	473	3,340	5,366	6,772	8,549
Total Crown operating balance	8,023	2,384	(10,505)	(4,509)	(13,360)	(14,897)	6,925	2,939	5,771	(5,369)	3,795	6,049	8,213	9,900	11,917
Cash position															
Core Crown residual cash	2,793	2,057	(8,639)	(9,000)	(13,343)	(10,644)	(5,742)	(4,109)	(1,827)	(1,322)	(2,192)	(2,081)	1,439	3,030	2,584
Debt															
Gross debt[1]	30,647	31,390	43,356	53,591	72,420	79,635	77,984	81,956	86,125	86,928	91,970	89,311	84,127	82,297	76,743
Gross debt incl RB settlement cash and bank bills	36,805	37,745	50,973	58,891	77,290	84,168	84,286	88,468	93,156	93,283	97,515	94,856	89,672	87,842	82,288
Net core Crown debt (incl NZS Fund)[2]	1,620	(2,676)	5,633	12,549	23,969	33,475	34,428	34,174	30,862	32,102	31,754	31,777	28,058	22,644	14,476
Net core Crown debt[2]	13,196	10,258	17,119	26,738	40,128	50,671	55,835	59,931	60,631	61,880	64,440	66,425	65,031	62,098	59,636
Net worth															
Total Crown net worth	96,827	105,514	99,515	94,988	80,887	59,780	70,011	80,697	98,236	95,521	98,926	104,953	113,147	123,003	134,819
Total net worth attributable to the Crown	96,531	105,132	99,068	94,586	80,579	59,348	68,071	75,486	86,454	89,366	93,034	99,105	107,365	117,337	129,326
Nominal expenditure GDP (revised actuals)	175,456	189,138	189,523	196,698	205,861	215,348	218,817	235,033	241,597	251,760	264,760	279,480	293,391	305,502	317,405
% GDP															
Revenue and expenses															
Core Crown tax revenue	30.5	30.0	28.9	25.8	25.0	25.6	26.8	26.2	27.6	28.0	28.0	27.9	27.9	28.1	28.3
Core Crown revenue	33.0	32.6	31.2	28.3	27.8	28.1	29.2	28.5	29.9	30.2	30.4	30.1	30.1	30.3	30.6
Core Crown expenses	30.6	30.0	33.6	32.3	34.1	32.0	32.0	30.3	30.0	29.4	29.6	28.7	28.1	27.9	27.7
Surpluses															
Total Crown OBEGAL	3.3	3.0	(2.1)	(3.2)	(8.9)	(4.3)	(2.0)	(1.2)	0.2	0.7	0.2	1.2	1.8	2.2	2.7
Total Crown operating balance	4.6	1.3	(5.5)	(2.3)	(6.5)	(6.9)	3.2	1.3	2.4	(2.1)	1.4	2.2	2.8	3.2	3.8
Cash position															
Core Crown residual cash	1.6	1.1	(4.6)	(4.6)	(6.5)	(4.9)	(2.6)	(1.7)	(0.8)	(0.5)	(0.8)	(0.7)	0.5	1.0	0.8
Debt															
Gross debt[1]	17.5	16.6	22.9	27.2	35.2	37.0	35.6	34.9	35.6	34.5	34.7	32.0	28.7	26.9	24.2
Gross debt incl RB settlement cash and bank bills	21.0	20.0	26.9	29.9	37.5	39.1	38.5	37.6	38.6	37.1	36.8	33.9	30.6	28.8	25.9
Net core Crown debt (incl NZS Fund)[2]	0.9	(1.4)	3.0	6.4	11.6	15.5	15.7	14.5	12.8	12.8	12.0	11.4	9.6	7.4	4.6
Net core Crown debt[2]	7.5	5.4	9.0	13.6	19.5	23.5	25.5	25.5	25.1	24.6	24.3	23.8	22.2	20.3	18.8
Net worth															
Total Crown net worth	55.2	55.8	52.5	48.3	39.3	27.8	32.0	34.3	40.7	37.9	37.4	37.6	38.6	40.3	42.5
Total net worth attributable to the Crown	55.0	55.6	52.3	48.1	39.1	27.6	31.1	32.1	35.8	35.5	35.1	35.5	36.6	38.4	40.7

1 Excludes Reserve Bank settlement cash and bank bills.
2 Excludes advances.

Economic Indicators

June Years	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Annual average % change	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Private consumption	3.7	2.9	-1.0	2.3	2.0	3.6	2.4	2.8	2.7	2.7	4.0	3.7	3.3	2.8	2.2
Public consumption	3.7	4.9	2.9	-0.4	2.7	0.6	0.3	2.8	2.1	1.7	2.6	1.5	1.0	1.1	1.0
TOTAL CONSUMPTION	3.7	3.4	0.0	1.6	2.2	2.8	1.9	2.8	2.5	2.4	3.7	3.2	2.7	2.4	1.9
Residential investment	2.5	-3.8	-21.9	-2.7	-2.6	9.8	13.2	14.9	8.6	8.2	14.3	7.8	2.1	-1.7	-0.2
Non-market investment	1.3	-8.1	39.9	-7.8	10.5	-30.1	12.8	2.8	26.9	12.8	2.1	3.4	-4.9	0.2	2.4
Market investment	2.1	12.6	-13.1	-8.7	8.9	11.8	-0.2	8.3	5.2	0.6	9.3	6.7	6.2	3.9	2.3
TOTAL INVESTMENT	2.1	6.5	-12.0	-6.8	5.6	7.2	3.9	9.3	7.8	3.1	10.0	6.8	4.3	2.1	1.6
Stock change (contribution to growth)	-0.5	0.9	-1.4	0.9	-0.1	0.1	0.0	0.3	-0.2	-0.4	-0.2	0.3	0.2	0.2	0.1
GROSS NATIONAL EXPENDITURE	2.7	4.9	-4.3	0.7	2.7	4.1	2.2	4.4	3.4	2.3	5.1	4.4	3.3	2.5	1.9
Exports	4.0	3.5	-2.9	4.8	2.2	2.1	3.1	0.1	5.7	5.1	1.4	1.9	3.0	2.7	3.2
Imports	1.7	11.6	-12.0	-1.0	11.4	4.4	2.6	9.0	6.6	1.2	5.7	5.0	4.0	2.8	1.9
EXPENDITURE ON GDP	3.4	2.5	-1.4	2.6	0.2	3.4	2.3	1.9	3.2	3.3	3.7	3.5	3.0	2.4	2.3
GDP (production measure)	3.2	2.0	-1.9	0.6	1.1	2.8	2.3	3.0	3.3	2.8	3.6	3.5	2.9	2.4	2.3
- annual % change	3.5	0.1	-2.1	2.3	1.1	2.6	2.5	3.6	2.4	3.6	3.5	3.4	2.6	2.3	2.3
Real GDP per capita	2.1	1.1	-2.7	-0.6	0.1	2.2	1.7	1.9	1.5	0.7	1.5	1.7	1.5	1.2	1.1
Nominal GDP (expenditure basis)	6.5	7.8	0.2	3.8	4.6	4.6	1.6	7.4	2.8	4.2	5.2	5.6	5.0	4.1	3.9
GDP deflator	3.0	5.2	1.6	1.1	4.4	1.2	-0.7	5.4	-0.4	0.9	1.4	2.0	2.0	1.7	1.6
Output gap (% deviation, June year average)	2.0	2.3	-0.8	-1.4	-2.1	-1.5	-1.4	-1.1	-0.8	-1.1	-0.6	0.1	0.4	0.2	0.0
Employment	1.6	1.3	-0.2	-1.3	1.5	0.9	0.2	3.2	3.2	2.3	4.8	1.6	1.5	1.1	0.9
Unemployment (% June quarter s.a.)	3.6	3.8	5.7	6.5	6.0	6.3	6.0	5.2	5.5	5.0	4.8	4.6	4.2	4.3	4.3
Wages (average ordinary-time hourly, ann % change)	4.4	5.4	4.7	1.1	3.0	2.9	2.1	2.6	2.8	2.1	1.6	2.2	2.8	3.1	3.0
CPI inflation (ann % change)	2.0	4.0	1.9	1.7	5.3	1.0	0.7	1.6	0.4	0.4	1.5	2.0	2.1	2.0	2.1
Merchandise terms of trade (SNA basis)	0.2	10.0	-4.3	-3.0	9.7	-1.7	-3.8	16.4	-4.8	-2.4	1.8	1.7	1.0	0.4	0.3
House prices (ann % change)	13.7	-4.4	-3.2	3.4	0.4	4.2	9.1	6.9	11.1	13.5	9.3	6.1	3.8	3.1	2.0
Current account balance - $billion	-12.2	-13.4	-9.4	-3.5	-6.0	-7.7	-7.9	-6.0	-8.9	-7.3	-8.1	-10.7	-12.1	-13.5	-13.9
Current account balance - % of GDP	-6.9	-7.1	-4.9	-1.8	-2.9	-3.6	-3.6	-2.5	-3.7	-2.9	-3.0	-3.8	-4.1	-4.4	-4.4
TWI (June quarter)	75.7	73.0	62.3	68.6	70.8	72.4	76.3	81.5	76.2	73.6	76.5	74.9	75.0	74.5	72.6
90-day bank bill rate (June quarter)	8.1	8.8	2.9	2.9	2.7	2.6	2.6	3.4	3.5	2.4	1.9	1.9	2.3	3.2	3.9
10-year bond rate (June quarter)	6.3	6.4	5.6	5.7	5.3	3.7	3.5	4.4	3.6	2.7	2.9	3.3	3.9	4.2	4.3

Data for 2017 and subsequently are forecasts. Data for 2016 and prior years are those that were available when the forecasts were finalised.