1

Economic and Fiscal Outlook

Overview

The economy is expected to gather momentum through 2011 and into 2012 and grow by an average of around 3.0% per annum over the next four years, following a subdued recovery so far. This growth in economic activity, together with Budget 2011 decisions to lower operating allowances, is expected to result in the Crown's operating balance returning to surplus (before gains and losses) in 2014/15.

The impact of the tragic earthquake in Canterbury on 22 February 2011 plays a major part in the economic outlook, from the initial disruption to activity through to the rebuilding phase. The fiscal outlook is also affected by the earthquakes, with one-off expenditures contributing to the operating deficit (before gains and losses) increasing to 8.4% of Gross Domestic Product (GDP) in 2010/11. The full impact of the earthquakes is outlined in Chapter 2.

There are some key uncertainties surrounding this outlook. In particular, the impact of the earthquakes and the degree of restraint by households and firms could differ from that outlined in our main forecasts. There are also ongoing uncertainties associated with the global economy that on balance pose downside risks to New Zealand. Some of these risks are explored in alternative scenarios in Chapter 3.

Economic Outlook

The economy has been more subdued than we expected in the *Half Year Update*, largely reflecting greater caution from households and businesses. Spending was lower and saving was higher as they looked to strengthen their financial positions. There were growing signs the economy was staging a recovery prior to the earthquake on 22 February, but the disruption caused by this disaster has pushed this out. The rebuilding of Canterbury is anticipated to get firmly underway from 2012 and is expected to see economic growth peak at 4.0% in the year to March 2013.

An underlying recovery in growth is also anticipated alongside this rebuilding. Higher farm incomes owing to the current surge in commodity prices are expected to flow through the wider economy, while consumer spending is expected to recover as incomes rise more strongly and household debt ratios return to more comfortable levels. Lower growth in government spending will provide room for private spending and rebuilding activity to increase with less pressure on resources. As a result, monetary policy, while gradually withdrawing current stimulus as the economy moves back onto a stronger growth path, will not need to tighten as much as it otherwise would.

Fiscal Outlook

The gap between core Crown revenue and expenses closes over the forecast period, returning the Crown's operating balance (before gains and losses) to material surplus in the June 2015 year, a year earlier than forecast in the *Half Year Update*. This is primarily the result of net savings in the current year's Budget package as well as a reduction in the forecast new operating spend in the next two Budgets.

The operating deficit (before gains and losses) in the short term, however, is higher than previously expected, reaching 8.4% of GDP in the current fiscal year. The increased deficit compared with what was forecast in the *Half Year Update* largely reflects the costs associated with the February earthquake.

Core Crown operating cash flows also reach surplus by the end of the forecast period. When capital spending is included, residual cash deficits are expected to decrease from 7.5% of GDP in the June 2011 year to 1.6% of GDP by the June 2015 year. As a result of these residual cash deficits, net core Crown debt is expected to peak at 29.6% of GDP in the June 2015 year. As outlined in the *Fiscal Strategy Report* (FSR), net debt is projected to reduce in subsequent years and the Government's long-term fiscal objective is for net debt to be brought back to a level no higher than 20% of GDP by the early 2020s.

Table 1.1 – Summary of the Treasury's economic and fiscal forecasts

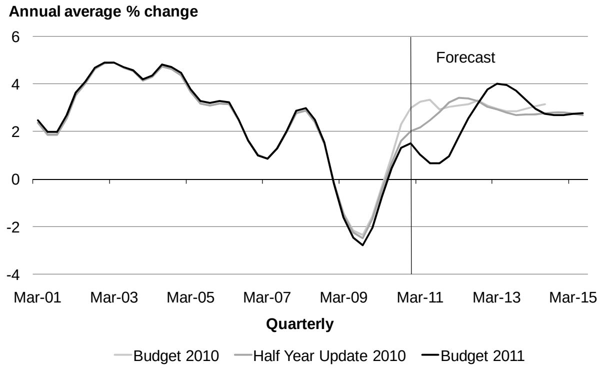
	2010 Actual	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Economic (March years, %)						
Economic growth[1]	-0.7	1.0	1.8	4.0	3.0	2.7
Consumer price inflation[2]	2.0	4.5	3.1	2.4	2.5	2.6
Unemployment rate[3]	6.0	6.8	5.7	4.8	4.8	4.6
Fiscal (June years, % of GDP)						
Operating balance[4]	-3.3	-8.4	-4.7	-1.8	-0.3	0.5
Net debt[5]	14.1	20.8	26.2	28.5	29.5	29.6
Net worth[6]	50.2	42.8	37.4	34.5	33.8	34.1

Notes: 1 Real production GDP, annual average percentage change
2 Consumers Price Index (CPI), annual percentage change, 2011 actual
3 Percent of labour force, March quarter, seasonally adjusted
4 Total Crown operating balance before gains and losses
5 Net core Crown debt excluding the New Zealand Superannuation Fund and advances
6 Total Crown net worth

Sources: Statistics New Zealand, the Treasury

Economic and Fiscal Outlook

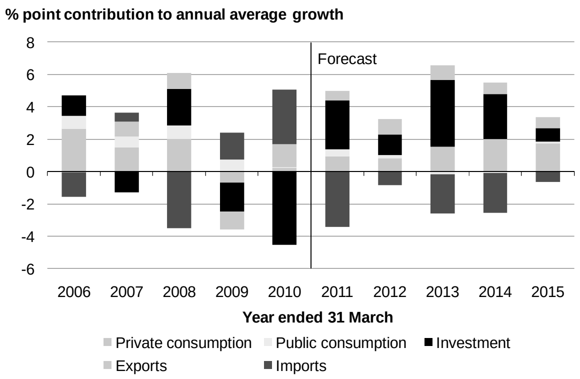
Figure 1.1 – Real production GDP



Sources: Statistics New Zealand, The Treasury

The New Zealand economy has been more subdued than we had anticipated in December's *Half Year Update* (Figure 1.1). Economic growth slowed sharply in mid-2010 and real GDP in the December 2010 quarter was just 0.8% higher than a year earlier. By comparison, the average increase across the OECD was 2.9% over the same period. The weakness of the New Zealand economy has largely reflected households and businesses being cautious in their spending and investment, opting instead to increase saving and strengthen their financial positions in the wake of the global financial crisis. At the same time, an elevated New Zealand dollar against most major currencies has also limited the ability of the tradable sector (exporters and import-competing firms) to drive overall growth higher.

Figure 1.2 – Components of real GDP growth



Sources: Statistics New Zealand, The Treasury

There were signs of the economy regaining momentum in early 2011, but this was disrupted by the tragic events in Canterbury on 22 February. A recovery in activity is now expected from mid-2011, with economic growth rising to 1.8% in the year to March 2012 and peaking at 4.0% in the year to March 2013. Higher growth in consumer spending is expected as households become more comfortable with the state of their own balance sheets and as incomes rise more strongly alongside an improving labour market. Domestic demand will also be supported as the recent increases in commodity prices flow through the wider economy. The exchange rate is forecast to remain elevated in the near term and thus remain a constraint on export growth, before falling owing to fundamental forces such as New Zealand's high level of international indebtedness and a recovering global economy. A lower New Zealand dollar will then boost export volumes, particularly service exports such as tourism. These factors are expected to provide an offset to a withdrawal of monetary stimulus and tighter fiscal policy from 2012/13, including lower growth in government consumption as operating allowances are reduced (Figure 1.2).

The impact of the Canterbury earthquakes plays a major part in the economic cycle, from the initial disruption, which delays the recovery, to the positive impact of the rebuild to regain what was lost, which amplifies the expansion. The rebuilding of Canterbury is expected to get firmly underway from 2012, which will cause the upswing in national investment to be much stronger than would have been forecast in the absence of the earthquake.

While the annual current account deficit is forecast to rise above 6% of GDP by late 2013, this is largely driven by investment, including for the Canterbury rebuild. National saving rates are expected to rise as a result of a return to Budget surplus and a higher household saving rate. The forecast economic recovery is expected to be far less reliant on debt-funded household consumption and investment than was the case in the mid-2000s.

Table 1.2 – Economic forecasts[1]

(Annual average % change, March years)	2010 Actual	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Private consumption	0.4	1.5	1.4	2.6	3.4	2.9
Public consumption	0.2	2.4	1.0	-0.8	-0.4	0.6
Total consumption	**0.4**	**1.7**	**1.3**	**1.8**	**2.5**	**2.4**
Residential investment	-13.0	0.9	0.8	53.5	17.4	2.7
Market investment	-10.0	7.5	4.3	13.0	9.8	2.5
Non-market investment	-5.6	-5.2	10.0	-6.7	-3.1	4.7
Total investment	**-9.4**	**5.3**	**5.6**	**18.8**	**11.0**	**3.0**
Stock change[2]	-2.2	1.8	0.0	-0.4	-0.2	0.0
Gross national expenditure	**-3.6**	**4.5**	**1.7**	**5.3**	**4.5**	**2.5**
Exports	4.6	1.9	3.0	2.9	2.2	2.1
Imports	-9.4	10.5	2.5	6.9	6.8	1.7
GDP (expenditure measure)	**0.7**	**2.1**	**1.6**	**4.0**	**3.0**	**2.7**
GDP (production measure)	**-0.7**	**1.0**	**1.8**	**4.0**	**3.0**	**2.7**
Real GDP per capita	-1.9	-0.1	1.0	3.2	2.0	1.8
Nominal GDP (expenditure measure)	1.1	5.3	4.7	6.4	5.4	4.9
GDP deflator	0.4	3.2	3.1	2.3	2.4	2.1
Output gap (% deviation, March year)[3]	-1.0	-1.3	-1.1	0.0	-0.1	-0.2
Employment	-1.3	0.9	1.1	2.5	1.8	1.3
Unemployment[4]	6.0	6.8	5.7	4.8	4.8	4.6
Nominal wages[5]	1.0	2.8	4.1	4.1	4.2	4.0
CPI inflation[6]	2.0	4.5	3.1	2.4	2.5	2.6
Merchandise terms of trade[7]	-7.5	10.4	-1.7	0.2	1.4	1.3
Current account balance						
$billion	-4.5	1.0	-8.4	-11.5	-15.6	-16.8
% of GDP	-2.4	0.5	-4.1	-5.2	-6.8	-6.9
Net international investment position						
% of GDP	-86.0	-78.6	-79.1	-79.6	-82.2	-85.3
TWI[8]	65.3	67.2	66.7	64.5	60.3	56.0
90-day bank bill rate[8]	2.7	3.0	3.0	3.9	4.7	5.0
10-year bond rate[8]	5.9	5.6	5.7	5.7	5.9	6.0

Notes:
1 Forecasts finalised 13 April 2011 and include data up to 18 April 2011
2 Contribution to GDP growth
3 Estimated as the percentage difference between actual real GDP and potential real GDP
4 Household Labour Force Survey, percent of the labour force, March quarter, seasonally adjusted
5 Quarterly Employment Survey, average ordinary-time hourly earnings, annual percentage change
6 Annual percentage change, actual CPI inflation for 2011
7 System of National Accounts (SNA) basis, annual average percentage change
8 Average for the March quarter, actual for 2011

A longer time series for these variables is provided on page 187.

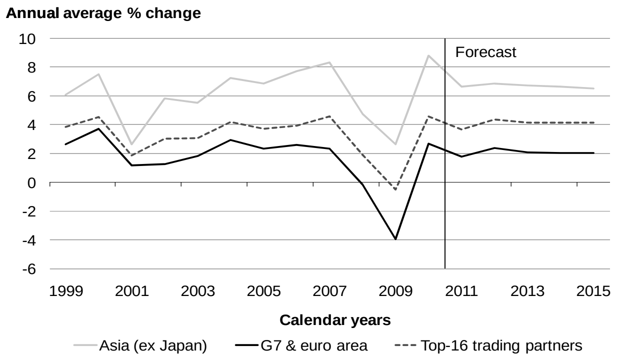
Sources: Statistics New Zealand, Reserve Bank of New Zealand, The Treasury

Global economy continues to recover…

The outlook for world growth has generally been revised up as the recovery from the global financial crisis has progressed, although there have been some set-backs recently. The recovery is being driven by emerging economies, in particular China and other Asian countries, with additional benefits for New Zealand via Australia. Activity in the major developed economies has been slower to rebound as they were more directly affected by the global crisis and their economic challenges are more entrenched. Temporary shocks have also adversely affected economic activity, in particular the Queensland floods in Australia and the earthquake in Japan. These events are expected to reduce growth in the short term, but rebuilding in Australia and Japan will boost it subsequently.

Growth in our main trading partners in calendar 2010 was estimated to be 4.6%, a rapid recovery from a 0.5% decline in output in 2009 (Figure 1.3). The outlook for 2011 is for 3.7% growth, taking account of the adverse events above, before increasing to 4.4% in 2012 and reverting to a trend of just above 4.0% thereafter. These figures take account of the increasing share of New Zealand's trade directed to the faster-growing Asian economies.

Figure 1.3 – Trading Partner Growth

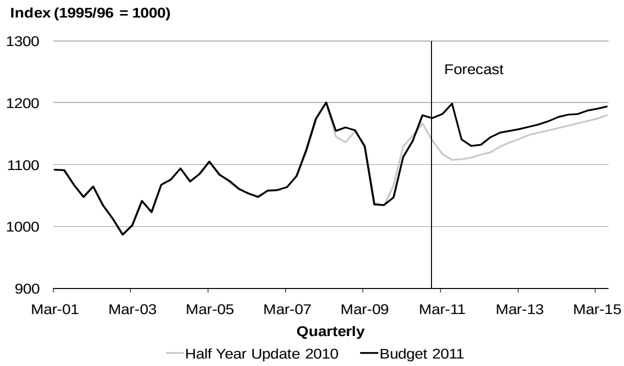


Sources: International Monetary Fund, The Treasury

Notwithstanding this positive headline picture, there remains an elevated level of risk around global growth. While there are some upsides, on balance the risks are weighted to the downside for the forecast period as a whole. As a result, the international economy remains a source of potential downside risk to New Zealand, with the possibility of rising global imbalances causing increased policy tension, the need for significant structural and fiscal policy change in many developed economies, continued financial difficulties in a number of peripheral European economies, and the possibility of higher oil prices. Some of these risks are explored further in the *Risks and Scenarios* and *Fiscal Risks* chapters.

...and boosts world prices for New Zealand's commodity exports

Figure 1.4 – Merchandise terms of trade (SNA)



Sources: Statistics New Zealand, The Treasury

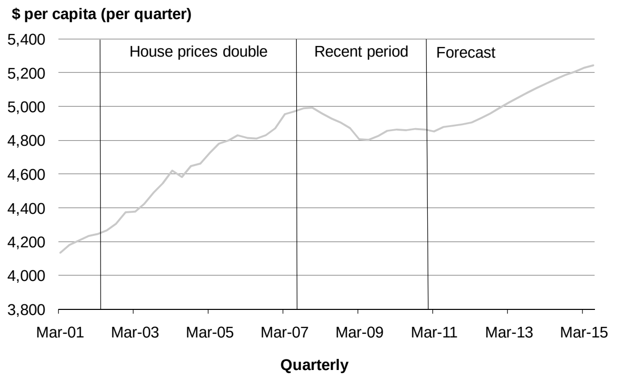
World prices for New Zealand's key commodities have exceeded the very high levels of 2007/08. This is pushing the merchandise terms of trade (the ratio of export prices to import prices) higher than was previously expected despite oil prices also being higher (Figure 1.4). A key judgement in these forecasts is the degree to which commodity prices can be sustained at such high levels. Some fall is expected as weather-related price increases reverse this year, but commodity prices over the next five years are then forecast to rise again and contribute to a rising profile for the terms of trade. This assumption is based on the strength of demand for food and other primary products from emerging markets, most notably China and India. Another feature of commodity prices is likely to be ongoing volatility, which makes it more difficult to differentiate longer-term trends from short-term movements. The increase in commodity prices could be larger than forecast, particularly in the near term as a result of the tightness of supply. However, anything that curbs demand from major markets such as China could see commodity prices weaken by more than expected. This possibility is explored in a downside scenario from page 108.

The Trade Weighted Index (TWI) of the exchange rate is forecast to remain around its March 2011 quarter average for the remainder of this year, supported by high terms of trade and a persistent interest rate differential. The terms of trade also provide longer-term support to the exchange rate, but ultimately long-term fundamentals such as the requirement for external balance are expected to see the exchange rate fall. A narrowing of the positive differential between local and global interest rates also contributes to the lower exchange rate. However, there is considerable uncertainty surrounding the path of the exchange rate.

There is also uncertainty about how the exchange rate will impact on export volumes. In terms of export receipts, the exchange rate is being more than offset by historically high world prices for commodity exporters. For manufacturing exporters, the effect of the exchange rate depends crucially on the markets they export to; the New Zealand dollar has appreciated strongly against the United States dollar and United Kingdom pound but is relatively low against the Australian dollar. A high exchange rate has made New Zealand less competitive in export services over recent years, but the forecast depreciation of the New Zealand dollar from 2012 is expected to gradually boost the volume of export services. In the near term, the Rugby World Cup is forecast to have a one-off positive impact on export services (ie, tourist spending), which is estimated to lift real GDP by around 0.3% in the second half of 2011.

Post-recession household behavioural change evident but expected to moderate...

Figure 1.5 – Real private consumption



Sources: Statistics New Zealand, The Treasury

The level of real or inflation-adjusted household spending is fundamentally linked to real income and real wealth, with temporary deviations reflected in saving and changes in borrowing. Between 2002 and 2007, house prices doubled, driving a significant lift in household wealth. At the same time, borrowing increased and demand for new and existing housing increased. Spending on durable goods (eg, appliances) rose in line with new housing investment. Spending on other goods and services also increased, reflecting confidence that robust income and asset price growth would continue in the medium term.

In early 2008, real private consumption began declining, as households faced higher prices for food and fuel, rising interest rates and, crucially, falling house prices. For the past three years, households have remained circumspect in their spending decisions, consistent with a recognition that debt levels (relative to income and assets) and debt servicing are unsustainably high, and concerns over job security (see the box on page 74 for more discussion on household deleveraging). In December 2010, real household spending per person was still 2.5% lower than three years earlier (Figure 1.5).

The lack of consumer spending growth since the end of the recession has occurred against a backdrop of low mortgage interest rates, linked to large reductions in the Official Cash Rate between mid-2008 and early 2009. Typically, low interest rates would encourage additional borrowing, but we have not seen this to date. The latest Reserve Bank data show household credit growth fell to a record low 1.4% in March 2011 from a year earlier, with the level of debt falling in the March month for the first time in the history of the series. We anticipate credit growth will remain weak for some time as households continue to consolidate their financial positions. In recent years, house prices have been flat and we expect annual increases to rise to only 3.0% per annum over the forecast period.

In addition to concerns around debt, real household spending growth since the recession has been impacted by petrol prices, which have risen 38% between March 2009 and early May 2011. With petrol being an important component of household budgets and subject to relatively inelastic demand, the large increase in prices has led to reduced spending on discretionary goods and services, such as motor vehicles and entertainment. While we expect oil prices to retrace slightly over the forecast period, the level is expected to remain high. The exchange rate is assumed to fall from 2012, flowing through to higher petrol prices and placing further pressure on household budgets.

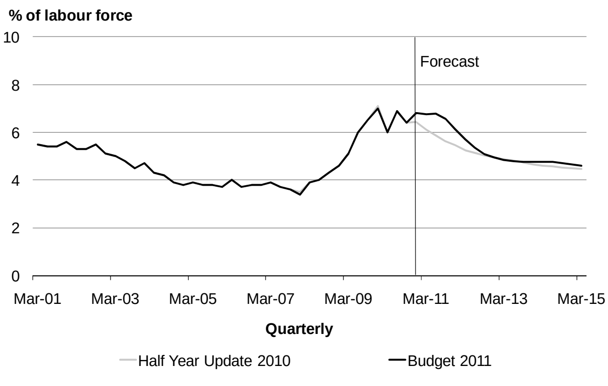
With the outlook for housing and borrowing flat, real consumer spending growth is, therefore, expected to grow in line with real income. We expect the labour market to be broadly flat over the first half of 2011, before picking up thereafter, with incomes driven by higher growth in employment and wages. Rising incomes are expected to allow consumer spending to grow moderately over the forecast period. On average, private consumption is forecast to grow 2.4% per year over the next five years. This is lower than the 4.5% average growth rate during the 2002 to 2007 housing boom but higher than the 0.6% recorded in the three years to the end of 2010.

...as income growth strengthens with an improving labour market

Employment will be impacted significantly by the earthquake. Some firms in and around Christchurch were unable to reopen after the February earthquake, while some workers living in affected areas did not return to work in the immediate aftermath. Although much activity was able to be relocated, we have assumed nationwide employment is around 15,000 lower by mid-2011 as a result of February's earthquake than it otherwise would have been. Despite this impact, total national employment is still expected to grow over 2011 as economic activity recovers.

Once the rebuilding of Canterbury gets firmly underway, employment growth is expected to rise relatively quickly, facilitating a fall in the unemployment rate from 6.8% in mid-2011 to below

Figure 1.6 – Unemployment rate



Sources: Statistics New Zealand, The Treasury

5% by the end of 2012 (Figure 1.6).[3] As the labour market tightens, wage growth is forecast to rise from recent low rates, peaking at 4.2% per annum in 2013/14. Some occupations directly related to reconstruction work are likely to see faster wage gains as capacity constraints in the building industry are approached. The annual net inflow of permanent and long-term migrants is expected to rise above 10,000 as the economy strengthens, after falling to around zero later this year largely because of the relatively strong Australian labour market and the disruption caused by the earthquakes.

Household Deleveraging

One of the key uncertainties for these forecasts is the degree to which households continue to increase their saving and strengthen their balance sheets. Household debt-to-asset ratios and debt-to-income ratios have fallen from their peaks in 2008 and 2009. How much more adjustment is undertaken has important implications for the path of consumption: for any given level of income and assets, maintaining or reducing debt from its current level requires that households spend less and save more than has been the case over the past decade.

Households took on more risk…

Household spending grew strongly for most of the past decade, supported in part by rapid growth in household debt and mortgage debt in particular. Household liabilities more than doubled in just six years, from $73 billion in 2001 to $150 billion in 2007. On the other side of the balance sheet, assets also more than doubled in value as house prices rose and residential building activity grew strongly – the median house price rose from $174,000 in 2001 to $349,000 in 2007, and 150,000 dwellings were added to the housing stock. As a consequence, the debt-to-asset ratio was little changed, but the risk profile of balance sheets had changed – house prices had moved well beyond their traditional relationship with household income and rental costs – and household net wealth was more exposed to a fall in house prices (Figure 1.7).

Table 1.3 – Household balance sheets

March years	2001	2009	2011 (Estimated)	2015 (Forecast)
Debt-to-asset ratio	21%	23%	22%	23%
Debt servicing ratio	6%	9%	7%	6%
Debt-to-income ratio	106%	157%	143%*	150%
Household saving rate	-5%	-5%	6%*	2%

Source: The Treasury *Includes insurance payments for earthquake damage

This risk was partially realised in 2008 when house prices began falling, compounded by losses in financial wealth as finance companies failed and equity markets fell. This involuntary rise in leverage (debt-to-asset or debt-to-income) was short-lived as asset prices rebounded over 2009/10. Nonetheless, net wealth remains below its pre-recession peak, house prices remain overvalued on the metrics above and debt remains high relative to income. The limited prospects for future house price growth, coupled with a desire by households to reduce the risk on their balance sheets, implies households will seek to increase their saving. The implication is that consumption will likely remain on a lower growth path.

3 There are a number of issues related to the measurement of the economy since the February earthquake. For example, the Household Labour Force Survey was unable to survey many households in Canterbury in the weeks after the earthquake. The March 2011 quarter labour data, released after our forecasts were finalised, did not pick up the full impact of the earthquake. Compared to our expectation of a steady unemployment rate of 6.8% in the March quarter, the unemployment rate fell from a revised 6.7% to 6.6%.

…which they are now shedding...

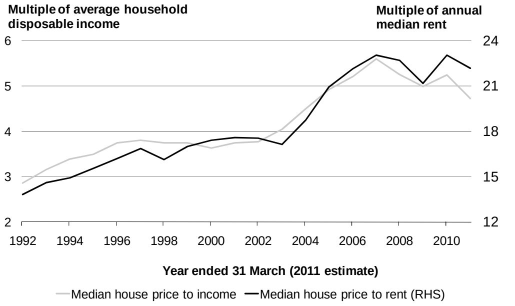
Recent falls in the debt-to-asset and debt-to-income ratios indicate that household balance sheets are becoming stronger, largely reflecting rising incomes and asset prices, but households have also begun to rein in their liabilities. Household credit fell in March 2011, the first monthly fall in at least 20 years.

The debt servicing ratio, which tracks the share of income going to meet interest payments on debt, provides another measure of the household debt burden. From an average of 6% between 1990 and 2004, household debt service payments rose to 9% of disposable income in the year to March 2009 before falling interest rates reduced payments to an estimated 7% in the year to March 2011. At current interest rates the debt servicing requirements do not point to a need for households to significantly reduce their debt. Over the year ahead, income growth, driven by a recovery in the labour market, is expected to exceed debt growth and, with largely unchanged interest rates, debt servicing payments are expected to fall further. Thereafter, debt growth picks up, as do interest rates, but rising incomes enable the debt servicing ratio to remain stable at around 6%.

…through greater saving

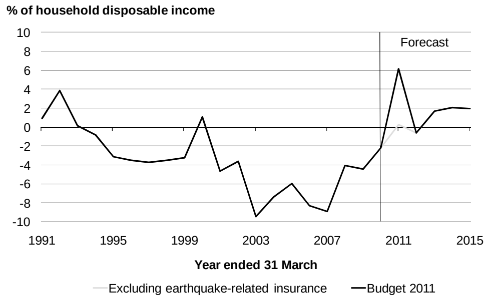
The relatively subdued growth in both credit and consumption, combined with moderate income growth, provides scope for households to save around 2% of disposable income, a significant turnaround from the average saving rate of around -8% recorded over the 2003 to 2007 period (Figure 1.8).

Figure 1.7 – Relative house prices



Sources: Statistics New Zealand, Department of Building and Housing, REINZ

Figure 1.8 – Household saving rate



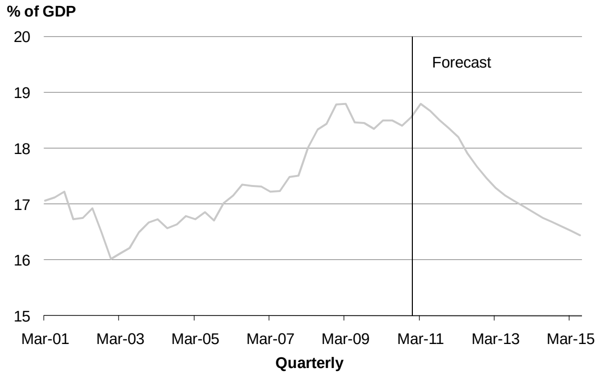
Sources: Statistics New Zealand, The Treasury

In sum, households have reduced their debt-to-asset and debt-to-income ratios and their debt service burdens from their peaks, but they remain at historically high levels. Barring an unexpected surge in asset prices, simply maintaining that improved position will require higher saving. A greater desire for saving than forecast here implies lower consumption spending. How much the saving rate does actually rise also depends on what else is affecting GDP growth. Private consumption spending accounts for around 60% of GDP, so if consumption is growing only slowly, a sector other than consumption must drive GDP growth if incomes are to grow faster than consumption and provide scope for higher saving. Residential and commercial construction are key drivers of GDP growth in our forecasts, with flow-on effects for manufacturing and other related support industries. The strong terms of trade also support household income and provide scope for increased saving.

Budget decisions impact on government consumption and investment...

Fiscal policy is currently having a stimulatory impact on the economy. Earthquake-related expenditure in Canterbury will add to this in the short term. In the June 2012 year, the overall fiscal stance is expected to be broadly neutral. Fiscal tightening is expected to begin in the following year. This tightening will occur at a time when rebuilding work in Canterbury is expected to peak.

Figure 1.9 – Real government consumption



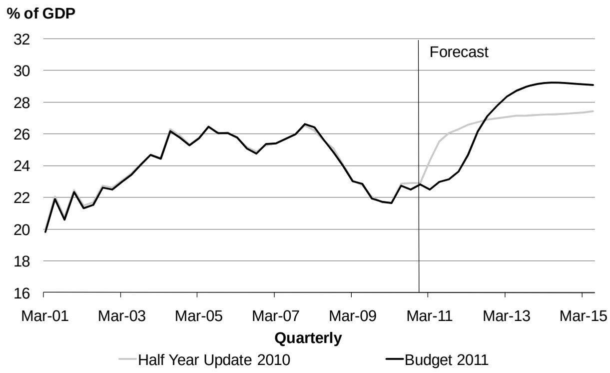
Sources: Statistics New Zealand, The Treasury

The Government's Budget decisions have an impact on the economy through public consumption, private consumption and non-market investment. The main impact is slower growth in government consumption (Figure 1.9), with reprioritisation of existing spending in Budget 2011 and lower operating allowances of $800 million in Budget 2012 and Budget 2013 (returning to $1.19 billion from Budget 2014, growing at 2% per annum). Changes to government transfers such as Working for Families will negatively impact private consumption, although this impact is expected to be limited by the nature of the changes (eg, Working for Families changes are targeted at higher-income families). Non-market investment, meanwhile, is forecast to grow, but this growth will be slower than previously expected reflecting lower gross capital allowances of $900 million per Budget.

...and private investment rises strongly owing to rebuilding in Canterbury...

Although growth in non-market investment is expected to be lower than previously expected, total investment is expected to rise very strongly from 2012 on the back of the rebuilding of Canterbury (Figure 1.10). In these forecasts, investment is able to make up a larger share of the real economy than in recent upswings owing to the nature of the funding. Much of the extra investment will be funded through insurance, ultimately reinsurance flows from overseas and from government. Another factor supporting this rise in investment relative to the experience of the 2000s is an anticipated fall in private and public consumption as a share of the economy, allowing room for interest rates to be lower.

Figure 1.10 – Real investment (ex large items)



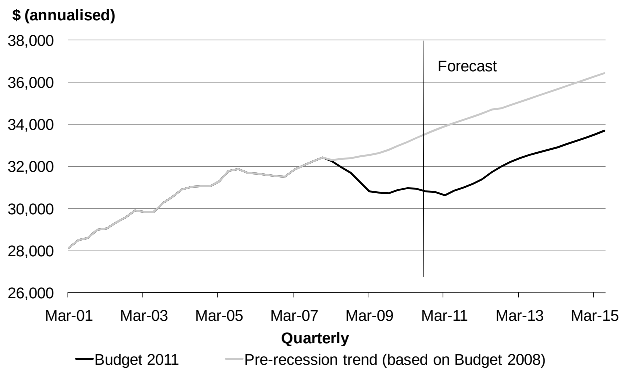
Sources: Statistics New Zealand, The Treasury

The regional pattern of economic activity will likely be quite different from previous cycles. Most notably, the expansion from 2012 will be weighted heavily to the Canterbury region. The rebuilding will put pressure on all parts of the construction industry – residential, commercial and infrastructure – in contrast to more typical expansions in New Zealand, which traditionally witness upturns in these different parts at different times. There is a risk that the rebuilding does not scale up as quickly as expected in these forecasts, either owing to ongoing aftershocks or greater capacity constraints being experienced. Alternatively, there is also a risk of the same volume of work being done in Canterbury but with more displacement of work outside the region or more inflation pressures than we have factored in our main forecasts. These issues are discussed further in the *Risks and Scenarios* chapter.

...to replace lost capital, which has reduced the productive capacity of the economy

Potential growth is an estimate of how fast the economy can grow without generating inflation pressures, but is subject to much uncertainty owing to the unobservable nature of potential output. Potential output is expected to grow by around 2.5% per annum over the forecast period. Our forecasts for the level of potential output remain lower than we forecast prior to the global financial crisis. As a result, the level of real GDP per capita is forecast to be lower than we had expected at the time of Budget 2008 as we have re-evaluated both past and future potential output (Figure 1.11). Compared to the *Half Year Update*, the productive capacity of the economy has been further reduced by the February earthquake in Canterbury, initially owing to the loss of physical capital. Although this impact is small, it still means that inflation pressures in these forecasts are slightly higher for any given level of economic activity.

Figure 1.11 – Real production GDP per capita

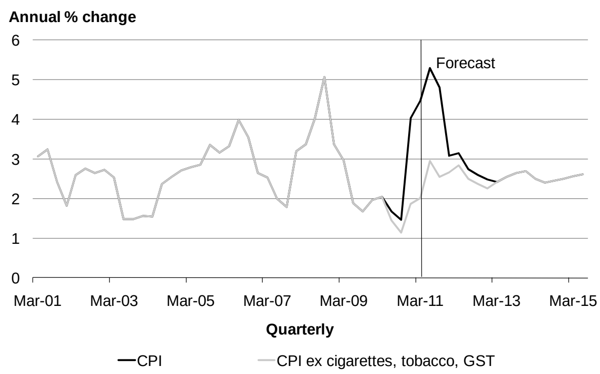


Sources: Statistics New Zealand, The Treasury

Inflation eases from mid-2011 but pressure remains from Canterbury rebuild

Headline Consumers Price Index (CPI) inflation is forecast to reach 5.3% in the year to June 2011, reflecting the 1 October 2010 increase in GST, higher excise rates for cigarettes and tobacco and recent sharp fuel price increases (Figure 1.12). The increase in the GST rate (which we assume added 2% to inflation) was offset by income tax cuts and, according to Treasury business talks in early March, is not expected to be a feature in wage setting. Furthermore, inflation expectations have remained relatively unchanged since the tax changes were announced. The two-year-ahead measure in the Reserve Bank's Survey of Expectations rose to 2.8% in the June 2010 quarter, but fell in the following quarter to 2.6%, where it has remained

Figure 1.12 – Consumers Price Index



Sources: Statistics New Zealand, The Treasury

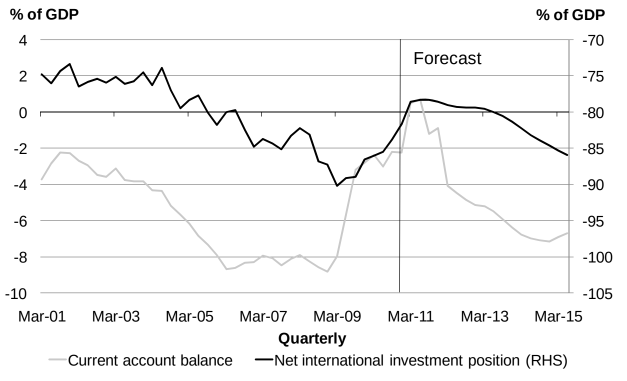
through to the March 2011 quarter. Inflation expectations are likely being tempered by the lack of demand pressure in the economy, as evident in recent inflation outturns. In the March 2011 quarter, the CPI rose 0.8%, but excluding fuel, and cigarette and tobacco price increases, prices were broadly flat, reflecting the weak trading environment. From mid-2012, the annual inflation rate is expected to remain within the Reserve Bank's 1% to 3% target band. Subdued pricing pressure, reflecting the gradual nature of the economic recovery, is expected to be countered by inflationary pressure associated with the Canterbury rebuild. We expect the output gap (the difference between actual and potential output) to close by mid-2012 as the rebuild gathers momentum. Tradable inflation averages around 2%, which is higher than its historical average because of a falling exchange rate from 2012.

Fiscal policy becomes contractionary from 2012/13, with government spending more restrained than was forecast in the *Half Year Update*, freeing up resources and reducing pressure on non-tradable inflation. As a result, monetary policy will not need to tighten as much, allowing interest rates to stay lower for longer and take pressure off the exchange rate. This mix is more conducive to tradable sector growth. We expect 90-day interest rates to lift gradually to 5.0% by March 2015, as the output gap closes. During the global financial crisis, the gap between the Official Cash Rate and funding costs for banks and other financial institutions lifted sharply (to around 150 basis points), meaning retail borrowing rates for households and businesses were higher than they otherwise would be for a given Official Cash Rate. The funding gap is expected to remain at 150 basis points over the next few years before falling to around 100 basis points by the end of the forecast period. The 10-year rate is assumed to lift slightly to 6.0% by the end of the forecast period, in line with its long-term average.

Current account deficit rises as investment increases by more than saving

An annual current account surplus is expected for the year-ended March 2011 for the first time since the early 1970s. This surplus will partly reflect subdued domestic demand and strong terms of trade, but is mainly the result of a higher current transfers balance in the September 2010 and March 2011 quarters owing to reinsurance payments related to the Canterbury earthquakes. New Zealand's net international investment position (IIP) also improves because of reinsurance inflows (Figure 1.13).

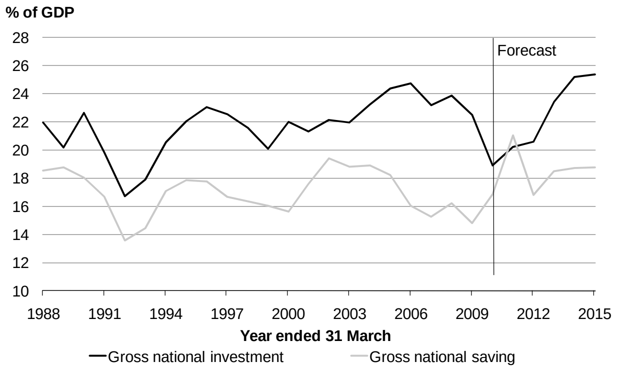
Figure 1.13 – Current account and net IIP



Sources: Statistics New Zealand, The Treasury

The current account balance is forecast to return to deficits above 6% of GDP by late 2013, while the net international liability position is expected to rise again as a result. The rise in the current account deficit is expected to be driven by higher investment-related imports, including for the rebuild of Canterbury, while export growth remains subdued. This experience would be different from the mid-2000s in both cause (increasing household debt) and magnitude (current account deficits rose above 8% of GDP). The forecast depreciation of the New Zealand dollar from 2012 is expected to boost service exports and dampen the demand for imports, twin developments that will together assist to strengthen the trade balance and contribute to a narrowing of the current account deficit towards the end of the forecast period and beyond.

Figure 1.14 – National saving and investment



Sources: Statistics New Zealand, The Treasury

The current account balance can also be examined as the difference between national saving and investment (Figure 1.14). The national saving rate is expected to rise over the forecast period, supported by an increasing rate of household saving. Higher government saving also helps to increase national saving as the operating balance (before gains and losses) returns to surplus.

The nominal size of the economy grows by around 5% per annum...

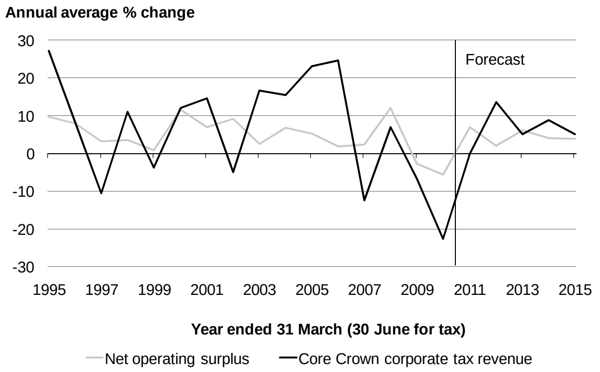
Nominal GDP is expected to rise by 5.3% in the year to March 2011, which reflects higher terms of trade and high inflation including the rise in GST on 1 October 2010 (nominal GDP is GST-inclusive). After easing back to 4.7% in the March 2012 year, growth in the nominal economy is then forecast to expand 6.4% in the March 2013 year, boosted by the rebuilding of Canterbury, before once again easing back gradually. Over the 2011 to 2015 March years, nominal GDP is expected to be a cumulative $13.1 billion (or 1.2%) lower than assumed in the *Half Year Update*, largely because of the delayed recovery caused by subdued domestic activity and the February earthquake.

...and supports a recovery in tax revenue...

Tax revenue has returned to growth over the past six months, after two years of contraction, but this growth remains weak. Most tax types have shown nil or only modest growth recently, although GST was boosted by the 1 October 2010 rate increase and offset by accompanying personal income tax rate cuts. Growth in tax revenue is expected to rise to an average of 7.5% per annum between the June 2011 and 2015 years. This increase is expected to be underpinned by growth in the nominal economy of around 5% per annum, together with an increase in core Crown tax revenue as a proportion of GDP from 25.6% in 2011 to 27.8% in 2015 owing to the following factors:

- Corporate taxes have dropped by around 30% since the June 2008 year (Figure 1.15). Taxable corporate profits also appear to have dropped by about 30% through this period. In addition, recent data suggest there was a significant build-up in tax losses through the 2008/09 recession, which are now being offset against taxable profits, thereby reducing corporate tax. We expect loss usage to remain at an elevated level, peaking in the 2013 year. Once the loss effect abates,

Figure 1.15 – Operating surplus (proxy for business profits) and corporate tax revenue



Sources: Statistics New Zealand, The Treasury

corporate tax growth is expected to accelerate. This loss effect causes corporate tax to be pro-cyclical, which means it falls by more than GDP during downturns but grows more rapidly than GDP at the top of the cycle.

- Given the progressive personal income tax scale, higher incomes attract a higher rate of income tax, which means the tax on those incomes increases at a faster rate as incomes increase. In aggregate, this is known as “fiscal drag”. Fiscal drag has been absent from source deductions (mostly PAYE) collections over the past few years owing to personal income tax cuts. PAYE growth will again be negative in the June 2012 year as income tax changes only took effect on 1 October 2010. From 2013 to 2015, fiscal drag is anticipated to add an average of around $400 million per annum to PAYE, which would see PAYE rise as a proportion of GDP from an estimated 10.1% in 2012 to 10.7% in 2015.

- We are also yet to see a full year of GST at the new 15% rate. Therefore, GST revenue will grow at a faster rate than private consumption and residential investment in the June 2012 year. Thus, GST is also expected to add to the tax-to-GDP ratio over the forecast period, growing from 6.6% of GDP in 2011 to 7.5% in 2015.

- The level of interest rates also affects tax revenue because interest earned by lenders is taxable and interest incurred by borrowers is deductible from taxable business profits. Over the 2011 to 2015 period, average deposit rates are expected to rise by around 50%. This, together with growth in the amount of money on deposit, is forecast to increase resident withholding tax on interest (RWT) from 0.9% of GDP in 2011 to 1.3% in 2015.

...although taxes are lower than expected in the* Half Year Update*...

In total across the five June years 2011 to 2015, core Crown tax revenue is expected to be $5 billion lower than forecast in the *Half Year Update*, as shown in Table 1.4. The largest reduction is expected to occur in corporate tax, mainly because operating surpluses (ie, profits) are expected to be lower. A slightly longer and larger tax loss effect than was previously assumed has also reduced the forecast of corporate taxes.

GST forecasts have been reduced in response to a softer near-term outlook for domestic consumption, albeit with reductions weighted more to the earlier years of the forecast period than the later years. This profile is, in part, a result of the Canterbury earthquakes. Insurers are expected to receive GST refunds from their GST-inclusive insurance payouts, mainly in the 2011 and 2012 years. Once the insurance claimants spend their insurance proceeds, either by purchasing replacement goods or constructing replacement buildings, the GST will flow back to the Crown. This is expected to happen mainly from 2012 onwards.

Net other persons tax is also expected to be lower than previously forecast, but not all of the tax types have had their forecasts reduced. The source deductions forecasts are slightly higher than in the *Half Year Update* in all years except for 2015, mainly owing to higher forecasts of aggregate wages and salaries.

Table 1.4 – Change in core Crown tax revenue forecasts

Year ended 30 June $billion	**2011 Forecast**	**2012 Forecast**	**2013 Forecast**	**2014 Forecast**	**2015 Forecast**
Core Crown tax revenue					
Half Year Update 2010 forecasts	**52.5**	**57.2**	**61.0**	**64.9**	**68.5**
Forecast changes	-1.3	-2.0	-1.1	-0.5	-
Budget 2011 forecasts	**51.2**	**55.2**	**59.9**	**64.4**	**68.5**
Changes in components					
Source deductions	0.3	0.2	0.4	0.1	-0.1
Other persons tax	-0.1	-0.4	-0.2	-0.2	-0.2
Corporate tax	-0.9	-0.7	-0.8	-0.4	-0.3
Interest RWT	0.1	-0.3	-0.4	-0.1	0.1
GST	-0.8	-0.7	-0.2	0.1	0.3
Other taxes	0.1	-0.1	-0.1	-0.1	-0.1
Policy changes	-	-	0.2	0.2	0.2

Note: Numbers in tables may not add exactly to the stated totals owing to rounding

Source: The Treasury

...with other outcomes possible, both lower and higher

In line with established practice, Inland Revenue also prepared a set of tax forecasts. The Treasury and Inland Revenue forecasting teams compare forecasts to provide quality assurance for each other. Both sets of tax forecasts were based on the Treasury's economic forecasts. Using slightly different assumptions and forecasting models, Inland Revenue has produced a set of tax forecasts that are much lower than the Treasury's. In this *Update*, the total difference between the tax forecasts across the five June years 2011 to 2015 is nearly $4 billion, a larger difference than is usually the case (Table 1.5). The bulk of the difference occurs in estimates for corporate tax. The Treasury forecasts corporate tax growth to remain subdued through the early part of the recovery as tax loss usage increases, and growth will accelerate through 2013 to 2015 as tax loss usage abates. Inland Revenue, however, does not forecast such a rapid acceleration as it makes no explicit assumption regarding the utilisation of tax losses in corporate tax.

The lower forecasts of tax revenue from Inland Revenue indicate there may be some downside risk to our tax forecasts. At the same time, there are also upside risks. The economic recovery could turn out stronger than forecast, or tax revenue could be higher if we have underestimated the size of the pro-cyclical response in corporate tax. The Canterbury earthquakes also present risks to the tax forecasts. What is currently being interpreted as underlying weakness in taxes could be a timing effect caused by earthquake-related business disruption. If so, tax revenue will likely be higher than in the Budget forecasts.

Table 1.5 – The Treasury and Inland Revenue core Crown tax revenue forecasts

Year ended 30 June $billion	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Source deductions					
The Treasury	20.7	21.2	23.1	24.7	26.3
Inland Revenue	20.6	20.9	22.8	24.5	26.2
Difference	0.1	0.3	0.3	0.2	0.1
Net other persons tax					
The Treasury	2.1	2.7	3.0	3.1	3.3
Inland Revenue	2.0	2.5	2.8	3.2	3.5
Difference	0.1	0.2	0.2	(0.1)	(0.2)
Corporate taxes					
The Treasury	7.7	8.8	9.3	10.3	10.8
Inland Revenue	8.0	8.8	9.0	9.5	9.7
Difference	(0.3)	-	0.3	0.8	1.1
Goods and services tax					
The Treasury	13.2	15.0	16.4	17.6	18.5
Inland Revenue	13.2	15.3	16.3	17.5	18.4
Difference	-	(0.3)	0.1	0.1	0.1
Other taxes					
The Treasury	7.5	7.5	8.1	8.7	9.6
Inland Revenue	7.3	7.6	8.0	8.6	9.2
Difference	0.2	(0.1)	0.1	0.1	0.4
Total tax					
The Treasury	51.2	55.2	59.9	64.4	68.5
Inland Revenue	51.1	55.1	58.9	63.3	67.0
Difference	0.1	0.1	1.0	1.1	1.5
Total tax (% of GDP)					
The Treasury	25.6	26.4	26.9	27.5	27.8
Inland Revenue	25.6	26.3	26.4	27.0	27.2
Difference	-	0.1	0.5	0.5	0.6

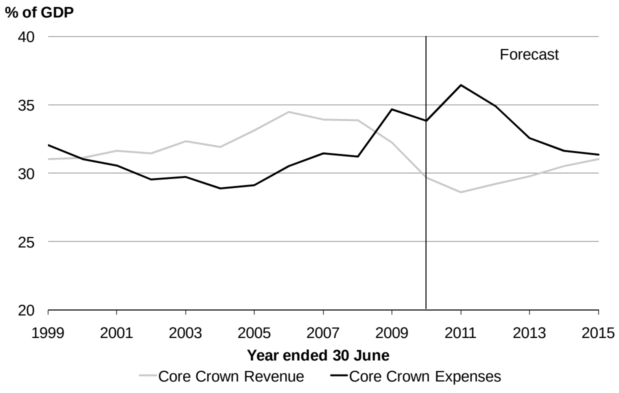
Sources: The Treasury, Inland Revenue

The gap between core Crown revenue and expenses closes over the forecast period...

Core Crown revenue falls in the current financial year to 28.5% of GDP before recovering to 31.0% by the end of the forecast period (Figure 1.16).

The largest component of core Crown revenue is tax revenue. As previously discussed, forecast tax revenue is lower than in the *Half Year Update*. However, it increases in absolute terms over the forecast period, reaching 27.8% of GDP by June 2015.

Figure 1.16 – Core Crown expenses and revenue



Source: The Treasury

While core Crown expenses increase this year as a result of the Canterbury earthquake, they fall as a percentage of GDP across the forecast period to be 31.3% of GDP by June 2015. This decrease reflects the cessation of "one-off" expenditure such as costs associated with the Canterbury earthquakes, provision for weathertight homes payments and the Deposit Guarantee Scheme, as well as a decrease in the amount of new spending forecast over this time.

Table 1.6 – Fiscal forecasts

Year ended 30 June	2010 Actual	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
$billion						
Core Crown revenue	56.2	57.0	61.1	66.4	71.5	76.4
Core Crown expenses	64.0	72.8	73.0	72.6	74.1	77.1
Core Crown residual cash	-9.0	-15.0	-13.5	-9.0	-5.4	-4.1
Net debt[1]	26.7	41.5	54.9	63.6	69.0	72.9
Gross debt[2]	53.6	71.6	77.8	79.2	88.7	86.2
Total Crown operating balance before gains and losses	-6.3	-16.7	-9.7	-4.1	-0.7	1.3
Total Crown operating balance	-4.5	-9.4	-7.3	-1.4	2.3	4.6
Total Crown net worth	95.0	85.5	78.3	76.9	79.3	83.9
% of GDP						
Core Crown revenue	29.7%	28.5%	29.2%	29.8%	30.5%	31.0%
Core Crown expenses	33.8%	36.4%	34.9%	32.5%	31.7%	31.3%
Core Crown residual cash	-4.8%	-7.5%	-6.4%	-4.0%	-2.3%	-1.6%
Net debt[1]	14.1%	20.8%	26.2%	28.5%	29.5%	29.6%
Gross debt[2]	28.3%	35.8%	37.2%	35.5%	37.9%	35.0%
Total Crown operating balance before gains and losses	-3.3%	-8.4%	-4.7%	-1.8%	-0.3%	0.5%
Total Crown operating balance	-2.4%	-4.7%	-3.5%	-0.6%	1.0%	1.9%
Total Crown net worth	50.2%	42.8%	37.4%	34.5%	33.8%	34.1%

Notes: 1 Net core Crown debt excluding the New Zealand Superannuation Fund and advances
2 Gross sovereign-issued debt excluding Reserve Bank bills and settlement cash

A longer time series for these variables is provided on page186.

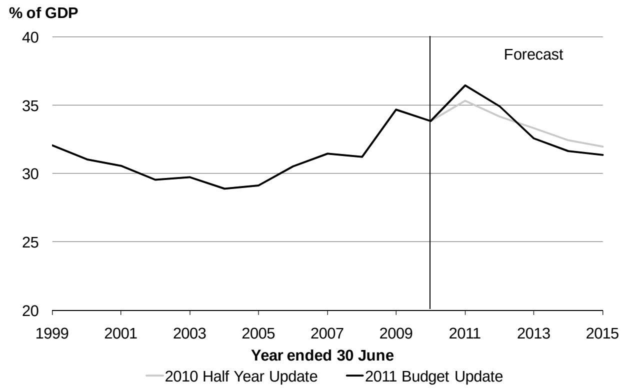
Source: The Treasury

...with core Crown expenses[4] lower than previous forecasts...

Relative to GDP, core Crown expenses are lower than the *Half Year Update* by the end of the forecast period primarily as a result of the current year's net savings package and a reduction in new spending in the next two Budgets (Figure 1.17).

Overall, though, core Crown expenses are forecast to increase in nominal terms. Table 1.7 details the movements.

Figure 1.17 – Core Crown expenses



Source: The Treasury

Table 1.7 – Growth in core Crown expenses

Year ended 30 June $billion	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Movements in expenditure					
New spending					
Budget 2010 decisions	1.4	1.2	1.2	1.2	1.2
Budget 2011 decisions	-	0.4	(0.1)	(0.4)	(0.3)
Budget 2012 allowance	-	-	0.8	0.8	0.8
Budget 2013 allowance	-	-	-	0.8	0.8
Budget 2014 allowance	-	-	-	-	1.2
Existing policies					
Increases in New Zealand Superannuation costs	0.5	1.3	1.9	2.6	3.4
Increase in other social assistance	0.5	0.7	0.7	0.7	0.8
Emissions Trading Scheme	1.2	0.6	0.3	0.3	0.3
Debt impairments	0.2	0.5	0.5	0.6	0.7
Finance costs	0.8	1.4	2.0	2.4	2.9
Short-term expenses					
Canterbury earthquakes	2.5	1.5	0.3	0.2	0.2
Weathertight homes	0.7	-	-	-	-
Deposit Guarantee Scheme	0.3	-	-	-	-
Other movements	0.7	1.4	1.0	0.9	1.1
Increase in core Crown expenses	8.8	9.0	8.6	10.1	13.1
Baseline expenses (June 2010)	64.0	64.0	64.0	64.0	64.0
Core Crown expenses	**72.8**	**73.0**	**72.6**	**74.1**	**77.1**

Source: The Treasury

The Budget 2011 package is a net savings package which results in a decrease in core Crown expenses (Table 1.8). This compares to the $1.12 billion additional spending each year forecast in the *Half Year Update*.

4 Core Crown expenses represent the operating expenses of government entities listed on page 145 but exclude expenses of State-owned enterprises and Crown entities. Also excluded are gains and losses.

Table 1.8 – Reconciliation of Budget 2011 initiatives

Year ended 30 June **$billion**	**2011** **Forecast**	**2012** **Forecast**	**2013** **Forecast**	**2014** **Forecast**	**2015** **Forecast**	**5-year** **Total**
Savings in Budget 2011	(0.2)	(0.7)	(1.3)	(1.5)	(1.5)	(5.2)
New spending in Budget 2011	0.1	1.1	1.0	0.8	0.9	3.9
Net savings in Budget 2011	(0.1)	0.4	(0.3)	(0.7)	(0.6)	(1.3)
Revenue initiatives (impacting core Crown revenue)	-	-	0.2	0.3	0.3	0.8
Increase/(decrease) in core Crown expenses	**(0.1)**	**0.4**	**(0.1)**	**(0.4)**	**(0.3)**	**(0.5)**

Source: The Treasury

In addition to the net savings in Budget 2011, the forecast includes a reduced operating allowance for new spending in Budget 2012 and Budget 2013. These forecasts now include an allowance for new spending of $800 million a year in those two Budgets (compared to $1.12 billion in the previous forecast).

However, the cost of existing programmes continues to increase over the forecast period.

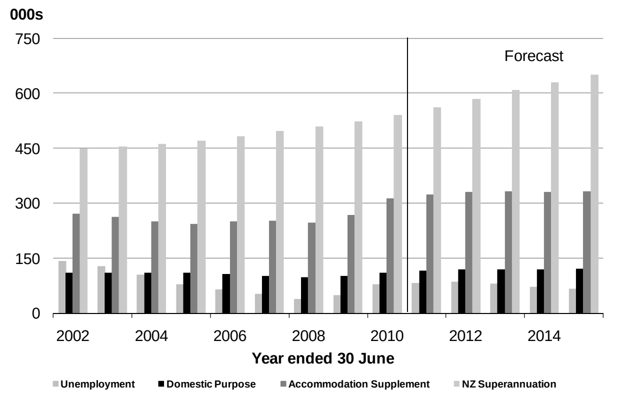
Most notably, social assistance expenses are forecast to increase by $3.1 billion over the forecast period when compared to the year ended June 2011. The majority of this increase is in relation to New Zealand Superannuation which increases by $2.8 billion over that period.

This increase in social assistance expenses is owing to both growth in the number of recipients (Figure 1.18) and the effect of wage and CPI indexation.

In addition, finance costs increase substantially in the next few years (Figure 1.19) with the borrowing programme largest in the current year (reaching $20 billion). The Government is borrowing more now while conditions are favourable, reducing borrowing requirements in future years.

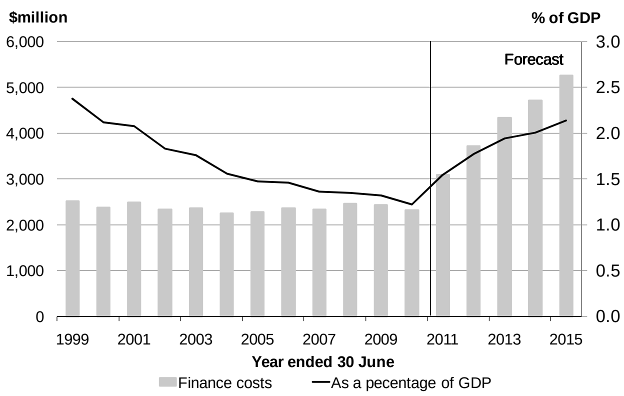
The "pre-borrowing" portion of debt is then invested in financial assets. Therefore, while finance costs increase over the forecast period, some of this is offset by an increase in interest revenue from the invested assets (Table 1.9).

Figure 1.18 – Beneficiary numbers



Source: Ministry of Social Development

Figure 1.19 – Finance costs



Source: The Treasury

Table 1.9 – Core Crown net interest income

Year ended 30 June $billion	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Core Crown interest revenue	1.0	1.3	1.5	1.6	1.9
Core Crown finance costs	(3.1)	(3.7)	(4.3)	(4.7)	(5.3)
Core Crown net interest	**(2.1)**	**(2.4)**	**(2.8)**	**(3.1)**	**(3.4)**

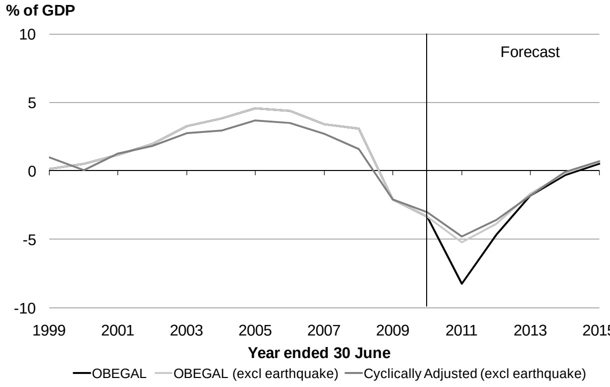
Source: The Treasury

...returning the Crown to surplus by the end of the forecast period...

When combined with the forecasts of State-owned enterprises and Crown entities, the total Crown is expected to record a material surplus in the June 2015 year (one year earlier than forecast in the *Half Year Update*).

The operating deficit[5] peaks in the current year at 8.4% of GDP (Figure 1.20). Excluding the direct costs of the earthquakes, the deficit would be around 5.2% of GDP.

Figure 1.20 – Total Crown operating balance before gains and losses



Source: The Treasury

Current weak economic growth is also playing a part in the large operating deficit in June 2011. Figure 1.20 shows the cyclically-adjusted,[6] or structural, operating balance. This cyclically-adjusted deficit reaches 4.8% of GDP in the current year, compared to the 5.2% above. The small difference between the two balances implies a small cyclical component to the operating deficit. For example, the automatic stabilisers (such as unemployment benefits) do temporarily add to the deficit, reflecting the negative output gap and high unemployment rate.

The structural deficit in the June 2011 financial year is gradually eliminated over the forecast period. The pace of improvement in the structural balance averages 1.5% of GDP per annum from June 2012 to June 2015 financial years.

When forecast net gains are included, the total Crown operating balance (including gains and losses) is forecast to reach a surplus of $2.3 billion a year earlier in the June 2014 financial year. These net gains are forecast predominantly by the Crown's financial institutions (eg, the New Zealand Superannuation Fund).

...and reducing cash deficits

In line with the operating balance before gains and losses, operating cash does reach surplus by the end of the forecast period. However, when capital spending is added, residual cash remains in deficit by $4.1 billion (or 1.6% of GDP) in the final year of the forecast

5 Operating balance before gains and losses.

6 For more details, see the *Additional Information* on the Treasury website (www.treasury.govt.nz).

(Table 1.10). These cash deficits represent the amount the Government has to fund, either by raising debt or reducing financial assets, and result in an increase in net debt.

Capital spending includes purchases of physical assets, advances (eg, student loans), capital injections (eg, investment in the New Zealand Transport Agency) and future new capital spending.

Contributions to the New Zealand Superannuation Fund are not expected to recommence during the forecast period.

Table 1.10 – Reconciliation from operating balance to net debt

Year ending 30 June $billion	2010 Actual	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Core Crown revenue	56.2	57.0	61.1	66.4	71.5	76.4
Core Crown expenses	(64.0)	(72.8)	(73.0)	(72.6)	(74.1)	(77.1)
Net surpluses/(deficits) of SOEs and CEs and core Crown gains and losses	3.3	6.4	4.6	4.8	4.9	5.3
Total Crown operating balance	**(4.5)**	**(9.4)**	**(7.3)**	**(1.4)**	**2.3**	**4.6**
Net retained surpluses of SOEs, CEs and NZS Fund	(3.7)	(6.0)	(4.7)	(4.9)	(4.9)	(5.3)
Non-cash items and working capital movements	3.2	4.8	2.5	0.8	1.3	0.8
Net core Crown cash flow from operations	**(5.0)**	**(10.6)**	**(9.5)**	**(5.5)**	**(1.3)**	**0.1**
Contribution to NZS Fund	(0.2)	-	-	-	-	-
Net purchase of physical assets	(1.8)	(1.9)	(1.8)	(1.4)	(2.0)	(1.6)
Advances and capital injections	(2.0)	(2.5)	(2.1)	(2.1)	(2.1)	(2.6)
Forecast for future new capital spending	-	-	(0.2)	(0.5)	(0.6)	(0.8)
Reprioritisation of assets to fund new capital spending	-	-	0.1	0.5	0.6	0.8
Core Crown residual cash deficit	**(9.0)**	**(15.0)**	**(13.5)**	**(9.0)**	**(5.4)**	**(4.1)**
Opening net debt	17.1	26.7	41.5	54.9	63.6	69.0
Core Crown residual cash deficit	9.0	15.0	13.5	9.0	5.4	4.1
Other valuation changes in financial assets and financial liabilities	0.6	(0.2)	(0.1)	(0.3)	-	(0.2)
Closing net debt	**26.7**	**41.5**	**54.9**	**63.6**	**69.0**	**72.9**

Source: The Treasury

The forecast for future new capital spending has been decreased to $900 million per Budget (spread over five years) from the $1.39 billion in the *Half Year Update*. This allowance is spread over the forecast period as outlined in Table 1.11.

Table 1.11 – Forecast for future new capital spending

Year ended 30 June $billion	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast	Outside the forecast period	Total
Budget 2011	-	0.1	-	-	-	-	0.1
Budget 2012	-	0.1	0.4	0.1	0.1	0.2	0.9
Budget 2013	-	-	0.1	0.4	0.2	0.2	0.9
Budget 2014	-	-	-	0.1	0.4	0.4	0.9
Budget 2015	-	-	-	-	0.1	0.8	0.9
	-	**0.2**	**0.5**	**0.6**	**0.8**	**1.6**	**3.7**

Source: The Treasury

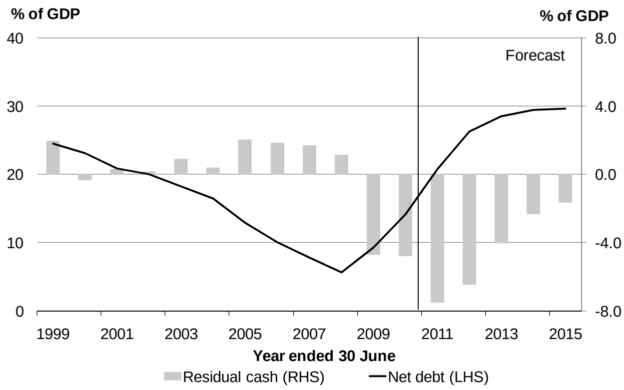
The Government has decided that, rather than fund this new spending through an increase in debt, existing capital on the Crown balance sheet will be utilised. New capital spending has therefore been forecast as a reduction in the Crown's assets. This is represented as "reprioritisation of assets to fund new capital spending" in Table 1.10.

As a result, net debt peaks at the end of the forecast period...

The continuation of cash deficits across the forecast period results in net debt peaking at 29.6% of GDP in the June 2015 financial year (Figure 1.21). Current projections estimate that net debt will begin falling as a percentage of GDP in the following year.

As discussed in the *Fiscal Strategy Report*, net debt is projected to decrease as a percentage of GDP after the forecast period.

Figure 1.21 – Net core Crown debt



Source: The Treasury

While net debt increases steadily over the forecast period, gross debt increases markedly in the short term. The 2010/11 borrowing programme run by the New Zealand Debt Management Office has recently been increased to $20 billion, which is larger than the current forecast cash deficit. This increase is possible owing to strong investor demand and means borrowing requirements in future years are reduced (Table 1.12). Net debt does not follow a similar trend as the surplus proceeds from these bond issuances are forecast to be invested in financial assets (resulting in no increase in net debt).

Table 1.12 – Net increase in domestic bonds

Year ended 30 June $billion	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast	5-year Total
Cash proceeds from issue of domestic bonds (market)	20.8	13.6	11.7	9.5	7.6	63.2
Repayment of domestic bonds (market)	-	(7.6)	(10.0)	-	(10.0)	(27.6)
Net increase in domestic bonds (market)	20.8	6.0	1.7	9.5	(2.4)	35.6
Cash proceeds from issue of domestic bonds (non-market)	0.4	0.2	0.5	0.3	0.4	1.8
Repayment of domestic bonds (non-market)	(1.2)	(1.1)	(0.4)	(0.1)	(0.3)	(3.1)
Net increase in domestic bonds (non-market)	(0.8)	(0.9)	0.1	0.2	0.1	(1.3)
Net cash proceeds from bond issuance	**20.0**	**5.1**	**1.8**	**9.7**	**(2.3)**	**34.3**

Source: The Treasury

...with continued focus on the management of the balance sheet

Net worth is forecast to fall to $76.9 billion by 2013 as operating deficits continue before rising to $83.9 billion by June 2015. Assets are forecast to reach $257.7 billion by the end of the forecast period while liabilities total $173.8 billion.

When compared to June 2010, total Crown liabilities increase by $45.5 billion by June 2015. The majority of this increase reflects the increase in gross debt. The Accident Compensation Corporation claims liability also increases by $5.1 billion over the same period.

In contrast, total assets are set to increase by $34.3 billion from June 2010 (Table 1.13).

Table 1.13 – Asset movements

Year ended 30 June $billion	**2010 Actual**	**2011 Forecast**	**2012 Forecast**	**2013 Forecast**	**2014 Forecast**	**2015 Forecast**	**5-year Total**
Opening total Crown assets	217.2	223.4	241.4	243.6	243.6	255.5	
Increases in assets:							
Addition of property, plant and equipment[1]	6.6	8.0	8.6	7.4	7.4	7.1	38.5
Student loans issued	1.5	1.6	1.6	1.6	1.7	1.6	8.1
Investment growth in Crown Financial Institutions	5.7	5.8	2.9	4.4	5.4	5.7	24.2
Forecast for new capital spending	-	-	0.2	0.5	0.6	0.8	2.1
Kiwibank mortgages	1.9	0.8	2.2	1.9	0.1	0.1	5.1
Gross investment in assets	15.7	16.2	15.5	15.8	15.2	15.3	78.0
Reduction in assets:							
Depreciation on property, plant and equipment	(3.6)	(3.8)	(4.0)	(4.2)	(4.3)	(4.4)	(20.7)
Reduction/(increase) in New Zealand Debt Management Office/Reserve Bank financial assets	(3.0)	3.9	(8.1)	(8.1)	4.3	(7.0)	(15.0)
Balance sheet funding for new capital spending	-	-	(0.1)	(0.5)	(0.6)	(0.8)	(2.0)
Other changes in assets	(2.9)	1.7	(1.1)	(3.0)	(2.7)	(0.9)	(6.0)
Net change in assets	**6.2**	**18.0**	**2.2**	**0.0**	**11.9**	**2.2**	**34.3**
Closing total Crown assets	**223.4**	**241.4**	**243.6**	**243.6**	**255.5**	**257.7**	

[1] Further breakdown is provided in note 14 of the forecast financial statements.

Source: The Treasury

Major increases in assets include:

- the purchase of around $38.5 billion of physical assets over the next five years. A breakdown of purchases of physical assets by the main sectors is provided on page 161
- an expected issuance of student loans of $8.1 billion
- growth in Crown Financial Institutions (eg, Accident Compensation Corporation) of around $24.2 billion
- forecast for new capital spending over the next five years of $2.1 billion, and
- net increase in Kiwibank mortgages of $5.1 billion.

These increases will be offset by around $20.7 billion of expected depreciation and an anticipated reduction in financial assets held by the New Zealand Debt Management Office and the Reserve Bank to fund the forecast cash deficit of around $15.0 billion.

While the forecast for new capital spending over the next five years is $2.1 billion, it is expected that existing capital will be reprioritised to meet this investment. This means that instead of borrowing to fund these investments, the Government will source funding from its existing balance sheet. As previously mentioned, the forecasts therefore assume that the allowance for new capital spending ($900 million per Budget spread over five years) will be met through a corresponding reduction in assets. This reprioritisation is to be applied for five Budgets for a total of $4.5 billion of new capital spending.

Finalisation Dates and Assumptions for the Forecasts

Economic and fiscal forecasts – finalisation dates	
Economic forecasts	13 April
Economic data	18 April
Tax revenue forecasts	20 April
Fiscal forecasts	2 May
Text finalised	11 May

Economic forecast assumptions

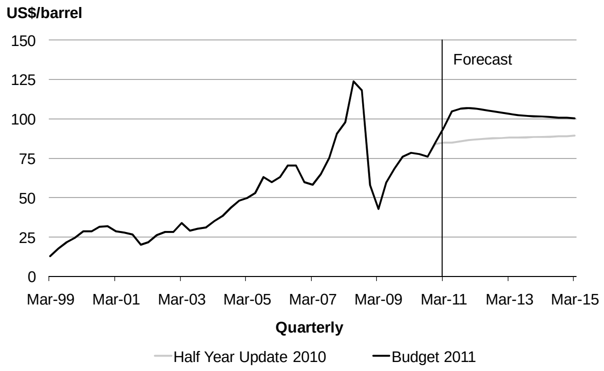
Earthquake – The Canterbury earthquakes have had a significant impact on the New Zealand economy over the past year and will continue to over the forecast period. Details of the economic and fiscal impacts are in Chapter 2.

Trading partner growth – The global economic outlook has continued to be revised upwards. The economies of New Zealand's top-16 trading partners are expected to grow 3.7% in 2011 and 4.4% in 2012 before averaging 4.1% per annum growth in the final three years of the forecast period. These are similar to growth rates in *Consensus Forecasts* for April 2011.

Global inflation and interest rates – Inflation pressures have risen for many of our trading partners, particularly in emerging Asia, as a result of high commodity prices and resource constraints. We expect interest rates to be gradually normalised over the forecast period.

Oil prices – The average price of West Texas Intermediate (WTI) oil was US$94/barrel in the March 2011 quarter and is assumed to rise over US$105/barrel per quarter from mid-2011, before falling to around US$100 at the end of the forecast period. At this point, the oil price assumption is approximately 12% above that assumed in the *Half Year Update*. These projections are based on a monthly average of futures prices from the New York Mercantile Exchange recorded on 11 April 2011.

Figure 1.22 – WTI oil prices



Sources: Datastream, The Treasury

Terms of trade – The merchandise terms of trade, as measured in the System of National Accounts (SNA), are estimated to rise further over the first half of 2011 to be around 2% higher in the June 2011 quarter than in the December 2010 quarter. This is around 8% higher than in the *Half Year Update 2010*.

Monetary conditions – The New Zealand dollar exchange rate is assumed to remain around its March 2011 quarter level of 67.2 on the Trade Weighted Index (TWI) throughout 2011. The TWI is then assumed to depreciate gradually from early 2012 to 56.0 in the March 2015 quarter. Ninety-day interest rates are expected to rise from 2.7% in the June quarter of 2011 to 4.0% two years later and continue to increase to 5.0% by the end of the forecast period.

External migration – The net inflow of permanent and long-term migrants is assumed to fall from 10,000 in the year to December 2010 to zero in the next year as a result of the subdued recovery and impact of the Canterbury earthquakes. Additional activity related to post-earthquake recovery eventually supports a rebound in net migration to 15,000 in the year to March 2014 before settling at our long-run assumption of 10,000 in the year to June 2015.

Several relatively minor tax policy changes have been included in the Budget forecasts:

Removal of KiwiSaver ESCT exemption – Employer contributions to KiwiSaver schemes will no longer be exempt Employer Superannuation Contribution Tax.

Exemption for non-resident investment in PIEs – The rules for non-resident investors in Portfolio Investment Entities will be aligned with those for direct investment to ensure fairness of tax treatment.

Bank thin capitalisation rules – The minimum prescribed percentage of equity for tax purposes will increase from 4% to 6%, the effect of which will limited foreign-owned banks' interest deductions against the New Zealand tax base.

Other – Several other minor policy changes that, individually, are below the $10 million per annum materiality threshold.

Table 1.14 – Tax policy changes included in the Budget tax revenue forecasts

Year ended 30 June ($ million)	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Material tax policy changes					
Removal of KiwiSaver ESCT exemption	-	44	196	212	226
Exemption for non-resident investment in PIEs	-	(5)	(10)	(10)	(10)
Bank thin capitalisation rules	-	8	31	31	31
Other	(9)	(19)	(9)	(9)	(10)
Total	**(9)**	**29**	**208**	**224**	**237**

Fiscal forecast assumptions

The fiscal forecasts are based on assumptions and judgements developed from the best information available on 2 May 2011, when the forecasts were finalised. Actual events are likely to differ from some of these assumptions and judgements. Furthermore, uncertainty around the forecast assumptions and judgements increases over the forecast period. The Canterbury earthquakes add additional uncertainty to the economic and fiscal forecasts.

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

- A nominal GDP forecast is needed in order to forecast tax revenue.
- A forecast of CPI inflation is needed because social assistance benefits are generally indexed to inflation.
- An unemployment forecast is needed to underpin the projected number of Unemployment Benefit recipients.
- Forecasts of interest rates are needed to forecast finance costs, interest income and discount rates.

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

Table 1.15 – Summary of key economic forecasts used in fiscal forecasts

	2010/11		2011/12	2012/13	2013/14	2014/15
June years	**Half Year forecasts**	**Budget forecasts**	**Budget forecasts**	**Budget forecasts**	**Budget forecasts**	**Budget forecasts**
Real GDP (P) (ann avg % chg)	2.5	0.7	2.5	4.0	2.7	2.8
Nominal GDP (E) ($m)	202,398	199,819	209,178	222,916	234,237	246,098
CPI (annual avg % change)	3.7	3.8	3.4	2.5	2.6	2.5
Govt 10-year bonds (ann avg %)	5.3	5.5	5.7	5.7	5.9	6.0
5-year bonds (ann avg %)	4.6	4.6	5.0	5.3	5.6	5.8
90-day bill rate (ann avg %)	3.3	3.0	2.9	3.7	4.6	4.9
Unemployment rate (ann avg %)	6.2	6.7	5.9	4.9	4.8	4.6
Employment (ann avg % change)	1.8	1.2	1.3	2.5	1.6	1.3
Current account (% of GDP)	-1.5	0.7	-4.5	-5.5	-7.0	-6.7

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

Government decisions	Incorporates government decisions up to 2 May 2011.
Tax revenue	Tax policy changes enacted and announced by the Government will take place as planned and will affect tax revenue and receipts as calculated and agreed by Inland Revenue and the Treasury. The surge in other persons tax refunds and company tax refunds over the past few years was largely a result of the recession. We have assumed that refunds will return to pre-recession trends as the economic recovery gets underway. Utilisation of corporate tax losses to offset future taxable profits will retard the growth of corporate tax up to and including the 2013 year. Earthquake-related GST refunds will provide a temporary boost to GST refunds over 2011 and 2012. GST receipts from earthquake-related spending will provide a temporary boost to net GST, mostly from 2012 onwards. The total net effect of these two elements will be zero (ignoring any additional spending over and above the insurance claims that may occur). The current unusually large margin between 90-day interest rates and six-month term deposit rates will be maintained throughout the forecast period, which has a positive influence on resident withholding tax on interest.
Earthquake costs	Expenditure (accrual measure) is forecast based on estimates on when key decisions will be taken. The timing of cash payments is based on estimates of when actual spending will take place. Refer to Chapter 2 for more detailed discussion on underlying assumptions.
Operating allowance for new spending	Net $800 million in Budgets 2012 and 2013. Net $1.19 billion in Budget 2014, growing by the rate of 2% per annum for subsequent Budgets.

<table>
<tr>
<td>Capital allowance for new spending</td>
<td>
$900 million in Budget 2012 onwards allocated as follows:
<table>
<tr><th>$billions</th><th>11/12</th><th>12/13</th><th>13/14</th><th>14/15</th><th>Post 2015</th><th>Total</th></tr>
<tr><td>Budget 12</td><td>0.10</td><td>0.35</td><td>0.20</td><td>0.15</td><td>0.10</td><td>0.90</td></tr>
<tr><td>Budget 13</td><td></td><td>0.10</td><td>0.35</td><td>0.20</td><td>0.25</td><td>0.90</td></tr>
<tr><td>Budget 14</td><td></td><td></td><td>0.10</td><td>0.35</td><td>0.45</td><td>0.90</td></tr>
<tr><td>Budget 15</td><td></td><td></td><td>-</td><td>0.10</td><td>0.80</td><td>0.90</td></tr>
<tr><td>Subtotal</td><td>0.10</td><td>0.45</td><td>0.65</td><td>0.80</td><td>1.60</td><td>3.60</td></tr>
</table>
Funding for this new spending will be from existing capital investments rather than borrowing for the next five Budgets.
</td>
</tr>
<tr>
<td>Investment rate of returns</td>
<td>Incorporate the actual results to 28 February 2011. Beyond the June 2011 year, gains on financial instruments are based on long-term benchmark rate of returns for each portfolio.</td>
</tr>
<tr>
<td>Finance cost on new bond issuances</td>
<td>Based on five-year rate from the economic forecasts and adjusted for differing maturity.</td>
</tr>
<tr>
<td>Top-down adjustment</td>
<td>
Based on historical spending patterns of departments and estimations of current fiscal conditions.
Top-down adjustment to operating and capital as follows:
<table>
<tr><th>$billions</th><th>10/11</th><th>11/12</th><th>12/13</th><th>13/14</th><th>14/15</th></tr>
<tr><td>Operating</td><td>0.25</td><td>0.31</td><td>0.05</td><td>0.05</td><td>0.05</td></tr>
<tr><td>Capital</td><td>0.10</td><td>0.17</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Total</td><td>0.35</td><td>0.48</td><td>0.05</td><td>0.05</td><td>0.05</td></tr>
</table>
</td>
</tr>
<tr>
<td>Borrowing requirements</td>
<td>The forecast cash deficits will be met by reducing financial assets and issuing debt.</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>For the purposes of the forecast financial statements, no revaluations of property, plant and equipment are projected beyond the current year. Valuations as recorded for the 2010 annual financial statements and any additional valuations that have occurred up to 28 February 2011 are included in these forecasts. A number of revaluation exercises are currently underway and are planned to be completed in time for the 2011 annual financial statements (published in early October). The results of these valuations are, therefore, not reported in these forecast financial statements.</td>
</tr>
<tr>
<td>Student loans</td>
<td>The carrying value of student loans is based on a valuation model adapted to reflect current student loans policy. As such, the carrying value over the forecast period is sensitive to changes in a number of underlying assumptions, including future income levels, repayment behaviour and macroeconomic factors such as inflation and discount rates used to determine the effective interest rate for new borrowers. Any change in these assumptions would affect the present fiscal forecast.</td>
</tr>
</table>

Government Superannuation Fund and ACC liabilities	The Government Superannuation Fund and ACC liabilities included in these forecasts have been valued as at 31 January 2011 and 31 December 2010 respectively, with the ACC valuation being adjusted for the 31 March 2011 discount rate. Both liabilities are valued by projecting future cash payments, and discounting them to present value. These valuations rely on historical data to predict future trends and use economic assumptions such as inflation and discount rates. Any change in actual payments or economic assumptions would affect the present fiscal forecast. For example, if the discount rate decreases, the value of the liabilities would increase. The Government Superannuation Fund's assets are offset against the gross liability and have been updated to reflect market values at 31 January 2011. The value of assets over the forecast period reflects long-run rate of return assumptions appropriate to the forecast portfolio mix.
Emissions Trading Scheme (ETS)	The forecasts have been prepared in accordance with current government ETS policies. Details of current climate change policies are listed at: www.mfe.govt.nz/issues/climate/policies-initiatives The carbon price assumption is based on estimates of the current carbon price from Point Carbon, and is €10.95 with an exchange rate of 0.5387 (a carbon price of NZ$20.33) over the forecast period. The economic models used to project agriculture and energy activity assume an international carbon price of NZ$25 per tonne to 2012, and NZ$50 to 2020. The forecast assumes a 65% uptake of post-1989 foresters into the ETS over Commitment Period One (CP1). It is assumed the ETS has no fiscal impact on debt or cash flows, as the net cash impact from the ETS and international obligations is highly uncertain.
Kyoto position	The Kyoto position included in the fiscal forecasts reflects the Government's obligation for CP1, from 2008 to 2012. It does not include any future potential reduction of the position through the transfer of units offshore through the forestry sector, or any future changes to the position through transactions under the ETS.
NZS Fund contributions	No contribution is assumed in the forecast period.