3

Risks and Scenarios

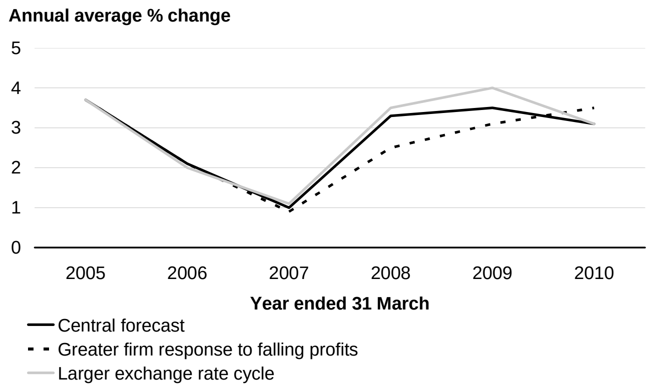
Summary

- The central forecast presented in the Economic and Tax Outlook chapter shows an economy that is expected to continue slowing over 2006 and early 2007 before rebounding in the year to March 2008. The speed and magnitude of the slowdown and recovery are dependent on how different factors evolve.

- Some of the major risks discussed below are key judgements in the forecasts and include the outlook for the terms of trade, exchange rate, business sentiment, inflation, and household reaction to increased indebtedness. Other risks, although less likely to occur, are still important to consider and could have large implications for the economy.

- Although we believe the central forecast presented in the Economic and Tax Outlook chapter to be the most likely outcome, we present, in the second part of this chapter, two scenarios which illustrate alternative paths. These scenarios are just two of a number of possible outcomes and therefore do not fully illustrate the range of possible outcomes.

Figure 3.1 – Real GDP



Source: The Treasury

- Corporate profit growth has been strong for some time, and especially so over the past two years. However it is expected to fall in 2007 and remain low. How businesses react to this fall in profits is an important judgement associated with the forecasts. A scenario where businesses react more to the fall in profits examines the impact on their investment and employment intentions and the consequent flow-through to consumption spending. This scenario results in lower real and nominal GDP for most of the forecast period.

- The future exchange rate path is one of the key judgements associated with the forecasts. A scenario involving a larger cycle in the exchange rate examines the direct impact this has on the external sector and consequent flow-through to the domestic sector. This scenario results in higher real and nominal GDP for most of the forecast period.

Introduction

The central forecast reflects the balancing of the upside and downside risks facing the economy to arrive at our best assessment of the way the economy is likely to develop. This requires a number of key judgements to be made about how the various forces affecting the economy will evolve. Some of these judgements are related to the cyclical drivers of activity and some relate to the structural characteristics of the economy. If actual events differ from these judgements, the economy will naturally deviate from our central forecast.

The first part of this chapter, Economic Risks, outlines some of the risks around the economic outlook. There are both upside and downside risks – some domestically and some internationally oriented. The second part of this chapter, Economic Scenarios, presents in more detail two scenarios that could occur if a different set of events were to occur.

Economic Risks

A number of key judgements in the forecasts may evolve differently

The reaction of business to falling profits is a key judgement…

Businesses have been facing inflationary pressures in the form of rising inputs and capital costs, as well as higher labour costs. The previously high exchange rate has also seen increased competition from imported goods. These forces have been reflected in declining margins and weaker business confidence. Businesses are unlikely to offset the fall in margins through sales volume growth over the coming year, leading to a fall in profits in 2007. Implicit in the central forecast is a judgement that businesses are in a position to see through the cyclical downturn in their profits as their balance sheets remain strong after a period of growth.

Although businesses are expected to reduce staff levels, the reduction is not great, with businesses expected to hold on to labour so that they are not constrained once economic activity increases. However, there is a risk that businesses may respond differently to the cyclical downturn in their profits than assumed in the central forecast and may enter a period of more aggressive cost-cutting. This could see lower investment and employment as well as lower wage inflation than incorporated in the central forecast, with subsequent flow-on effects into private consumption growth. Such a scenario is examined later in the chapter.

…as is the response of households to high debt levels

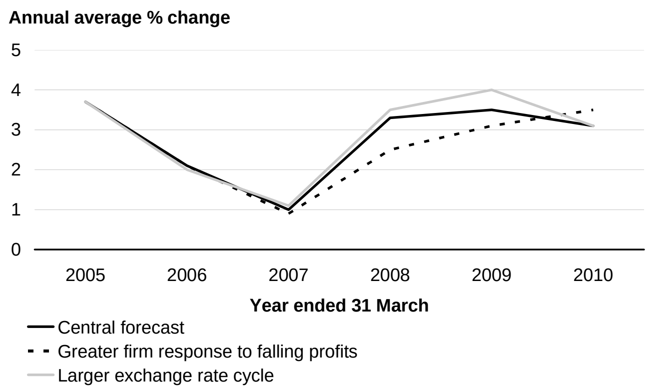
As with previous forecasts, there is a judgement that the continued accumulation of debt by households will impinge on future private consumption growth by acting as a constraint on spending, particularly with house price growth expected to fall and become negative in 2007 and 2008. The ratio of debt to household income is currently at record high levels. Despite slowing consumption growth, this ratio is expected to continue to increase over the forecast period. There is some uncertainty surrounding the effect of higher debt servicing costs as well as the extent to which concerns around debt levels will act as a brake on spending (if at all). If households' spending decisions are less influenced by their growing debt levels than is incorporated in the central forecast, it is likely to lead to higher private consumption and residential investment. Conversely, if a sizeable attempt by households at debt consolidation occurred, this would pose downside risk to the central forecast.

There are also uncertainties surrounding the housing market. Although it appears activity has slowed, house price growth is still running at historically high levels. The central forecast incorporates a small fall in average nominal house prices. If this were not to eventuate, then this could see increased consumption spending as households continue to borrow against equity increases in their homes. However, it is also possible that house prices could fall further than incorporated in the central forecast. If this were to occur it may result in a larger slowdown in residential investment and consumption spending than incorporated in the central forecasts.

The exchange rate and the external sector response are important…

The future path of the exchange rate and its impact on the future performance of the economy is a key judgement of the forecasts. The Trade Weighted Index (TWI) fell by 4.4% in the March quarter. The central forecast assumes further falls in the TWI. Such a fall would be consistent with the forecast declines in the terms of trade and interest rate differentials. However, there is a possibility that the exchange rate could fall further than assumed and this would likely impact on the economy through higher export volume growth, higher inflation and lower import volume growth. An example of this scenario is examined later in the chapter.

Figure 3.2 – Exports of goods and services



Source: The Treasury

The magnitude and timing of the export and import volume response to the exchange rate depreciation are key judgements in the central forecast. The central forecast assumes that there is a lag in the export sector response to a lower exchange rate. If this lag or delay in the response to the exchange rate was longer than expected, then export volume growth and hence GDP growth could be lower than in the central forecast. Likewise, if the response of the export sector was more rapid, then export volume growth would likely be higher over 2006 and 2007.

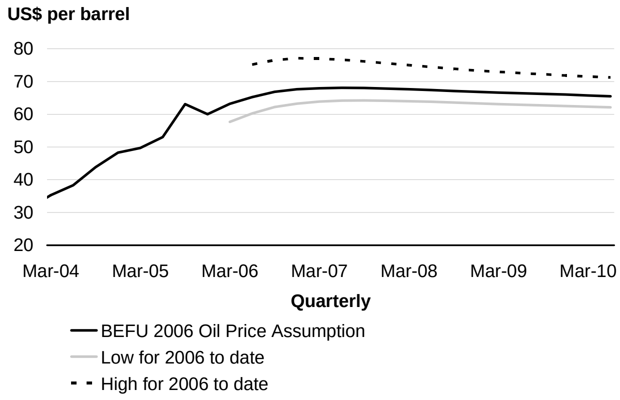
…as are the world prices for commodity exports

The outlook for the terms of trade is also a key judgement of the forecasts. After two years of strong growth, the terms of trade fell over the second half of 2005. Record high prices for some of New Zealand's commodity exports, which were held artificially high by temporary supply factors, pushed the terms of trade to their peak in March 2005. However, there is growing evidence to suggest that some export commodity prices have peaked and have started to fall as these supply factors have abated. The extent of the fall in export prices poses a large risk to the forecasts. The central forecast incorporates a rather gradual fall in world export prices as strong world demand holds them at relatively high levels. However, as at times in the past, export price declines can occur rapidly. If the strength in the global economy does not flow through into the prices of some exports, or if the impact of the supply shortages were larger than expected, then prices could fall further and faster than incorporated in the central forecast. This would likely lead to lower agricultural income and consumption spending than incorporated in the central forecast.

Future oil price movements are uncertain…

Although it is an assumption in the central forecast, the outlook for oil prices poses significant risk to the terms of trade and therefore the economy. Between the start of 2006 and the date the forecasts were finalised, West Texas Intermediate (WTI) crude oil prices increased by approximately 13% and are around 50% higher than the level in January 2005. These recent price increases appear to be driven largely by strong world demand leading to pressures on refining capacity, as well as uncertainty surrounding the geopolitical situations in some oil exporting countries. Oil prices, based on the futures market, are assumed to continue increasing over 2006 and the first half of 2007. If the political situations eased, or if more refining capacity was made available, then these oil price increases may not eventuate. This would result in a higher terms of trade as well as increased consumption spending in comparison to the central forecast. However, if the geopolitical tensions in the oil exporting countries were to escalate, further oil price increases would be likely and this could have implications for both the domestic and global economies.

Figure 3.3 – Oil futures curves



Source: Datastream, The Treasury

…and any further increases could impact on inflation and interest rates

These oil price increases and the assumed depreciation in the exchange rate pose risks to the inflation track presented in the Economic and Tax Outlook chapter. The annual inflation rate is expected to remain around its current high rate for some time before moderating from mid-2007. However, if the exchange rate were to fall further than expected or if oil prices continued to increase, then there is a risk that the inflation rate could be higher. There is also a possibility that second round effects of higher oil prices on input costs could be felt if firms were forced to raise prices in order to ease pressures on their margins. This could then pose risks to our interest rate forecasts. If generalised inflation was taking hold or inflation expectations had increased, then monetary policy may have to respond by increasing interest rates or holding rates at current levels for longer.

Global growth and migration flows also pose risks to the forecasts

The development of the world economy is a major driver of activity for New Zealand through the impact on both the prices and volumes of exports and imports, and through interest rates and confidence. The Economic and Tax Outlook chapter summarised the *Consensus* forecasts for trading partner growth that underpin the central forecast. Over the next year, steady economic growth for New Zealand's largest trading partners is expected. If world economic growth were to slow more than expected, New Zealand's export volumes and prices could fall faster than forecast and economic growth would slow accordingly.

Net migration has had a significant impact on New Zealand's population growth in recent years which has relevance for the size of the workforce as well as demand for goods and services. In the central forecast, net migration inflows are assumed to increase gradually to 10,000. There is a risk that as employment growth slows and the economy weakens, net migration will be lower than forecast or even turn negative. This would result in lower domestic demand than built into the central forecast. However, there is also a risk, given recent data released since the forecasts were finalised, that net migration could be higher than expected in the central forecast in the short term.

Other risks, although less likely, could have a large effect if they occurred

Climatic conditions are an important influence on agriculture-related production in New Zealand. According to the National Institute of Water and Atmospheric Research (NIWA), over the three months from April, rainfall is likely to be normal or below normal in the South Island and southwest North Island, while all other regions should experience normal or above normal rainfall. A more severe outcome with drier conditions than predicted could have a detrimental impact on agricultural production and hydroelectric generation. Lake levels in the South Island have been very low over summer and although they have recently increased, they remain below average. If these lake levels remain below average over winter it increases the risks of electricity supply shortages and price spikes, which will have an adverse impact on economic growth.

The World Health Organisation (WHO) and other health authorities have warned of the risk of an influenza pandemic with the emergence and spread of a highly pathogenic strain of avian influenza, H5N1. The continued spread of avian influenza (as an animal disease, rather than human disease) may itself pose some risks to our forecasts through its impact on trading partners and possible risks to the poultry industry in New Zealand. Moreover, the risk of a pandemic may itself have some impact on international travel, tourism, and trade in services. Finally, while the likelihood of a pandemic, and its severity should it occur, is unknown, it is clear that a serious pandemic would have major human, social and economic costs.

Economic Scenarios

The following scenarios present two possible growth paths for the economy when some of the key judgements underlying the central forecast are altered.

1. Greater firm response to falling profits – This scenario examines the implications for the economy if businesses cut back employment and investment intentions in the face of falling profits.

2. Larger exchange rate cycle – This scenario illustrates the implications for the economy if the exchange rate depreciates further than in the central forecasts.

The scenarios are two of a large number of possible outcomes, and do not represent upper or lower bounds for the central forecast, with more extreme paths being possible.

Table 3.1 – Alternative scenarios: summary

	2005	2006	2007	2008	2009	2010
	Actual	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**
Production GDP (annual average % change, year ending 31 March)						
Central forecast	3.7	2.1	1.0	3.3	3.5	3.1
Greater firm response to falling profits	3.7	2.1	0.9	2.5	3.1	3.5
Larger exchange rate cycle	3.7	2.0	1.1	3.5	4.0	3.1
Nominal Expenditure GDP (annual average % change, year ending 31 March)						
Central forecast	7.2	4.3	1.9	5.2	5.6	5.2
Greater firm response to falling profits	7.2	4.3	1.7	4.2	4.6	4.8
Larger exchange rate cycle	7.2	4.3	2.1	6.2	6.7	5.3
OBERAC ($ billion, year ending June)						
Central forecast	8.9	7.0	5.8	4.4	3.6	5.4
Greater firm response to falling profits	8.9	7.1	5.6	3.4	2.5	4.3
Larger exchange rate cycle	8.9	7.1	5.9	4.9	4.7	6.4

Sources: Statistics New Zealand, The Treasury

Greater firm response to falling profits

In the central forecast, economic activity is forecast to slow over 2006 and 2007, negatively affecting firm profitability. We assume that businesses are able to see through the cyclical slowdown due to a period of previous strong profit growth and strong balance sheets. A key judgement is that firms hold on to labour in order to avoid constraints when economic activity picks up in 2008 and 2009. This scenario looks at the situation where firms respond to the forecast weakness in profits by entering a period of more aggressive cost cutting, cutting back on their investment expenditure and also laying off more workers.

Table 3.2 – Greater firm response to falling profits

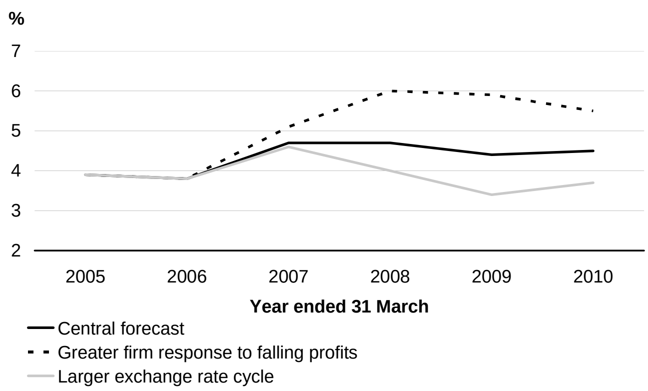
(Annual average % change, year ending 31 March)	2005 Actual	2006 Forecast	2007 Forecast	2008 Forecast	2009 Forecast	2010 Forecast
Private consumption	5.8	3.8	0.7	0.5	1.0	2.3
Residential investment	2.3	-5.4	-10.4	-2.6	6.1	12.8
Business investment	9.8	7.8	-5.2	-8.6	6.0	9.3
Gross national expenditure	6.5	4.3	-0.5	-0.2	2.6	3.9
Exports of goods and services	3.9	0.1	1.0	5.6	4.7	3.4
Imports of goods and services	13.7	5.1	-1.3	-2.7	3.0	4.9
GDP (production measure)	3.7	2.1	0.9	2.5	3.1	3.5
Employment growth	3.6	2.4	-0.5	-0.7	0.5	1.7
Unemployment rate[1]	3.9	3.8	5.1	6.0	5.9	5.5
90-day bank bill rate[2]	6.9	7.6	6.9	4.7	4.7	4.9
TWI[2]	69.6	68.3	58.7	57.5	58	58.4
CPI[3]	2.8	3.3	3.4	2.1	1.1	1.3
Current account balance (% GDP)	-7.4	-9.3	-8.7	-6.6	-5.1	-5.1
Nominal GDP (expenditure measure)	7.2	4.3	1.7	4.2	4.6	4.8

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

NOTES:
1 Percentage of labour force, March quarter, seasonally adjusted.
2 Average for March quarter.
3 Annual percentage change, March quarter.

These changes in behaviour see firms begin to cut back on investment expenditure and further reduce employment over the second half of 2006. For the 2007 March year business investment falls 5.2%, 1.8% lower than in the central forecast. With less demand for imported investment goods, import volumes also fall relative to the central forecast and this results in the overall impact on GDP being relatively modest at this stage, with production GDP growth slowing to 0.9% in the March 2007 year, slightly slower than the 1.0% growth in the central forecast.

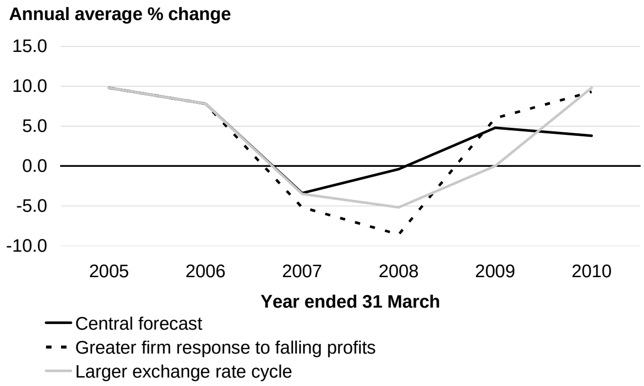
Figure 3.4 – Unemployment rate



Source: The Treasury

Firms continue to cut back their expenditure during the 2008 March year with business investment continuing to contract. Under this scenario business investment falls 8.6% (compared with a 0.4% fall in the central forecast). Employment growth is also weaker in the 2008 March year, falling 0.7%, which is 1.1% below the central forecast. This results in the unemployment rate rising sharply to 6.0% and, as a result, private consumption growth is 0.3% lower under this scenario than the central forecast.

Figure 3.5 – Business investment



Source: The Treasury

March year real private consumption growth reaches a trough of 0.5% in 2008, while residential investment contracts in each of the 2006, 2007 and 2008 March years. With lower domestic demand (Gross National Expenditure growth is 1.4% lower than the central forecast in the March 2008 year), demand for imports remains muted, with import growth 1.8% lower than the central forecast. Overall, this results in GDP growth of 2.5%, 0.8% lower than the central forecast. The recovery of GDP growth is driven off strong export growth of a similar magnitude to the central forecast, given that the exchange rate and export performance remains similar to that in the central forecast throughout the forecast period.

Weaker domestic demand eases inflationary pressures in the domestic economy and monetary policy responds to the domestic weakness and lower inflation pressures by easing considerably over the March 2008 year. Under this scenario 90-day rates fall below 5% as inflation eases to around 2%. Ninety-day rates remain below the central forecast for the remainder of the forecast horizon. The gap between 90-day rates in this scenario and the central forecast does, however, narrow to 0.9% by March 2010 as lower interest rates help domestic demand to recover.

Lower interest rates encourage a recovery in both business and residential investment in the 2009 and 2010 March years, but consumers remain cautious as employment growth remains below the central forecast and, with a softer labour market, wage increases remain modest. Consumption growth recovers to 2.3% in the final forecast year (equal to the central forecast) as employment growth recovers and the unemployment rate begins to ease.

Under this scenario the lower import growth over most of the forecast horizon results in the current account being less negative. Lower real activity combined with reduced inflationary pressures results in nominal GDP growth being below the central forecast over the entire forecast period and nearly $4.6 billion lower than in the central forecast in the March 2010 year. The cumulative impact on nominal GDP of this scenario is around $10.4 billion over the forecast period. By the end of the forecast period real GDP is around $1.2 billion lower than in the central forecast. This scenario has a negative impact on the size of the operating surplus through lower revenue growth.

Larger exchange rate cycle

Under the central forecast the New Zealand dollar is expected to fall over the forecast period. Previous New Zealand exchange rate cycles suggest that when the exchange rate depreciates it can "overshoot" long-run averages or estimates of equilibrium or fair value.

Table 3.3 – Larger exchange rate cycle

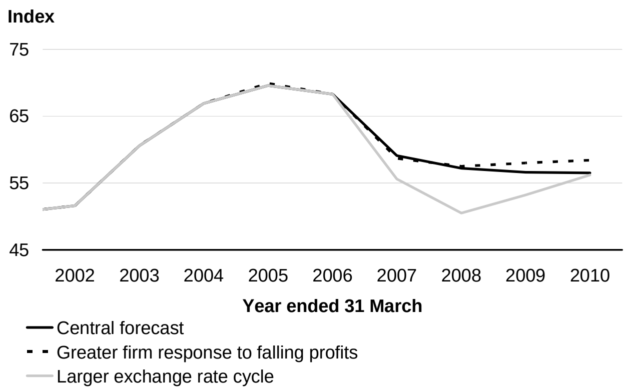
(Annual average % change, year ending 31 March)	**2005 Actual**	**2006 Forecast**	**2007 Forecast**	**2008 Forecast**	**2009 Forecast**	**2010 Forecast**
Private consumption	5.8	3.8	0.6	0.1	2.2	3.0
Residential investment	2.3	-5.4	-10.4	-4.0	6.5	10.2
Business investment	9.8	7.8	-3.5	-5.2	6.8	9.8
Gross national expenditure	6.5	4.3	-0.3	0.0	3.4	4.3
Exports of goods and services	3.9	0.1	1.0	6.9	5.6	2.9
Imports of goods and services	13.7	5.1	-1.5	-3.8	4.0	6.7
GDP (production measure)	**3.7**	**2.0**	**1.1**	**3.5**	**4.0**	**3.1**
Employment growth	3.6	2.4	-0.3	1.0	2.2	1.7
Unemployment rate[1]	3.9	3.8	4.6	4.0	3.4	3.7
90-day bank bill rate[2]	6.9	7.6	8.1	6.3	5.9	5.8
TWI[2]	69.6	68.3	55.6	50.5	53.2	56.2
CPI[3]	2.8	3.3	3.7	3.4	2.1	2.0
Current account balance (% GDP)	-7.4	-9.3	-8.9	-6.8	-4.9	-5.3
Nominal GDP (expenditure measure)	7.2	4.3	2.1	6.2	6.7	5.3

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

NOTES: 1 Percentage of labour force, March quarter, seasonally adjusted.
2 Average for March quarter.
3 Annual percentage change, March quarter.

Under the second scenario presented above, the exchange rate is assumed to fall further than in the central forecast with the TWI falling to around 50 in March 2008 (about its level in 2001 at the trough of the previous exchange rate cycle) before recovering in the following two years to around the level assumed in the central forecast. Initially the exchange rate deviation from the central track is reasonably small with the largest deviation occurring in the following year.

Figure 3.6 – Exchange rate (TWI)



Source: The Treasury

In the March 2007 year the lower exchange rate has a small negative influence (relative to the central forecast) on consumption and business investment as imported goods become more expensive. Import volumes fall relative to the central forecast with the overall impact on GDP being very modest. With the rate of depreciation of the exchange rate being more rapid, monetary policy begins to react to the potential for higher tradables inflation. Ninety-day rates increase to around 8.0% in March 2007 compared with 7.6% in March 2006. This contrasts with the central track, in which rates are expected to ease to around 7.0% by March 2007.

Consumption and investment growth are quite a bit weaker in the March 2008 year relative to the central forecast as consumers and firms respond to higher interest rates and higher import prices. Consumption growth is 0.6% weaker than the central forecast while residential investment and business investment are 2.8% and 4.8% below that contained in the central forecast respectively.

Offsetting this weakness in the domestic economy is a stronger recovery in exports as the lower exchange rate assists the competitiveness of our products abroad. Export growth is stronger than the central forecast in both the 2008 and 2009 March years. Stronger export demand, combined with a substitution away from more expensive imported inputs towards labour, sees employment grow more strongly than in the central forecast from 2008 on. This results in the unemployment rate being lower than in the central forecast.

The switch to the export sector becoming the key driver of growth in 2008 helps the current account deficit become less negative, with the deficit falling to 6.8% of GDP in 2008 and just below 5% in 2009. Negative sentiment around the currency diminishes and the exchange rate appreciates over the last couple of years to a similar level to that contained in the central forecast.

As the exchange rate stops depreciating, tradable inflation pressures ease and coupled with weak domestic demand in 2008 this enables interest rates to return to levels close to the central forecast track. Lower interest rates, combined with the potential for lower import prices as the exchange rate begins to appreciate, and strengthening employment growth, bring a recovery in domestic demand growth in the March 2009 and 2010 years.

Overall real GDP growth is similar to the central forecast in 2007, 0.2% higher in the March 2008 year, and 0.5% higher in 2009. Despite the scenario having a relatively small impact on real GDP, higher inflation, particularly over the March 2008 year, sees nominal GDP $4 billion higher in the March 2010 year and $9.8 billion higher in total over the forecast period. Although the higher nominal GDP will flow through to a higher nominal tax revenue, it is likely that the Government would require higher nominal expenditure in order to maintain real service provision at a similar level to the central forecast as a result of the higher inflation.

Fiscal Scenarios

The fiscal position is strongly influenced by the economy. The major economic determinants, and how they impact on the fiscal position, are listed below. While each effect is expressed in terms of an increase in the determinant, the opposite impact applies for a decrease.

- Nominal GDP – higher GDP levels are reflected in higher tax revenue, which increases the operating balance and lowers the Government's debt.
- Interest rates – higher interest rates lead to increased debt financing costs. While interest-based revenue also increases, the negative effect of higher finance costs on the operating balance dominates, meaning debt increases.
- The level of unemployment – higher levels of unemployment translate to an increase in spending, because the number of unemployment beneficiaries rises. This decreases the operating balance and raises debt levels.
- CPI inflation – as most benefits are indexed to CPI movements, higher inflation results in increased benefit costs. This reduces the operating balance and increases debt.

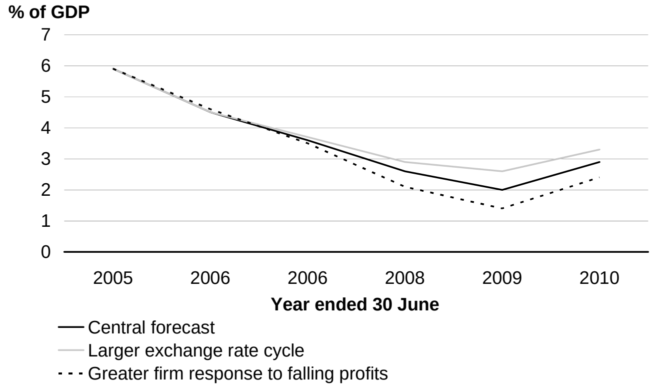
Table 3.4 – Alternative scenarios: OBERAC and gross debt

Year ending 30 June	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
	Actual	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**
OBERAC ($ billion)						
Central forecast	8.9	7.0	5.8	4.4	3.6	5.4
Greater firm response to falling profits	8.9	7.1	5.6	3.4	2.5	4.3
Larger exchange rate cycle	8.9	7.1	5.9	4.9	4.7	6.4
Gross sovereign-issued debt ($ billion)						
Central forecast	35.0	36.0	35.0	37.1	37.0	36.3
Greater firm response to falling profits	35.0	35.8	35.0	38.0	39.0	39.5
Larger exchange rate cycle	35.0	35.8	34.8	36.3	35.1	33.6
OBERAC (% GDP)						
Central forecast	5.9	4.5	3.6	2.6	2.0	2.9
Greater firm response to falling profits	5.9	4.6	3.5	2.1	1.4	2.4
Larger exchange rate cycle	5.9	4.5	3.7	2.9	2.6	3.3
Gross sovereign-issued debt (% GDP)						
Central forecast	23.2	23.0	21.9	21.9	20.7	19.4
Greater firm response to falling profits	23.2	22.9	22.0	22.8	22.3	21.6
Larger exchange rate cycle	23.2	22.9	21.7	21.2	19.3	17.5

Sources: Statistics New Zealand, The Treasury

The greater firm response to falling profits scenario is characterised by lower nominal GDP, lower interest rates, a higher unemployment rate and lower inflation in comparison with the central forecast. Lower nominal GDP and higher unemployment result in a decrease in taxes collected and an increase in benefit payments. Lower inflation results in a partial reduction in benefit payments and lower interest rates result in a reduction in debt servicing costs. However, the overall impact of this scenario is a lower OBERAC and higher debt.

Figure 3.7 – OBERAC



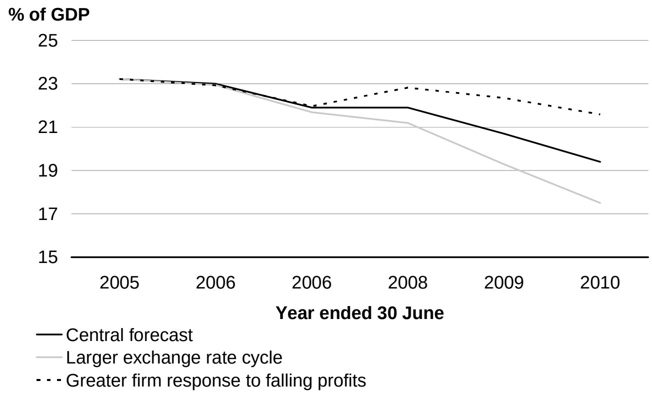
Source: The Treasury

By the end of the forecast period the OBERAC is around half a percentage point of GDP lower than the central forecast and gross sovereign-issued debt (GSID) is around two percentage points of GDP higher than the central forecast.

The larger exchange rate cycle scenario is characterised by a more cyclical profile for interest rates. Inflation is higher throughout the forecast period in comparison with the central forecast. Nominal GDP is higher than the central forecast for most of the forecast period. The unemployment rate is lower than the central forecast for most of the forecast period.

Higher nominal GDP leads to higher tax revenue, and lower unemployment leads to lower expenses, but higher interest rates and inflation in the larger exchange rate cycle scenario result in higher expenses. The overall impact is an increase in the OBERAC by around half a percentage point of GDP by the end of the forecast period. The cumulative impact of having a higher OBERAC is a reduction in GSID by around two percentage points of GDP by the end of the forecast period compared with the central scenario.

Figure 3.8 – Gross sovereign-issued debt



Source: The Treasury

Fiscal Sensitivities

The scenarios above indicate the sensitivity of fiscal aggregates to changes in economic conditions. Table 3.5 provides some "rules of thumb" on the sensitivities of the fiscal position to changes in specific variables.

Table 3.5 – Fiscal sensitivity analysis

($ million) June years	2005/06 Forecast	2006/07 Forecast	2007/08 Forecast	2008/09 Forecast	2009/10 Forecast
1% Lower nominal GDP growth per annum					
Revenue	(470)	(985)	(1,505)	(2,030)	(2,755)
Expenses (mainly debt servicing)	15	60	135	240	380
Impact on the operating balance	**(485)**	**(1,045)**	**(1,640)**	**(2,270)**	**(3,135)**
Revenue Impact of a 1% decrease in the growth rates of:					
Wages and salaries	(205)	(430)	(670)	(935)	(1,225)
Taxable business profits	(110)	(250)	(385)	(520)	(725)
One percentage point lower interest rates					
Interest income	(2)	(14)	(24)	(31)	(34)
Expenses	(27)	(135)	(174)	(197)	(231)
Impact on the operating balance	**25**	**121**	**150**	**166**	**197**
One percentage point lower real interest rates					
ACC liability (SOE and Crown entity surpluses)	(700)				
GSF liability (expenses)	(1,900)				
Impact on the operating balance	(2,600)				

The forecasts of capital contributions to the New Zealand Superannuation (NZS) Fund are sensitive to the expected net after-tax annual return on the NZS Fund, which in turn depends on the expected gross rate of return assumed on the Fund's assets:

Table 3.6 – New Zealand Superannuation Fund contributions sensitivity analysis

Variable	**Marginal Change**	**Effect on Net Return After Tax**	**Effect on Capital Contribution ($ billion)**			
	(%age points)	(%age points)	**2006/07**	**2007/08**	**2008/09**	**2009/10**
Expected gross rate of return	-1%	-0.71%	+0.192	+0.209	+0.226	+0.245