Fiscal Forecasts – Finalisation Dates and Key Assumptions

Finalisation Dates	
Economic outlook (refer Chapter 1)	15 November
Tax revenue forecasts	21 November
Fiscal forecasts	8 December
Government decisions and circumstances	8 December
Actual asset revaluations	30 September
Foreign exchange rates	30 September
Specific fiscal risks (refer Chapter 4)	8 December
Contingent liabilities and commitments (refer Chapter 4)	31 October

Key Assumptions

The fiscal forecasts have been prepared in accordance with the Public Finance Act 1989. They are based on the Crown's accounting policies and assumptions (refer page 108 of the GAAP tables). As with all assumptions, there is a degree of uncertainty surrounding them. This uncertainty increases as the forecast horizon extends. A summary of the key economic assumptions that are particularly relevant to the fiscal forecasts is provided below (on a June-year-end basis to align with the Crown's balance date of 30 June):

	2006/07		2007/08	2008/09	2009/10	2010/11
June years	**BEFU**	**HYEFU**	**HYEFU**	**HYEFU**	**HYEFU**	**HYEFU**
Real GDP (P) (ann avg % chg)	1.5	2.0	2.6	3.2	3.1	3.0
Nominal GDP (E) ($m)	160,013	162,667	170,633	179,817	188,764	198,068
CPI (annual % change)	3.3	1.9	2.7	1.9	2.0	2.0
Govt 10-year bonds (qty avg %)	5.9	6.0	6.0	6.0	6.0	6.0
90-day bill rate (qty avg %)	6.8	7.5	5.9	6.0	6.1	6.0
Unemployment rate ((HLFS) basis ann avg %)	3.8	4.0	4.7	4.6	4.5	4.3
Full-time equivalent employment (ann avg % change)	1.8	0.9	0	0.9	1.4	1.5
Current account (% of GDP)	-8.4	-9.3	-8.3	-6.5	-6.2	-6.3

Source: The Treasury

New Zealand Superannuation (NZS) Fund

The contribution to the NZS Fund for the year ending 30 June 2007 is $2.049 billion. The contribution to the NZS Fund is calculated over a 40-year rolling horizon to ensure that superannuation entitlements over the next 40 years can be met if the contribution rate were to be held constant at that level. The Government is making the required minimum annual contribution for 2006/07 as calculated by the formula set out in the NZS Act.

$ billion (June year end)	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Required contribution	2.107	2.337	2.049	2.133	2.326	2.459	2.576
Actual/Budgeted contribution	2.107	2.337	2.049	2.133	2.326	2.459	2.576

Source: The Treasury

The underlying assumptions in calculating the contributions for 2007 are the nominal GDP series to 2047, the NZS expense series to 2047 and the expected long-term, net after-tax annual return of the NZS Fund (6.1%) (6.1% *Budget Update*). The forecast rate of return is based on the Treasury's assumptions for the rate of return on financial portfolios of Crown financial institutions. The Treasury website contains further information on the NZS Fund, as well as a copy of the NZS Fund model.

2

Fiscal Outlook

Summary of the *Half Year Update*

The Government's fiscal position is strong.

The Financial Statements of the Government for the year ended 30 June 2006 recorded residual cash of $3 billion ($1.2 billion ahead of the *Budget Update* forecast), gross sovereign-issued debt (GSID) standing at 22.5% of GDP at year end, and, with the addition of the $9.9 billion NZS Fund, the Government was in a net financial asset position of $2.1 billion.

GDP growth, as expected, has been easing, but not by as much as we thought at the time of the *Budget Update*. Economic growth is now expected to bottom out at a somewhat higher rate, and overall, the economic forecasts described in Chapter 1 paint a less cyclical picture for the economy.

Forecast tax revenue has increased as a result of this updated view of the economy and judgements about the impact of fiscal drag and the build-up of tax losses. These tax forecasts, together with updated expenditure forecasts and the indicative allocations for future Budgets described in the *Budget Policy Statement* released today, result in higher forecast operating surpluses across the forecast period than at the *Budget Update*.

These operating surpluses flow through to a stronger fiscal position throughout the forecast period than at *Budget Update*. The forecasts show ongoing progress in implementing the Government's fiscal strategy and its objective of strengthening the fiscal position in advance of future pressures arising from population ageing and increased demand for health care.

The fiscal forecasts also imply a somewhat firmer fiscal stance over the period 2005/06 to 2007/08 than predicted at the time of the *Budget Update*.

More specifically, the forecasts show:

- Core Crown revenues peaking in 2006/07 at 36.3% of GDP and then settling at 34.3%, with tax to GDP broadly stable throughout the forecast period at around 31%.
- A similar pattern for core Crown expenses, peaking in 2006/07 at 33.2% of GDP and then falling to around 32%.

- An operating balance and OBERAC of around $6.0 billion across the forecast period. This is expected to be sufficient to meet the Government's annual contribution to the NZS Fund and some, but not all, capital spending.
- Cash deficits increasing to $1.8 billion in 2008/09 and then falling to $0.3 billion in 2010/11. This represents an increase in the cash position over the forecast period in comparison to the Budget Update of about $3.6 billion.
- GSID falling from 23.3% of GDP in 2006/07 to 20.7% of GDP by the end of the forecast horizon. In the early years of the forecast the debt track is higher but in later years is broadly consistent with the Budget Update and consistent with the Government's long-term debt objective to have gross debt broadly stable at around 20% of GDP over the next 10 years.
- The NZS Fund increasing to $26.7 billion (13.5% of GDP) by 2010/11, with net core Crown debt including NZS Fund assets forecast to be in a positive financial position of $19.2 billion (9.7% of GDP).

Table 2.1 – Summary fiscal indicators[1]

	Year ended 30 June					
($ million)	**2006 Actual**	**2007 Forecast**	**2008 Forecast**	**2009 Forecast**	**2010 Forecast**	**2011 Forecast**
Core Crown revenue[2]	59,170	59,020	59,917	61,577	64,746	67,895
% of GDP	*37.6*	*36.3*	*35.1*	*34.2*	*34.3*	*34.3*
Core Crown expenses	49,900	53,963	55,577	58,159	60,554	63,479
% of GDP	*31.7*	*33.2*	*32.6*	*32.3*	*32.1*	*32.0*
Operating balance	11,473	6,260	6,071	5,197	5,826	5,979
% of GDP	*7.3*	*3.8*	*3.6*	*2.9*	*3.1*	*3.0*
OBERAC	8,648	6,656	6,071	5,197	5,826	5,979
% of GDP	*5.5*	*4.1*	*3.6*	*2.9*	*3.1*	*3.0*
OBERAC excluding NZS Fund returns	8,068	5,981	5,231	4,170	4,588	4,511
% of GDP	*5.1*	*3.7*	*3.1*	*2.3*	*2.4*	*2.3*
Residual cash	2,985	107	(691)	(1,821)	(978)	(294)
% of GDP	*1.9*	*0.1*	*(0.4)*	*(1.0)*	*(0.5)*	*(0.1)*
Gross sovereign-issued debt	35,461	37,867	40,153	39,192	38,615	41,082
% of GDP	*22.5*	*23.3*	*23.5*	*21.8*	*20.5*	*20.7*
Net core Crown debt	7,745	6,382	5,923	7,187	7,697	7,525
% of GDP	*4.9*	*3.9*	*3.5*	*4.0*	*4.1*	*3.8*
Net core Crown debt (incl NZS Fund)	(2,116)	(6,271)	(9,703)	(11,792)	(14,979)	(19,195)
% of GDP	*(1.3)*	*(3.9)*	*(5.7)*	*(6.6)*	*(7.9)*	*(9.7)*

Source: The Treasury

1 Detailed tables of the key indicators for the *Half Year Economic and Fiscal Update* (HYEFU) and *Budget and Economic and Fiscal Update* (BEFU) are located on pages 54 and 55. The fiscal fact sheet on pages 59 to 62 provides a guide to the key fiscal indicators used to measure the Government's performance.

2 The 2005/06 core Crown revenue includes the one-off non-cash adjustment of $1.8 billion (1.2% of GDP), reflecting the change in accounting treatment for the recognition of provisional tax.

Key Trends

Table 2.2 – Reconciliation to core Crown residual cash

		Year ended 30 June					
	$ million	**2006 Actual**	**2007 Forecast**	**2008 Forecast**	**2009 Forecast**	**2010 Forecast**	**2011 Forecast**
	Core Crown revenue	59,170	59,020	59,917	61,577	64,746	67,895
Less	Core Crown expenses	49,900	53,963	55,577	58,159	60,554	63,479
Plus	Net surpluses/(deficits) of SOEs and CEs	2,203	1,203	1,731	1,779	1,634	1,563
Equals	**operating balance**	**11,473**	**6,260**	**6,071**	**5,197**	**5,826**	**5,979**
Less	*OBERAC adjustments*						
	Revaluation changes	1,471	(396)	-	-	-	-
	Accounting changes	1,354	-	-	-	-	-
Equals	**OBERAC**	**8,648**	**6,656**	**6,071**	**5,197**	**5,826**	**5,979**
Less	Net return on the NZS Fund (excl revaluation changes)	580	675	840	1,027	1,238	1,468
Equals	OBERAC less NZS Fund retained earnings	**8,068**	**5,981**	**5,231**	**4,170**	**4,588**	**4,511**
Less	Net retained surpluses of SOEs and CEs	1,179	1,203	1,731	1,779	1,634	1,563
	Non-cash items and working capital movements	(1,970)	1,829	1,313	473	1,095	1,297
Equals		**8,859**	**6,607**	**4,813**	**2,864**	**4,049**	**4,245**
Less							
	Contribution to NZS Fund	2,337	2,131	2,687	2,790	3,173	3,146
	Purchase of physical assets	1,826	2,237	1,233	966	1,025	690
	Advances and capital injections	1,711	2,132	1,584	929	829	703
Equals	**residual cash**	**2,985**	**107**	**(691)**	**(1,821)**	**(978)**	**(294)**
	Domestic bond programme	2,375	2,456	2,517	2,476	2,472	2,465
Indicators for fiscal objectives (% of GDP)							
	Core Crown revenue	37.6	36.3	35.1	34.2	34.3	34.3
	Core Crown expenses	31.7	33.2	32.6	32.3	32.1	32.0
	OBERAC	5.5	4.1	3.6	2.9	3.1	3.0
	Gross sovereign-issued debt	22.5	23.3	23.5	21.8	20.5	20.7
	Net core Crown debt	4.9	3.9	3.5	4.0	4.1	3.8
	Net core Crown debt with NZS Fund assets	(1.3)	(3.9)	(5.7)	(6.6)	(7.9)	(9.7)
	Net worth	45.4	47.8	49.1	49.5	50.2	50.9
	New Zealand Superannuation Fund						
	Fund asset returns (after tax)	969	743	840	1,027	1,238	1,468
	Fund assets	9,861	12,653	15,626	18,979	22,676	26,720
	% of GDP	*6.3*	*7.8*	*9.2*	*10.6*	*12.0*	*13.5*

Top-down adjustment to cash payment forecasts

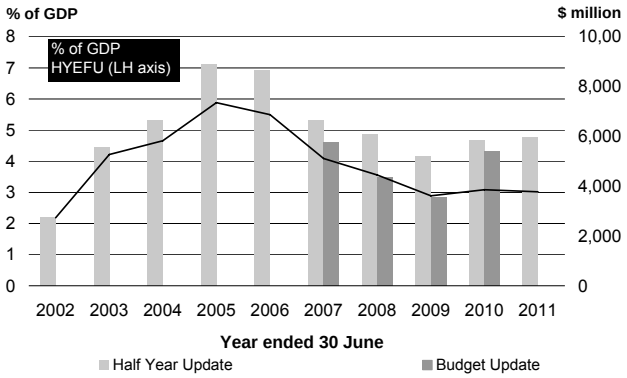
The core Crown cash payments for 2006/07 incorporate a top-down adjustment of $800 million to take into account the usual timing delays of departmental spending. The adjustment is made in the above table and is spread over operating ($500 million) and capital ($300 million) payments.

The level of the adjustment has been based on the analysis of previous over-forecasting by departments and a review of the actual outturn to 31 October 2006.

The OBERAC is expected to be lower than recent outturns …

Significant spending initiatives in the 2004, 2005 and 2006 Budget packages are expected to translate into OBERAC surpluses over the forecast period that are lower than those recorded in recent outturns. However, while the economy is expected to enter a period of slower growth, the forecast slowdown is now not as pronounced at the time of the *Budget Update*.

Figure 2.1 – OBERAC on a year-by-year basis



Source: The Treasury

The OBERAC is now forecast to be $6.7 billion (4.1% of GDP) in the current year, declining to $6 billion (3% of GDP) by 2010/11, slightly higher in each year compared to the *Budget Update* primarily as a result of:

- higher than expected nominal GDP flowing into tax revenue, and
- the labour market being stronger than previously expected resulting in a reduction in benefit payments.

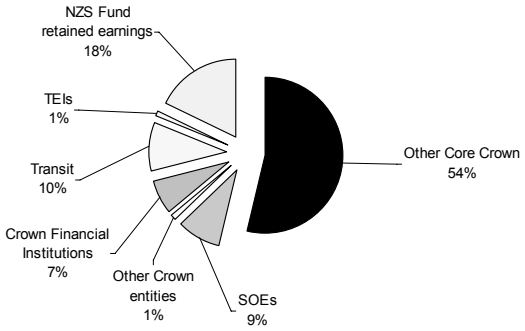
Post 2008, the increase in the OBERAC generated by the above factors is forecast to be offset by increasing the Budget 2008 allocation by $1 billion in addition to the $2 billion already allocated. This has been included in Figure 2.1.

… so, too, the cash available from operating …

Some components of the operating surpluses expected over the forecast period have been committed by the Government. This includes:

- entities retaining their surpluses for the purpose of achieving their long-term objectives (ACC, EQC, NZS Fund and EQC), and
- entities retaining their surpluses to accumulate assets (SOEs and some Crown entities).

Figure 2.2 – Accumulated operating balance breakdown for the period 2006/07 to 2010/11



Source: The Treasury

This leaves around 54% (or around on average $4 billion per annum) of the accumulated operating balance available to finance the Government's investing activities, such as contributions to the NZS Fund and its general capital programme.

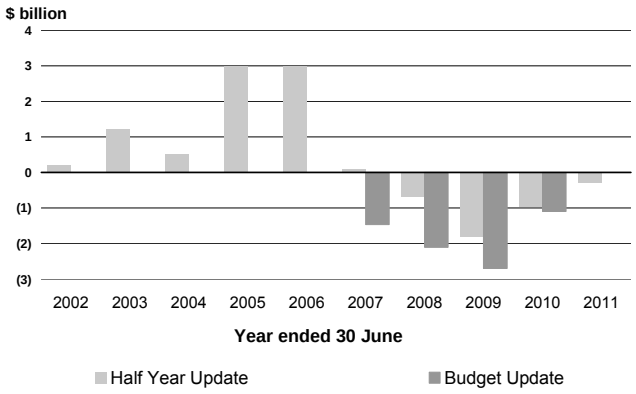
… As a result there is a cash shortfall, albeit lower than previously forecast

There is a residual financing requirement over the period 2006/07 through 2010/11 of around $3.8 billion.

The cash shortfall results because the Government's capital programme exceeds the cash available.

The cash flow from operations generates around $22.6 billion over the forecast period. This will be invested primarily in NZS Fund contributions of $11.5 billion, purchases of physical assets of $8.5 billion (for example, schools and defence equipment), advances of $4.3 billion (mainly student loans and refinancing existing private sector debt of the health and housing sectors), injections into Crown entities for hospitals and housing of $1.2 billion and the purchase of foreign exchange reserves of $0.7 billion.

Figure 2.3 – Core Crown cash position on a year-by-year basis

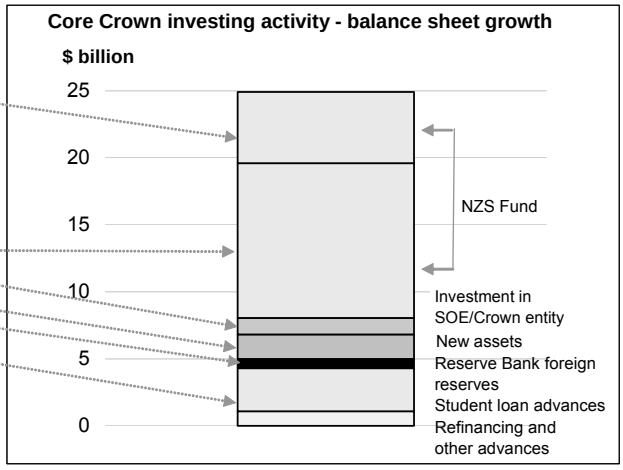


Source: The Treasury

The forecast accumulated cash shortfall of $3.8 billion has reduced since the *Budget Update* by around $3.6 billion.

Table 2.3 – Impact of Crown operating surpluses on the balance sheet from 2006/07 to 20010/11 inclusive

	$ billion
Operating balances	29.3
Less	
Retained NZS Fund returns	(5.3)
Retained SOE/Crown entity returns	(7.9)
Add	
Depreciation	6.7
Other	(0.2)
Operating cash flows	22.6
Invested in	
NZS Fund contributions	(11.5)
SOEs'/Crown entities' net capital injections	(1.2)
Increase asset base	(1.8)
Purchase of foreign reserves	(0.7)
Maintain existing asset base	(6.7)
Advances	(4.3)
Other	(0.1)
Requiring finance	(3.8)



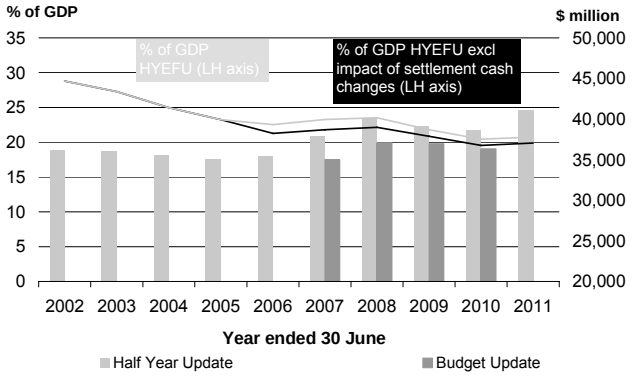
The Government is forecast to receive cash of around $14.9 billion ($12.4 billion from the bond programme) from borrowings. This is forecast to be used to meet the cash shortfall, repay debt which is maturing over the period ($8.8 billion) and purchase financial assets.

Gradually declining gross debt …

GSID is forecast to increase by around $5.6 billion over the forecast period but to fall as a percentage of GDP from 22.5% to 20.7% by 2010/11. The nominal increase in GSID comprises a number of factors:

- borrowing to meet the cash shortfall expected over the forecast period and to refinance maturing bonds
- an increase in settlement cash levels held by the Reserve Bank from $2 billion to $7.5 billion (that is sustained at this level over the forecast period), and
- a reduction in the holding of Treasury Bills from $4.9 billion (as at 30 June 2006) to $2.7 billion by 2010/11.

Figure 2.4 – Gross sovereign-issued debt (% of GDP and $million)



Source: The Treasury

… combined with a build-up of financial assets …

Although there has been a strengthening in the forecast cash position compared with the *Budget Update*, the forecast Government's bond programme remains relatively unchanged at around $2.5 billion per annum over the forecast period (see Table 2.2). This continues NZDMO's recent practice of smoothing bond issuance from year to year.

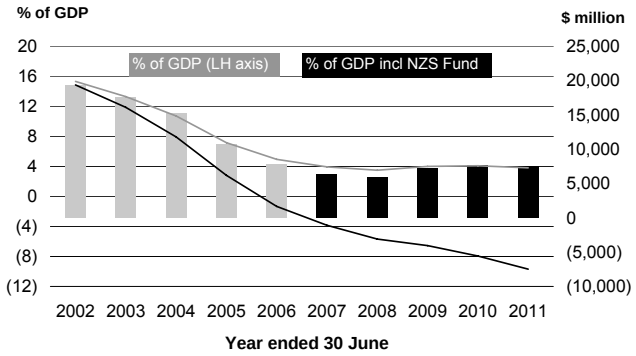
Keeping the bond programme unchanged results in an increase in the forecast financial assets held by the Government relative to the *Budget Update.*

… leads to a further rise in the net asset position of the Government

In contrast to GSID, net core Crown debt is forecast to remain relatively flat over the forecast period at around $7 billion or 4% of GDP.

Over the forecast period, core Crown financial assets are forecast to increase by around $20.1 billion. The largest part of the increase occurs in the assets held by the NZS Fund. The Fund is expected to increase from $9.9 billion by $16.8 billion to be $26.7 billion by 2010/11.

Figure 2.5 – Net debt (% of GDP and $million) and % of GDP including assets of NZS Fund



Source: The Treasury

Net core Crown debt including the assets of the NZS Fund is forecast to be in a net financial asset position of $19.2 billion by 2010/11, or 9.7% of GDP.

Settlement Cash Level

The Reserve Bank of New Zealand has raised the settlement cash level to approximately $7.5 billion at 31 October 2006 from $2 billion at 30 June 2006, as a result of its Liquidity Management Review. The change in the settlement cash level reflected the Reserve Bank's concerns over liquidity pressures in the New Zealand banking system.

With commercial banks now holding significant quantities of settlement cash, their demand for Treasury Bills issued by the Nez Zealand Debt management Office (NZDMO) has reduced. The holdings of Treasury Bills are forecast to reduce by $2.2 billion by 2010/11.

What is settlement cash?

Settlement cash is the amount of cash the Reserve Bank leaves in the banking system each day. The Reserve Bank aims to leave a relatively constant level of cash in the banking system, although this can be subject to change from time to time. Settlement cash can be used by banks to meet their payment obligations. Hence, settlement cash is a liquidity mechanism used to settle wholesale obligations between the banks and provides the basis for settling most of the retail banking transactions that occur every working day between corporates and individuals.

What is the impact on the fiscal forecasts?

The settlement cash activity of the Reserve Bank is financed from commercial banks and not by Government funding, so doesn't impact on the Government's residual cash position. It does impact on GSID and the components of the operating balance (as outlined in the table below), however the impact on the overall net worth and operating balance is neutral.

The following table outlines the impact of the above transactions on the fiscal forecasts at 2010/11 relative to 30 June 2006

	Impact on GSID	**Impact on the Operating Balance**
Increase in settlement cash	+ $5.5 billion	+ $0.7 billion (revenue) + $0.7 billion (expenses)
Reduction in Treasury Bills	- $2.2 billion	- $0.2 billion (revenue) - $0.2 billion (expenses)
Total	**+ $3.3 billion**	**Nil**

Revenue and Expenses

Table 2.4 – Revenue and expenses comparison with *Budget Update*

(% of GDP)	Year ended 30 June 2006 Actual	2007 Forecast	2008 Forecast	2009 Forecast	2010 Forecast	2011 Forecast
Total revenue						
Half Year Update	48.7	46.1	44.9	44.0	43.9	43.7
Budget Update		45.4	44.3	43.5	44.1	
Total expenses						
Half Year Update	41.4	42.3	41.4	41.1	40.8	40.7
Budget Update		41.9	41.8	41.6	41.3	
Core Crown revenue						
Half Year Update	37.6	36.3	35.1	34.2	34.3	34.3
Budget Update		35.1	34.2	33.5	34.2	
Core Crown expenses						
Half Year Update	31.7	33.2	32.6	32.3	32.1	32.0
Budget Update		32.7	32.6	32.5	32.3	
SOE revenue						
Half Year Update	8.1	7.3	7.2	7.2	7.1	6.9
Budget Update		7.5	7.4	7.4	7.3	
SOE expenses						
Half Year Update	6.9	6.8	6.6	6.6	6.5	6.4
Budget Update		6.8	6.8	6.7	6.6	
Crown entities' revenue						
Half Year Update	16.1	16.0	15.7	15.2	14.5	14.0
Budget Update		16.0	15.5	14.9	13.9	
Crown entities' expenses						
Half Year Update	15.1	15.4	15.1	14.6	14.1	13.5
Budget Update		15.3	14.9	14.4	13.9	

Source: The Treasury

Over the forecast period, total revenue to GDP is expected to fall as are total expenses to GDP.

The trend in total revenue and expenses over the forecast horizon will largely be driven by activity in the core Crown segment of reported government activity. The following section discusses the core Crown activity in more detail. The SOE and Crown entities' activity is covered in a separate section in the chapter (refer page 50).

Core Crown – Revenue

Table 2.5 – Core Crown revenue

Core Crown Revenue	Year ended 30 June 2006 Actual	2007 Forecast	2008 Forecast	2009 Forecast	2010 Forecast	2011 Forecast
($ billion)						
Tax revenue	52.4	52.2	53.9	56.2	59.2	61.9
Investment revenue	4.5	4.5	3.8	4.1	4.4	4.7
Other core Crown revenue	2.2	2.3	2.2	1.3	1.1	1.3
Total core Crown revenue	59.1	59.0	59.9	61.6	64.7	67.9
(% of GDP)						
Tax revenue	33.3	32.1	31.6	31.3	31.3	31.3
Investment revenue	2.9	2.8	2.2	2.3	2.3	2.4
Other core Crown revenue	1.4	1.4	1.3	0.7	0.6	0.6
Total core Crown revenue	37.6	36.3	35.1	34.3	34.3	34.3

Source: The Treasury

Over the forecast period, total core Crown revenue initially declines as a percentage of GDP and remains relatively stable at around 34.3%. Tax revenue (discussed below) is the major source of core Crown revenue and is the main driver of this trend.

Within the other sources of core Crown revenue, investment revenue is forecast to fall from 2.8% of GDP in 2006/07 and to remain relatively stable at around 2.3% of GDP. This reflects a forecast assumption that investment rate of returns will drop to average rate of returns after the high rates experienced in 2005/06. This growth in line with GDP reflects the build-up of financial assets across the Crown.

Other core Crown revenue initially stays stable then declines from 2008/09 onwards. The drop in other revenue from 2008/09 onwards reflects the indicative portion of the 2008 Budget package allocated to revenue initiatives.

Tax revenue

Table 2.6 – Tax revenue % of GDP, compared with the *Budget Update*

Tax Revenue	Year ended 30 June 2006 Actual	2007 Forecast	2008 Forecast	2009 Forecast	2010 Forecast	2011 Forecast
(% of GDP)						
Tax revenue - *Half Year Update*	33.3	32.1	31.6	31.3	31.3	31.3
Tax revenue - *Budget Update*		31.7	30.8	30.1	30.8	

Source: The Treasury

Over the June and September quarters, tax revenue growth has slowed; annual average growth in tax revenue has fallen from around 10% to close to 5%. Although PAYE growth has remained at around 8% during this period, growth in other taxes has declined, most noticeably corporate tax, where growth is now hovering around 0% (after adjusting for the change in provisional tax accounting in June 2006) after being as high as 20% in December 2005.

This slowing in corporate tax was not unexpected. Apart from some one-off factors that are expected to reverse out in the near future, corporate tax for the September 2006 quarter is close to the *Budget Update* forecast.

Looking ahead, corporate tax is expected to follow the business cycle, albeit with a slightly smoother growth path. This is because tax loss accumulation and utilisation tend to smooth the growth profile of tax relative to the business cycle. Corporate tax growth is forecast to be higher than profit growth through the bottom of the business cycle in 2007 as a higher-than-normal proportion of companies incur losses. Through the upswing in the business cycle, corporate tax is expected to grow more slowly than profit growth as the losses built up in 2007 are offset against profits in 2008 and 2009. Overall, the forecast for corporate tax is similar to the *Budget Update* forecast.

In contrast, recent PAYE growth has exceeded expectations, largely because wage and employment growth has been higher than forecast in the *Budget Update*. This has caused an upward shift in the level of compensation of employees through the whole forecast period, which adds about $500 million to the PAYE forecast each year. An increase in Treasury's estimate of the "fiscal drag" effect, ie, taxpayers facing higher marginal tax rates at higher incomes, has also added about $200 million a year to the PAYE forecasts.

The overall picture across the forecast period is for tax revenue to decline relative to GDP through to 2009 and to flatten out thereafter. This is contrary to what we would expect to see, ie, tax revenue gradually increasing relative to GDP, as the effect of an increasing effective tax rate on personal income owing to the progressive tax scale slightly outweighs the retarding effect of taxes that grow more slowly than GDP, such as excise duties.

The reasons for this unusual profile in the tax-vs-GDP are:

- overall from 2007 through to 2011, the tax bases of the major tax types, eg, compensation of employees, private consumption are forecast to grow more slowly than GDP, thereby reducing the total effective tax rate on GDP
- tax threshold adjustments scheduled for April 2008 and April 2011 remove some of the fiscal drag effect from tax on personal income
- the effective tax rate on corporate income reduces through the upswing of the business cycle as tax losses generated at the bottom of the business cycle are subsequently used to reduce firms' total income tax liability, and
- further reductions in import tariff rates cause customs duty to lag GDP growth by a wider margin than has been the case in recent years.

These effects are summarised in the following table.

Table 2.7 – Movement in effective tax rate on GDP from 2007 to 2011

	Tax revenue (% of GDP)
2007 tax revenue	*32.1*
Tax base movements, ie, changes in the composition of GDP	-0.5
Fiscal drag	+0.6
Tax threshold adjustments	-0.3
Tax loss offsets	-0.2
Tariff rate reductions	-0.1
Other (eg, excise duties)	-0.3
2011 tax revenue	*31.3*

Table 2.8 – Treasury and Inland Revenue total tax revenue forecasts

($ million)	2006/07 Forecast	2007/08 Forecast	2008/09 Forecast	2009/10 Forecast	2010/11 Forecast
PAYE					
Treasury	20,566	21,404	22,354	23,668	24,980
Inland Revenue	20,580	21,510	22,475	23,890	25,250
Difference	(14)	(106)	(121)	(222)	(270)
Corporate taxes					
Treasury	8,905	8,947	9,550	10,450	10,833
Inland Revenue	9,003	9,619	10,379	10,631	11,042
Difference	(98)	(672)	(829)	(181)	(209)
Goods and services tax					
Treasury	10,709	11,181	11,618	11,899	12,446
Inland Revenue	10,644	11,025	11,542	11,817	12,421
Difference	65	156	76	82	25
Other taxes					
Treasury	11,529	11,812	12,074	12,495	12,966
Inland Revenue	11,655	11,886	12,015	12,533	13,034
Difference	(126)	(74)	59	(38)	(68)
Total tax					
Treasury	51,709	53,344	55,596	58,512	61,225
Inland Revenue	51,882	54,040	56,411	58,871	61,747
Difference	(173)	(696)	(815)	(359)	(522)
Total tax (% of GDP)					
Treasury	31.8%	31.3%	30.9%	31.0%	30.9%
Inland Revenue	31.9%	31.7%	31.4%	31.2%	31.2%
Difference	-0.1%	-0.4%	-0.5%	-0.2%	-0.3%

Sources: Inland Revenue, The Treasury

Inland Revenue's total tax forecasts are higher than the Treasury's in all years, although the gap between the two sets of forecasts is not as large as it was in the *Budget Update*. Most of the differences occur in the corporate and PAYE tax types.

At the time of the *Budget Update*, growth in PAYE exceeded that which could be easily explained by growth in aggregate wages and salaries, even after allowing for the impact of fiscal drag. Inland Revenue assumed that this unexplained growth would continue into the forecast period. This assumption opened up a wedge between Treasury and Inland Revenue forecasts of PAYE; this wedge grew to more than $1 billion by the end of the forecast period.

Recent labour market data have shown that employment growth through the first half of 2006 was higher than expected in the *Budget Update*. PAYE in the September quarter was close to Inland Revenue's forecast, but $200 million above Treasury's.

Treasury's labour market forecast is now much higher than in the *Budget Update* in the near term and is now more readily reconciled against recent PAYE receipts. In response to recent outturns and to the new labour market forecast, Treasury's PAYE forecasts have increased in the order of $800 million per year. Inland Revenue's PAYE forecasts have increased by much smaller amounts in the near term, and have decreased from 2009 onwards. Thus the difference between the two departments' PAYE forecasts is now much smaller than in the *Budget Update*.

Detailed comparisons of Treasury and Inland Revenue tax forecasts can be found at www.treasury.govt.nz/forecasts/hyefu/2006.

Treasury or Inland Revenue: Which tax forecasts have been the more accurate?

Ever since the early 1990s, both Treasury and Inland Revenue have been producing tax forecasts for each *Budget Update* and *Half-Year/December Update*. This is to ensure that no single agency prepares tax forecasts in isolation and that the official tax forecasts are subjected to some sort of quality assurance. We have examined the accuracy of both agencies' forecasts over the last decade or so.

Table 2.9 – Accuracy of Treasury and Inland Revenue tax revenue forecasts, for June years 1995 to 2006 (root mean errors)

	Forecast horizon (years ahead)				
	0	**1**	**2**	**3**	**4**
Treasury	1.4%	4.0%	6.3%	8.2%	13.7%
Inland Revenue	1.4%	4.2%	6.3%	8.3%	14.2%

Root-mean square error is the square-root of the mean of the squares of the forecast errors. It is a measure of the accuracy and variability of the forecast errors.

Table 2.9 shows that, with the possible exception of the four-year-ahead forecasts, the root-mean square errors of both agencies' forecasts are very similar to each other.

This result is not all that surprising. Both agencies use the same macroeconomic forecast as the basis for their tax forecast. At each forecasting round, there is much discussion between the two tax forecasting teams to test assumptions and judgements, and to ensure that both agencies use all available information in their forecasts. This tends to bring the two sets of forecasts closer together, rather than further apart.

Large differences (of $1 billion or more) between the two sets of forecasts have been evident only in the last two forecasting rounds and have mainly affected the longer-horizon forecasts. Therefore, it will be several years before these differences start to affect the statistics presented in table 2.6. In short, over the historical period these forecasts have practically been the same. We will not be able to judge the accuracy of the differences now existing between the two agencies for another 2-3 years.

Core Crown – Expenses

Table 2.10 – Expenses indicators

Expenses ($ billion)	2006 Actual	2007 Forecast	2008 Forecast	2009 Forecast	2010 Forecast	2011 Forecast
Core Crown	49.9	54.0	55.6	58.2	60.6	63.5
Core Crown (excluding GSF valuation)	49.6	53.7	55.6	58.2	60.6	63.5
(% of GDP)						
Core Crown	31.7	33.2	32.6	32.3	32.1	32.0
Core Crown (excluding GSF valuation)	31.5	33.0	32.6	32.3	32.1	32.0

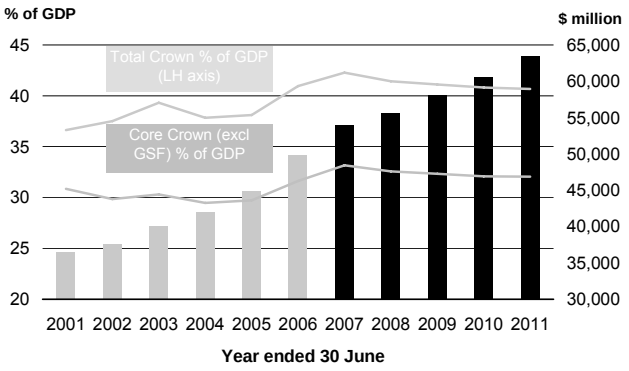
Source: The Treasury

Over the past two years core Crown expenses to GDP have increased, primarily due to the impact of the significant increase in spending made in the 2004 and 2005 Budget packages. The Working for Families package was a key part of this.

This continues in 2006/07, with core Crown expenses (excluding Government Super Fund (GSF) valuations) forecast to increase $4.1 billion, or 31.5% of GDP in 2005/06 to 33.0% of GDP. This growth in expenses is primarily due to:

- the impact of the 2006 Budget package ($2.4 billion)
- an increase in finance costs resulting from the impact of changes in the Reserve Bank settlement cash levels ($0.5 billion, refer page 39). This is entirely offset by higher investment income as the increase in Reserve Bank borrowings has been used to increase financial assets
- additional fair value write-downs of student loans ($0.4 billion), and
- the indexation of benefits ($0.1 billion).

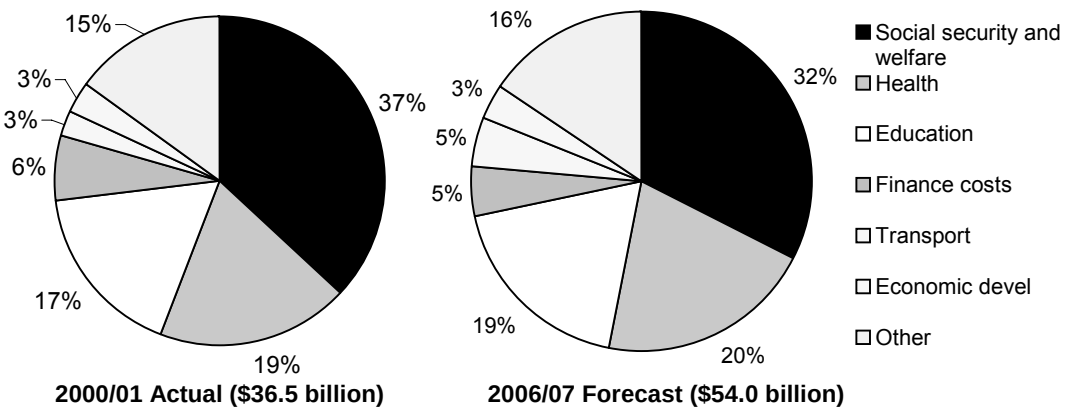
Figure 2.6 – Core expenses excluding GSF valuations ($ and % of GDP)



Source: The Treasury

Beyond 2006/07, core Crown expenses (excluding the GSF valuation) are expected to stay relatively flat over the forecast period at around 32% of GDP. This is essentially owing to smaller new operating spending forecast in comparison to the last three Budgets. In nominal terms, expenses are forecast to increase by around $9.8 billion. The major drivers of this increase are indexation of benefits (around $1.6 billion) and the allowances for new operating initiatives for future Budgets ($8.0 billion; see Figure 2.8 below).

Figure 2.7 – Core Crown functional expenses as a percentage of total expenses (excluding valuations)



Source: The Treasury

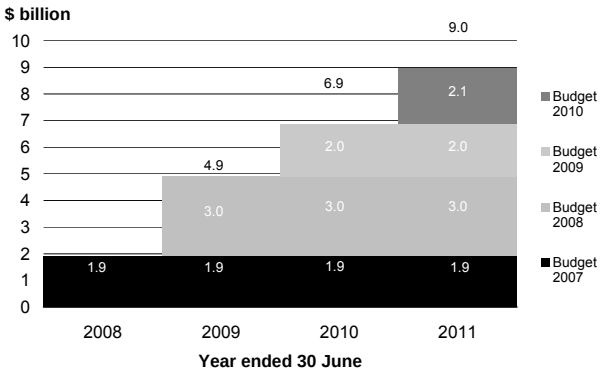
Forecast New Operating Initiatives

The fiscal forecasts include indicative amounts for new operating initiatives.

Budget allowances represent a level of Government funding that will be allocated to spending and revenue initiatives over the Budgets covered in the fiscal forecasts. The Government has not taken any decisions on where this funding will be allocated except for where pre-commitments against future Budgets have been made.

The operating allowance included in the fiscal forecast for Budget 2007 is $1.9 billion. The BPS has signalled a Budget 2007 package of $1.9 billion plus the three-month costs of the business tax package that fall in 2007/08.

Figure 2.8 – Net allowance for new operating initiatives (GST exclusive)



Source: The Treasury

The Budget 2008 allowance is forecast to be $3 billion. The economic and fiscal forecasts have been prepared on the basis that the allowance covers both revenue and expense initiatives. It does not imply any final decisions on the size and composition of the business tax package. The Budget 2008 allocation is $1 billion higher than indicated in the 2006 *Fiscal Strategy Report*.

Allowances for the 2009 and 2010 Budgets remain at around $2 billion. It is assumed all of the forecast new operating initiatives in these Budgets are allocated to spending.

Net Worth

Net worth is forecast to increase from $71.4 billion in 2005/06 to $100.8 billion by 2010/11. The growth in net worth reflects the Government's strategy to run operating surpluses to strengthen its fiscal position. This strategy is evident across the whole of the Crown. The following section focuses on the net worth of the core Crown segments for reported government activity. The SOE and Crown entities' activity is covered in a separate section on page 50.

Table 2.11 – Net worth

Net worth ($ billion)	Year ended 30 June 2006 Actual	2007 Forecast	2008 Forecast	2009 Forecast	2010 Forecast	2011 Forecast
Total Crown net worth	71.4	77.7	83.8	89.0	94.8	100.8
Core Crown net worth	40.1	45.1	49.5	52.9	57.1	61.5
SOE net worth	13.1	13.5	14.2	14.9	15.6	16.3
Crown entities' net worth	41.8	43.3	44.7	46.0	47.1	48.1

Source: The Treasury

Core Crown

Table 2.12 – Components of core Crown net worth

($ billion)	Year ended 30 June 2006 Actual	2007 Forecast	2008 Forecast	2009 Forecast	2010 Forecast	2011 Forecast
Total assets	102.3	109.7	116.3	118.4	121.5	127.9
Total liabilities	62.2	64.5	66.8	65.5	64.4	66.4
Net worth	40.1	45.1	49.5	52.9	57.1	61.5

Source: The Treasury

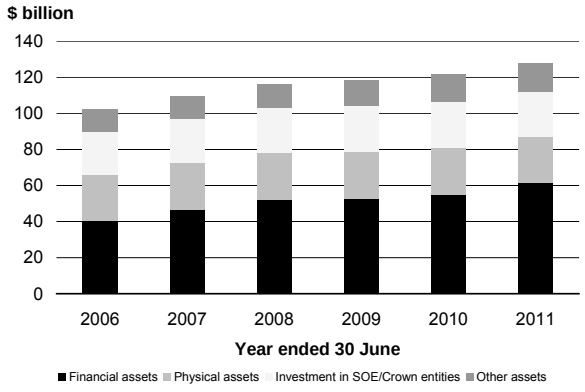
Over the forecast period, core Crown assets are expected to increase from $102.3 billion to $127.9 billion, largely due to the planned strategy of running operating surpluses (refer Table 2.3) and additional borrowing to build up assets.

As Figure 2.9 illustrates, the majority of growth occurs within financial assets, which increase by around $20.8 billion, while investments in Crown entities (primarily to fund hospital and housing capital projects) and physical assets also increase slightly.

Within the financial asset portfolio of the core Crown:

- the NZS Fund is expected to increase by around $16.8 billion over the forecast period. These funds are being set aside to assist in meeting pressures on future NZS payments associated with an ageing population

Figure 2.9 – Core Crown asset growth

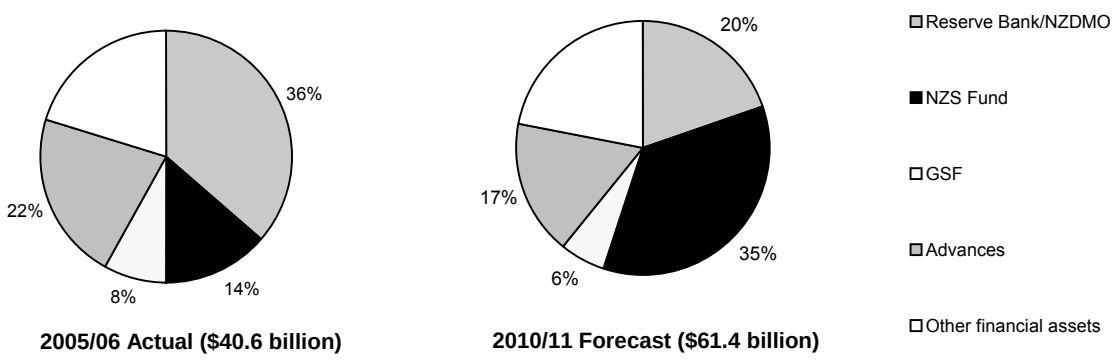


Source: The Treasury

- advances are forecast to increase by around $3.5 billion, primarily due to student loans, and
- the financial asset portfolios of the Reserve Bank, New Zealand Debt Management Office and GSF holdings are expected to slightly increase over the forecast period.

By 2010/11 the make-up of the financial asset portfolio is expected to have changed significantly, primarily driven by the increase in the holdings of the NZS Fund.

Figure 2.10 – Core Crown financial assets by portfolio

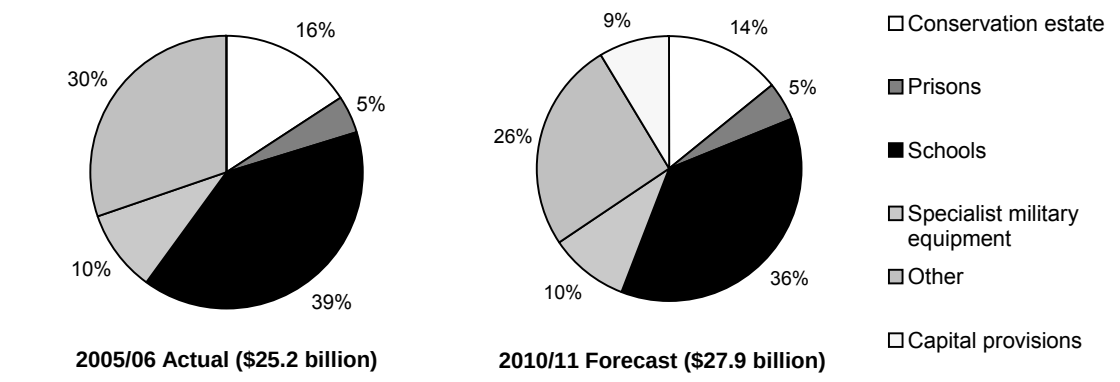


Source: The Treasury

Investments in Crown entities are forecast to increase by around $0.8 billion to allow for maintenance to and increase in the asset base, especially within the health and housing sectors.

Physical assets are expected to increase slightly over the forecast horizon, illustrating the maintenance and expansion of the core Crown's physical asset base. Figure 2.11 provides a breakdown of the physical assets held by the core Crown, by major asset classes.

Figure 2.11 – Core Crown physical assets by asset class (including capital provisions)



Source: The Treasury

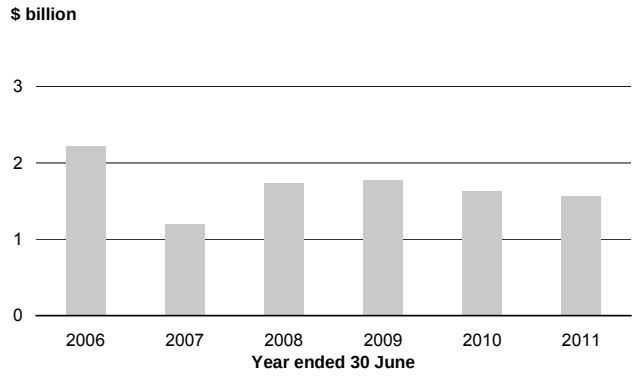
The level of liabilities is expected to increase over the forecast period from $62.2 billion in 2005/06 to $66.4 billion by 2010/11. The major component of core Crown liabilities is gross debt, which as previously mentioned, is forecast to increase but decrease as a percentage of GDP over the forecast period.

State-Owned Enterprises and Crown Entities

SOEs and Crown entities (CEs) are forecast to run total operating surpluses of $10.1 billion over the forecast period. Around $2.2 billion of the operating surpluses is forecast to be returned as dividends and is available to fund spending elsewhere in the Crown.

The SOE/CE net surpluses are not expected to be at the same level as the 2005/06 outturn, as the actual outturn included some large investment gains, resulting from strong global equity markets and one-off gains on sale of physical assets.

Figure 2.12 – SOE and CE operating balance



Source: The Treasury

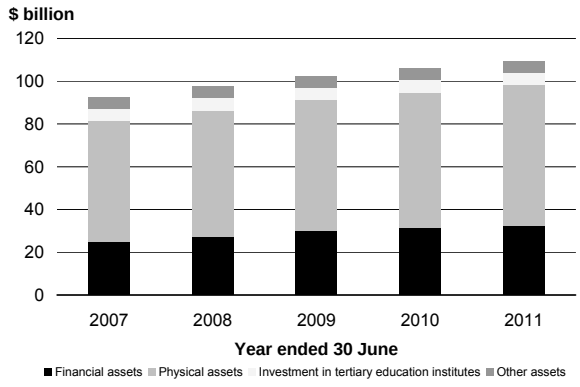
In 2006/07 SOE/CE net surpluses are forecast to be $1.2 billion, which is lower than what is expected over the rest of the forecast horizon. The lower 2006/07 result relative to future years is primarily due to:

- higher expenses due to an increase in the ACC unfunded liability of around $0.2 billion, and
- the impact of foreign exchange losses of around $0.2 billion (foreign exchange losses are not forecast beyond the current year).

From 2007/08 onwards, SOE/CE net surpluses are forecast to remain relatively flat at around $1.7 billion per annum.

The SOE/CE net surpluses (after payment of dividends) total $7.9 billion over the forecast period. This residual is maintained within the entities that have generated the net surpluses. In broad terms the majority of the accumulated net surpluses are forecast to be applied to build up assets.

Figure 2.13 – SOE and CE assets



Source: The Treasury

Financial assets are forecast to increase by around $9.5 billion. The majority of the increase is within the Crown Financial Institutes, which are accumulating financial assets for the purpose of meeting future obligations.

Physical assets are forecast to increase by around $11.5 billion. The majority of the increase is over the SOE segment and Transit NZ, which are investing in physical assets to maintain and expand their current asset base.

The expansion in assets mentioned above that is not funded by net surpluses are forecast to be met by entities raising debt and capital contributions provided by the Government.

Comparison with *Budget Update*

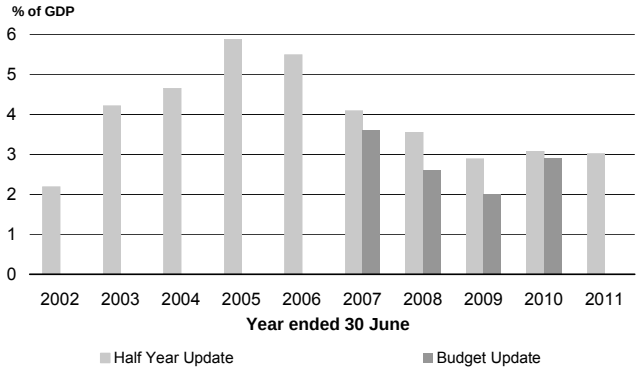
OBERAC and operating balance

Over the forecast period the OBERAC is forecast to be higher than the *Budget Update.*

The increase in the OBERAC compared with the *Budget Update* is largely due to:

- an increase in tax revenue due to forecasting changes of approximately $1 billion per annum. Most of the increase in the compensation of employees forecast has led to an increase in PAYE forecasts of $600 to 800 million each year. Tax revenue has also changed due to policy decisions outlined in table 2.14

Figure 2.14 – OBERAC comparison



Source: The Treasury

- a reduction in benefit expense forecast of approximately $0.2 billion in 2006/07 and by $0.4 billion thereafter. Most of the reduction occurs in the unemployment benefit and is due to an improved economic and labour market outlook from the *Budget Update* and enhanced provision of services to job seekers, and
- an increase in investment income mainly due to the fact the Government is forecast to hold a higher level of financial assets as a result of the Reserve Bank increasing the settlement cash level. There is a corresponding increase in the forecast for finance costs. There is also an increase in investment income due to a change in the methodology used by the NZDMO to calculate interest income on its financial asset portfolio.

The above factors affect each of the forecast years. In addition, in the current year expenses are also influenced by expenses transfers from the 2005/06 financial year and a one-off write-off of student loan debt.

Post 2008 revenue is forecast to reduce by $1 billion each year, reflecting the increase in the 2008 Budget allocation.

Table 2.13 – OBERAC reconciliation (explains changes to the OBERAC since the *Budget Update*)

($ million)	2007 Forecast	2008 Forecast	2009 Forecast	2010 Forecast
OBERAC 2006 *Budget Update*	**5,768**	**4,343**	**3,561**	**5,412**
Changes (revenue)				
Tax revenue (forecasting)	857	1,129	1,276	833
Tax revenue (policy)	182	106	683	(30)
Other sovereign revenue	4	11	4	11
New revenue allocation	-	-	(1,000)	(1,000)
Investment income	1,536	883	873	773
Other revenue	15	7	12	1
Changes to SOE/CE results	(296)	11	(27)	(148)
Total revenue changes	**2,298**	**2,147**	**1,821**	**440**
Changes (core Crown expenses)				
Welfare Benefit forecast changes	158	356	354	366
Student loans	(434)	(109)	(113)	(102)
Future new operating spending	104	176	154	305
Other core Crown functional expenses	(554)	(554)	(290)	(307)
Finance costs	(684)	(288)	(290)	(288)
Total core Crown expenses changes	**(1,410)**	**(419)**	**(185)**	**(26)**
Total changes	**888**	**1,728**	**1,636**	**414**
OBERAC 2006 *Half Year Update*	**6,656**	**6,071**	**5,197**	**5,826**

Source: The Treasury

Effect of Tax Policy Changes to Tax Forecasts

Table 2.14 – Material changes in tax revenue forecasts owing to changes in tax policy since the *Budget Update*

($ million)	2007 Forecast	2008 Forecast	2009 Forecast	2010 Forecast
Material policy changes				
KiwiSaver SSCWT exemption	-	(35)	(71)	(104)
Fair discount rate	-	(30)	(30)	(30)
Portfolio investment entities	-	36	(1)	(1)
Provisional tax accruals	182	135	785	105
Total	**182**	**106**	**683**	**(30)**

Source: The Treasury

KiwiSaver SSCWT exemption

Employer contributions to KiwiSaver will be exempt from specified superannuation contribution withholding tax

Fair discount rate

A '"fair discount rate" method is to be used for the taxation of offshore portfolio share investments.

Portfolio investment entities

The application date of new rules for portfolio investment entities has been deferred from 1 April 2007 to 1 October 2007.

Provisional tax accruals

In June 2006, Inland Revenue changed the way it calculates provisional tax revenue. This change has the largest effect in 2009 when $600 million of provisional tax revenue that was previously lost owing to a shift in payment dates is effectively reinstated by the new calculation method. Note that this is a change in accounting treatment rather than a tax policy change.

Residual cash

Over the forecast period residual cash is forecast to be around $3.6 billion higher than the *Budget Update*. The main drivers of the forecast increase are broadly similar to what has increased the OBERAC.

Debt indicators

Compared to the *Budget Update,* GSID is forecast to be higher by the end of the forecast period. This is largely due to the Reserve Bank increasing its settlement cash level by an additional $5.5 billion. This is partially offset by lower forecast issuance of Treasury Bills by NZDMO.

Net core Crown debt is lower by the end of the forecast period compared to the *Budget Update*. The main reason for this is because of the increase in the cash position.

Table 2.15 – 2006 *Half Year Update* fiscal indicators

Fiscal indicators ($ million)	2006 Actual	2007 Forecast	2008 Forecast	2009 Forecast	2010 Forecast	2011 Forecast
	Year ended 30 June					
Revenue						
Total revenue	76,581	74,977	76,688	79,051	82,818	86,489
Core Crown revenue	59,170	59,020	59,917	61,577	64,746	67,895
Tax revenue	51,973	51,708	53,344	55,596	58,512	61,225
Expenses						
Total Crown expenses	65,084	68,790	70,688	73,926	77,064	80,583
Core Crown expenses	49,900	53,963	55,577	58,159	60,554	63,479
Operating balance - Core Crown	9,270	5,057	4,340	3,418	4,192	4,416
Operating balance - Crown entities	1,593	1,013	1,079	1,124	963	950
Operating balance - SOEs	1,799	776	993	1,055	1,091	1,062
Dividend elimination	(1,189)	(586)	(341)	(400)	(420)	(449)
Operating balance	11,473	6,260	6,071	5,197	5,826	5,979
OBERAC	8,648	6,656	6,071	5,197	5,826	5,979
OBERAC (excluding net NZS Fund asset returns)	8,068	5,981	5,231	4,170	4,588	4,511
Cash available/(shortfall to be funded)	2,985	107	(691)	(1,821)	(978)	(294)
Debt indicators						
Gross sovereign-issued debt	35,461	37,867	40,153	39,192	38,615	41,082
Total gross Crown debt	39,427	43,750	46,869	47,290	46,901	49,531
Net core Crown debt	7,745	6,382	5,923	7,187	7,697	7,525
Net core Crown debt with NZS Fund assets	(2,116)	(6,271)	(9,703)	(11,792)	(14,979)	(19,195)
Net worth	71,403	77,718	83,789	88,986	94,812	100,791
Domestic bond programme	2,375	2,456	2,517	2,476	2,472	2,465
Nominal GDP	157,332	162,667	170,633	179,817	188,764	198,068
Fiscal indicators as a % of GDP						
Revenue						
Total Crown revenue	48.7	46.1	44.9	44.0	43.9	43.7
Core Crown revenue	37.6	36.3	35.1	34.2	34.3	34.3
Tax revenue	33.0	31.8	31.3	30.9	31.0	30.9
Expenses						
Total Crown expenses	41.4	42.3	41.4	41.1	40.8	40.7
Core Crown expenses	31.7	33.2	32.6	32.3	32.1	32.0
Operating balance	7.3	3.8	3.6	2.9	3.1	3.0
OBERAC	5.5	4.1	3.6	2.9	3.1	3.0
OBERAC (excluding net NZS Fund asset returns)	5.1	3.7	3.1	2.3	2.4	2.3
Debt indicators						
Gross sovereign-issued debt	22.5	23.3	23.5	21.8	20.5	20.7
Total gross Crown debt	25.1	26.9	27.5	26.3	24.8	25.0
Net core Crown debt	4.9	3.9	3.5	4.0	4.1	3.8
Net core Crown debt with NZS Fund assets	(1.3)	(3.9)	(5.7)	(6.6)	(7.9)	(9.7)
Net worth	45.4	47.8	49.1	49.5	50.2	50.9
New Zealand Superannuation Fund						
Fund asset returns (after tax)	969	743	840	1,027	1,238	1,468
Fund contributions	2,337	2,049	2,133	2,326	2,459	2,576
Fund assets (year end)	9,861	12,653	15,626	18,979	22,676	26,720
% of GDP	6.3	7.8	9.2	10.6	12.0	13.5

Source: The Treasury

Table 2.16 – 2006 *Budget Update* fiscal indicators

Fiscal indicators ($ million)	Year ended 30 June 2006 Actual	2007 Forecast	2008 Forecast	2009 Forecast	2010 Forecast
Revenue					
Total revenue	76,581	72,611	74,842	77,560	82,716
Core Crown revenue	59,170	56,190	57,781	59,728	64,157
Tax revenue	51,973	50,669	52,109	53,637	57,709
Expenses					
Total expenses	65,084	66,976	70,632	74,132	77,437
Core Crown expenses	49,900	52,254	55,158	57,973	60,527
Operating balance - Core Crown	9,270	3,936	2,623	1,755	3,630
Operating balance - Crown entities	1,593	1,233	1,086	1,084	994
Operating balance - SOEs	1,799	1,111	1,079	1,195	1,258
Dividend elimination	(1,189)	(512)	(445)	(473)	(470)
Total operating balance	11,473	5,768	4,343	3,561	5,412
OBERAC	8,648	5,768	4,343	3,561	5,412
OBERAC (excluding net NZS Fund asset returns)	8,068	5,093	3,495	2,517	4,147
Cash available/(shortfall to be funded)	2,985	(1,468)	(2,110)	(2,706)	(1,101)
Debt indicators					
Gross sovereign-issued debt	35,461	35,013	37,082	36,973	36,348
Total gross Crown debt	39,427	38,388	41,412	41,367	40,113
Net core Crown debt	7,745	9,209	10,396	12,701	13,511
Net core Crown debt with NZS Fund assets	(2,116)	(3,530)	(5,430)	(6,634)	(9,740)
Net worth	71,403	64,253	68,596	72,157	77,569
Domestic bond programme	2,375	2,438	2,484	2,472	2,394
Nominal GDP	156,933	160,013	169,104	178,305	187,584
Fiscal indicators as a % of GDP					
Revenue					
Total Crown revenue	48.8	45.4	44.3	43.5	44.1
Core Crown revenue	33.2	35.1	34.2	33.5	34.2
Tax revenue	33.1	31.7	30.8	30.1	30.8
Expenses					
Total Crown expenses	41.5	41.9	41.8	41.6	41.3
Core Crown expenses	31.8	32.7	32.6	32.5	32.3
Operating balance	7.3	3.6	2.6	2.0	2.9
OBERAC	5.5	3.6	2.6	2.0	2.9
OBERAC (excluding net NZS Fund asset returns)	4.9	3.2	2.1	1.4	2.2
Debt indicators					
Gross sovereign-issued debt	22.6	21.9	21.9	20.7	19.4
Total gross Crown debt	25.1	24.0	24.5	23.2	21.4
Net core Crown debt	4.9	5.8	6.1	7.1	7.2
Net core Crown debt with NZS Fund assets	(1.3)	(2.2)	(3.2)	(3.7)	(5.2)
Net worth	45.5	40.2	40.6	40.5	41.4
New Zealand Superannuation Fund					
Fund asset returns (after tax)	969	675	848	1,044	1,265
Fund contributions	2,337	2,049	2,239	2,465	2,651
Fund assets (year end)	9,861	12,739	15,826	19,335	23,251
% of GDP	6.3	8.0	9.4	10.8	12.4

Source: The Treasury

New Zealand International Financial Reporting Standards (NZ IFRS)

This note outlines the process for adopting New Zealand equivalents to International Financial Reporting Standards (NZ IFRS) for the Government reporting entity.

The Accounting Standards Review Board announced in December 2002 that reporting entities must adopt NZ IFRS for periods beginning after 1 January 2007, with earlier adoption optional. The Minister of Finance announced in 2003 that the Crown will first adopt NZ IFRS for its financial year beginning 1 July 2007.

Treasury is managing the adoption of NZ IFRS for the consolidated Financial Statements of the Government reporting entity. Individual entities included within the consolidated Financial Statements of the Government reporting entity are responsible for ensuring their own NZ IFRS preparedness. Treasury provides guidance to these entities and facilitates implementation on common issues.

The NZ IFRS adoption timetable requires collecting comparative NZ IFRS financial information throughout 2006/07. Forecasts in the 2007 Budget for 2007/08 and beyond will be prepared on an NZ IFRS basis as will interim financial statements prepared in the 2007/08 financial year. The first set of audited financial statements prepared under NZ IFRS will be for the year ending 30 June 2008.

Entities will start providing NZ IFRS information to Treasury from October 2006 onwards. The initial streams of information will relate to the opening balance sheet only. Subsequent information will capture monthly flows and, leading up to the 2007 Budget, forecast information on an NZ IFRS basis.

At this time, it is expected that impacts on reported results will arise from applying the insurance standard (NZ IFRS 4) to the ACC claims liability and recognition and measurement changes arising from the new financial instrument standards. These latter changes include recognising all financial derivatives in the financial statements and greater use of fair values.

Presentation changes are likely to include presenting the GSF liability net of related assets, as is required under NZ IAS 19. The components of financial income and financial expense will also be affected by NZ IFRS requirements, notably reporting of movements in derivatives and differing rules for disclosing foreign exchange gains/losses.

Draft NZ IFRS accounting policies for the Government reporting entity are available at www.treasury.govt.nz/nzifrs/. Noticeable changes to existing policies include those for financial instruments, with all financial instruments being reported initially at fair value, and impairment for goodwill.

The potential areas of impact from adoption of NZ IFRS may change materially as implementation unfolds.

Risks to fiscal forecasts

The fiscal forecasts were finalised on 8 December 2006 in accordance with the forecast accounting policies. There are certain risks around the forecast results. To assist in evaluating such risks, the following chapters should be read in conjunction with the fiscal forecasts:

- *Risks and Scenarios* (Chapter 3) – The fiscal forecasts are based on the economic forecasts presented in Chapter 1 and any variation from the economic forecast will affect the fiscal forecasts, in particular tax revenue and benefit expenses. The *Risks and Scenarios* chapter discusses the effect on the forecasts under different circumstances.
- *Specific Fiscal Risks* (Chapter 4) – The fiscal forecasts incorporate Government decisions up to 8 December 2006. The *Specific Fiscal Risks* chapter covers specific policy decisions that are under active consideration by the Government at the time of the finalisation of the forecasts.

In addition to the specific fiscal risks and the link to the economic forecasts, there are a number of forecasting issues explained below that may arise in future.

Tax forecasting risks

The tax forecasts prepared for this *Half Year Update* are based on current tax policy and on the macroeconomic central forecast. Sensitivities of tax revenue to changes in economic conditions are presented in the *Risks and Scenarios* chapter on page 69.

SOEs' and Crown entities' forecasts

The forecasts for large SOEs and Crown entities were provided in October 2006 based on their best assessments at that time.

Revaluation of property, plant and equipment

Crown accounting policy is to revalue certain classes of property, plant and equipment on a regular basis. In certain circumstances the valuation will be affected by foreign exchange rates, so any appreciation in the New Zealand dollar (from 30 June 2006) will adversely affect the current physical asset values included in the fiscal forecasts.

Discount rates

The GSF and ACC liabilities included in these forecasts have been valued as at 31 October and 30 September respectively. The liabilities are to be next valued for the 2007 *Budget Update*. Any change in discount rates will affect the presented fiscal forecast. For example, if the discount rate rises, the value of the liabilities will decrease.

Tertiary Education Institutes' (TEIs') accounting treatment

The forecast information presented in the 2006 *Half Year Update* combined TEIs on an equity accounting basis. This treatment has been under consideration by accounting standard setters. The Financial Reporting Standards Board (FRSB) has recently advised that the question of whether to consolidate autonomous and independent entities will be

considered by delivering its deliberations of the International Accounting Standards Board (IASB) project on consolidation. The IASB plans to publish a discussion paper in 2007.

The combination method adopted in these forecasts is to equity account for the TEIs' net surpluses and net investment (ie, TEI revenues, expenses, assets and liabilities are not included on a line-by-line basis). This is consistent with the treatment adopted in the 2006 Financial Statements of the Government.

The key indicators are unchanged as a result of the combination approach for TEIs (refer page 60 of the 30 June 2006 Financial Statements of the Government).

Value of Rail Infrastructure

The rail infrastructure (ie, the land, rail track and all the equipment needed to operate the rail network) is currently reported in the Financial Statements and Forecasts at a historic cost value. This is mainly represented by the $1 that the Crown paid Tranz Rail Ltd to repurchase the asset plus the amounts that have been spent on replacement since (and forecast to be spent).

This approach is permitted under generally accepted accounting practice, and was the only one possible until robust information on current values could be obtained. However, the information value in such as approach will diminish over time as increasingly substantial capital amounts for additional work are combined with the nominal amount for the purchase from Tranz Rail Ltd.

Usually, the Government values those assets for which a market value is not readily or reliably able to be determined by using a replacement cost approach. This would provide an estimate of the fair value of the land combined with the current gross replacement costs of the other assets (bridges, tunnels, tracks, level crossings etc.) less allowances for physical deterioration and optimisation for obsolescence and relevant surplus capacity. Such an approach has merit in that it provides information as to the likely cost and time period for maintaining (replacing) the asset. This approach is currently used for the state highway network.

ONTRACK has commissioned a valuation using the optimised depreciated replacement cost methodology to be applied from 1 July 2006. This valuation has not yet been assessed by the Treasury nor has it been audited by the Auditor General, and it has not been included in these forecasts.

It should be noted, however, that any valuation on this methodology will produce a significantly larger amount than the current historic valuation. Moreover, such an amount would not be realisable through a sale, nor through any other commercial transaction. Therefore the valuation will impact neither on the Government's fiscal strategy, nor the main indicators used to assess the fiscal condition.

Indicators of the Government's Fiscal Performance

This section aims to help readers better understand the Government's fiscal position.

Each indicator in this fact sheet gives valid insights into the Government's historical, current and forecast fiscal position, but no one indicator gives a complete picture. Individual indicators do, however, come into greater or lesser focus as circumstances change.

When, for example, the New Zealand Government's net worth was low and net and gross debt levels were high, much of the focus of Government and public commentary at that time was on eliminating annual operating deficits and on the need to attain, and later to lock in, annual operating surpluses.

However, as net worth has risen, and gross and net debt levels have fallen, the Government in more recent years has increasingly focused on how to maintain debt levels around current levels and, accordingly, has given more focus to the Government's annual cash balance.

Most of the indicators in this section may be useful regardless of the particular fiscal strategy being followed. In a few cases (such as the formulation of OBERAC excluding NZS Fund returns), the indicator is used to throw light on the impact of a particular strategy (in this case the build-up of financial assets in the NZS Fund).

Accounting Equations

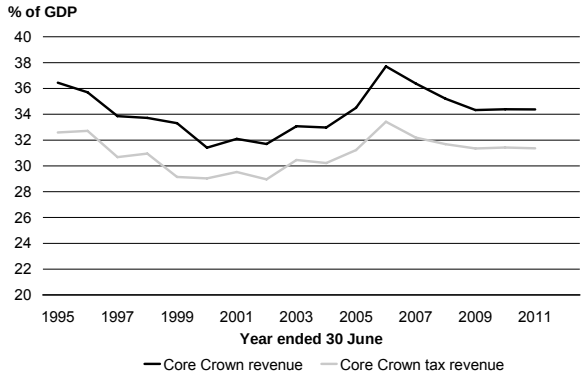
Flow indicators

- Core Crown revenues – core crown expenses + net surplus of SOEs (ie, after dividends) and Crown entities = **Operating balance.**
- Operating balance – revaluation movements – accounting changes = **OBERAC.**
- OBERAC – retained items (eg, net surplus of SOEs/CEs and net investment returns of the NZS Fund) – non-cash items (eg, depreciation) = **Core Crown cash flow from operations.**
- Core Crown cash flow from operations – net investing activities (eg, contributions to NZS Fund, purchases of assets, loans to others) = **Cash available/shortfall.**

Stock indicators

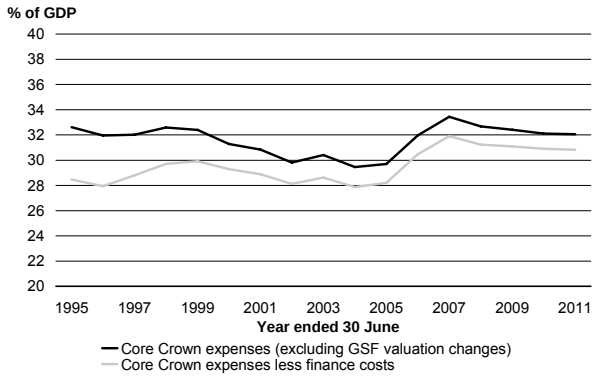
- **Gross sovereign-issued debt (GSID)** = debt issued by the core Crown.
- **Core Crown net debt** =GSID – core Crown's financial assets. (Cash available/shortfall in any year largely drive the change in net core Crown debt.)
- **Net worth (NW)** = Crown's total assets – Crown's total liabilities. (Operating balance (OB) in any year largely drives the change in net worth.)

Ratio of core Crown revenue to GDP



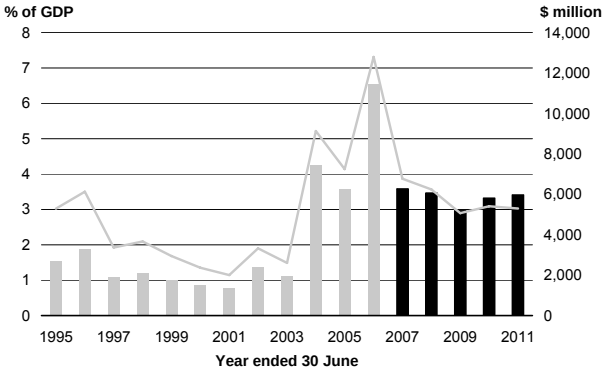
Core Crown revenue to GDP is expected to be broadly stable at around 34% over the forecast period, while core Crown tax to GDP is expected to be broadly stable at slightly above 31% of GDP.

Ratio of core Crown expenses to GDP



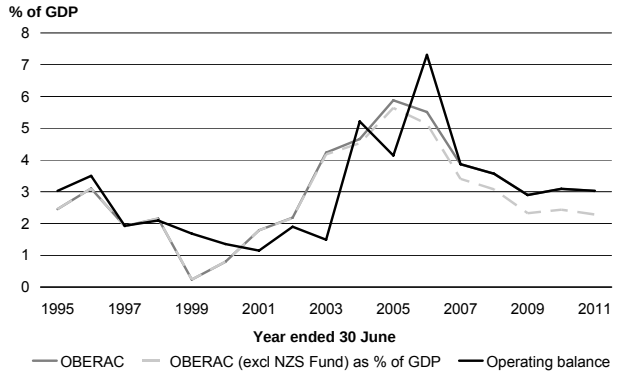
Core Crown expenses to GDP are expected to remain broadly stable at around 32% of GDP over the forecast period.

Operating balance



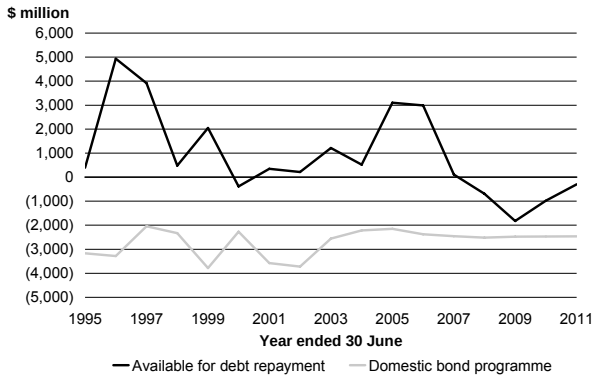
The Government has been running operating surpluses since the early 1990s. These are expected to reach a peak of 7.3% of GDP in 2006 and are expected to remain above 3% of GDP over the forecast period.

OBERAC



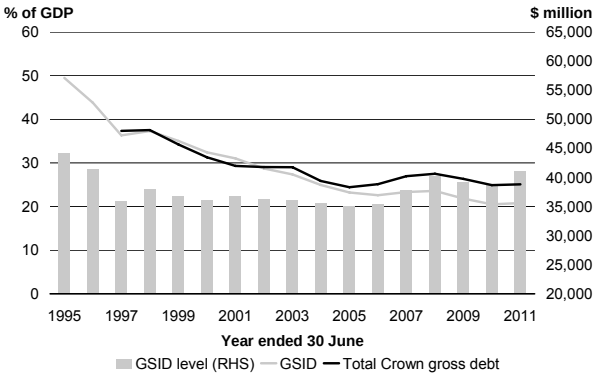
The OBERAC excluding NZS Fund returns is expected to come down from its recent peak of a surplus equivalent to around 5.1% of GDP in 2006, toward 2% of GDP in 2008 and beyond.

Cash available/(shortfall to be funded) and domestic bond programme



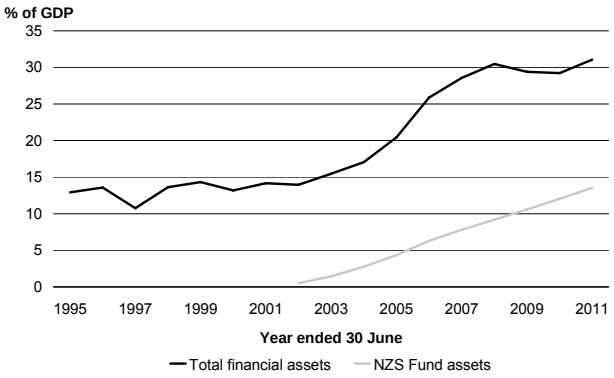
The Government is currently moving from a period of having cash available to repay debt, to a need, in subsequent years, to generate cash through borrowing and reductions in marketable securities.

Crown gross debt



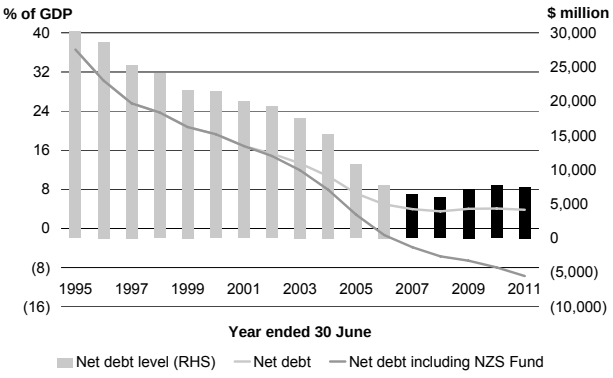
GSID has been steadily declining since the early 1990s and is expected to remain broadly stable around 20% of GDP in the forecast period.

Core Crown financial assets



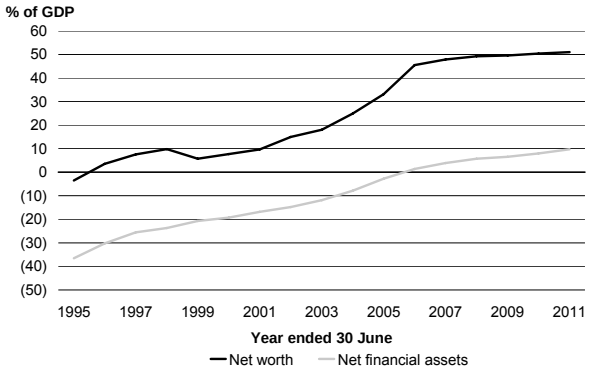
As at 30 June 2007, the NZS Fund's assets are forecast to total $12.7 billion or around 7.8% of GDP. The NZS Fund is expected to grow to around $26.7 billion or 13.5% of GDP by the end of the forecast period.

Core Crown net debt



After declining steadily since the early 1990s, net debt is projected to consolidate in the years ahead at around 4% of GDP. If the assets of the NZS Fund are included, the Government's net debt position moved into a net financial asset position during 2005/06.

Net worth



Net worth is projected to continue to rise at a rapid rate, moving from around 5% in 2000 to over 45.4% in 2006 and moving towards 50.9% by the end of the forecast period.

Annex 1 – The Treasury's Fiscal Forecasting Performance

This Annex discusses the historical accuracy of fiscal forecasts produced in the Budget economic and fiscal updates. One means of assessing the Treasury's forecasting performance is to compare it with the track record of Treasuries and Finance Ministries in other countries. We have been able to draw on benchmarking studies carried out by the International Monetary Fund and HM Treasury in the United Kingdom. Forecasts will always have a range of uncertainty around them, and the merit of comparing forecasting performance across countries is that it draws comparison with the actual levels of achievement seen in practice.

Nevertheless, it is important to look directly at the properties of the New Zealand forecasts. In the past, we have published reviews of the accuracy of the Treasury's forecasts (to be found at: www.treasury.govt.nz/forecasts/performance). This annex extends those reviews. The current pattern of forecast errors makes effective forward-planning and Budget decision-making more difficult for the Government. We need to improve the quality of the forecasts.

Finally, the annex reports briefly on work that we have undertaken in the Treasury and that work currently underway to improve the performance of the forecasts.

International perspectives

Two recent studies are available to "benchmark" the Treasury's forecasting performance against like-for-like forecasters such as other government agencies.

In February 2005, the International Monetary Fund (IMF) produced a report *Canada – Selected Issues* as part of its 2005 Article IV Consultation with Canada. That report compared the forecasting performance of government agencies in 11 different countries over the period 1995 to 2003. It found the following:

- The performance of the New Zealand Treasury's tax revenue forecasts ranked first for one-year-ahead forecasts (in terms of the size of average and average absolute forecast errors[3]) and third for two-year-ahead forecasts.
- For forecasts of the fiscal balance, the New Zealand Treasury's forecasts ranked third for both one-year-ahead and two-year-ahead forecasts.

In its December 2005 end of year fiscal report, HM Treasury compared the performance of forecasts of the net borrowing requirement in 15 member states of the European Union (EU) over the period 1997 to 2004. It found that:

- Average forecast errors ranged from -3% to +2% of GDP, with the New Zealand Treasury's result being 1.2% of GDP, ie, towards the top end of the EU range.
- Average absolute forecast errors ranged from 0.26% to more than 3% of GDP, with the New Zealand Treasury's result being 1.5% of GDP, ie, near the middle of the EU range.

Overall, these studies show that the Treasury's forecasting performance compares well with that of similar agencies around the world.

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3 Throughout this annex, forecast error is defined as the actual outcome less the forecast of that outcome.

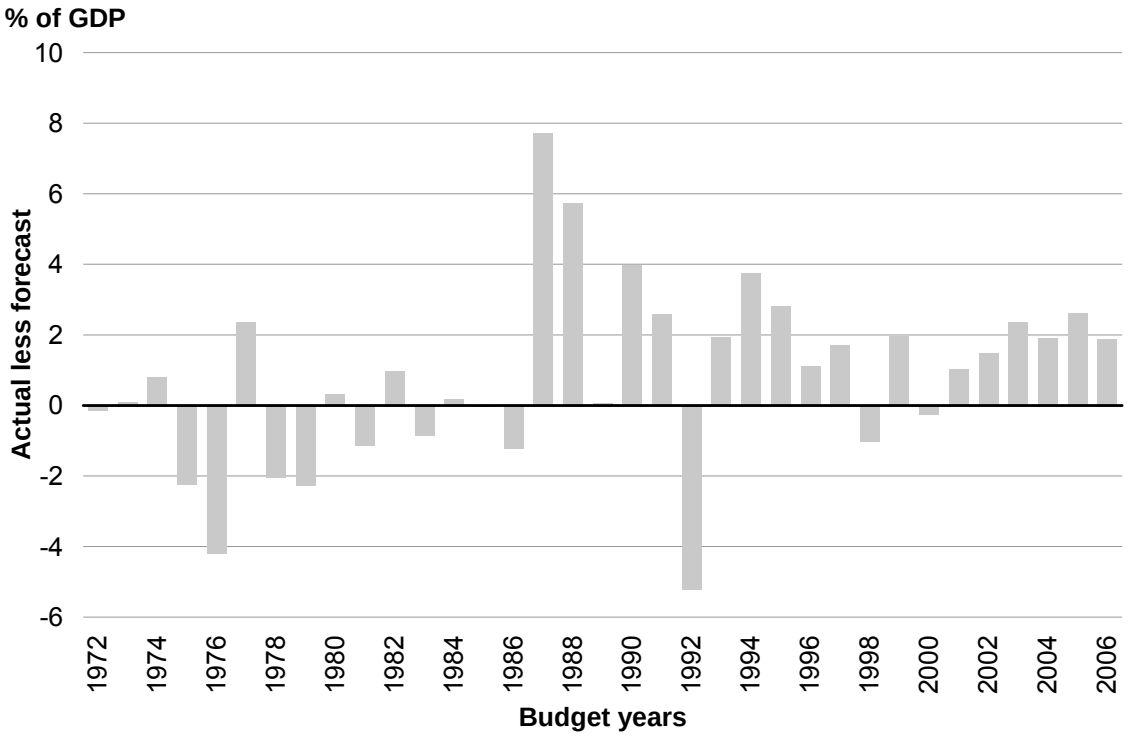
Historical perspectives

The second basis for assessing forecast performance is to look at the pattern of results in New Zealand alone, and not focusing on the performance relative to other countries. In recent years, reports on the performance of the Treasury's forecasts have been published[4]. Other analyses reported in this annex have examined a much longer time period compared with the assessments in those reports. In particular, there was an analysis of forecast errors for the fiscal balance and tax receipts starting from the early 1970s.

Fiscal balance

The current headline measure of the fiscal balance is the Crown's operating balance. However, this concept of operating balance has existed in the Crown accounts only since GAAP reporting was adopted in 1994. Forecasts of the Crown's net cash balance, ie, the cash available to repay debt or required to be financed, have been examined in order to look at performance over the past 35 years.

Figure 1 – Net cash balance forecast errors, one-year-ahead forecasts of Budget years 1972 to 2006



Source: The Treasury

Over the whole period, the average forecast error of the net cash balance is 0.8% of GDP, indicating that the forecasts may be too low, on average. After applying a test to this average error statistic, there was insufficient evidence to conclude that forecasts of the net cash balance were on average too high or too low, or in other words, the errors tended to cancel out on average.

4 www.treasury.govt.nz/forecasts/performance

Nevertheless, some distinct patterns are evident in Figure 1 when sub-periods of time are considered:

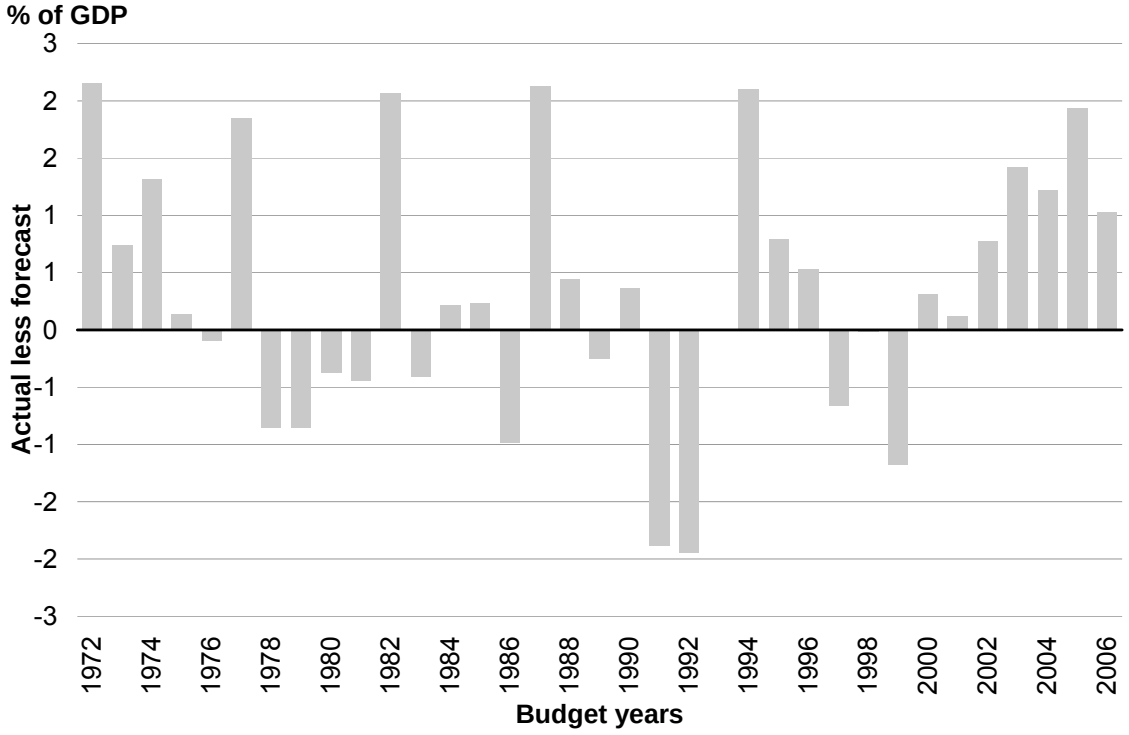
- From 1972 to 1986, which covers a period when the New Zealand economy was more strictly regulated than today, the forecast errors appear to be random and are much smaller than in the rest of the series.
- From 1987 to 1991, the forecast errors were mostly positive and relatively large. This was a period when the New Zealand economy was undergoing structural transformation and was accompanied by a period of historically high CPI inflation.
- From 1992 to 2006, the forecast errors mirror economic growth, with forecast errors being positive (ie, forecasts were too low) during periods of high economic growth and generally negative (ie, forecasts were too high) during periods of low economic growth. In particular, there were five positive forecast errors in a row from 1993 through to 1997, and a further six in a row from 2001 to 2006. The 1993 to 2006 period was 'split' by shocks such as the Asian financial crisis, droughts and the September 2001 terrorist attacks.

These patterns make for a more salutary assessment of forecast performance than comes from looking at the average error over the full time period.

Tax receipts

The net cash balance essentially equals total receipts less total expenditure. The largest part of total receipts is tax receipts. The Treasury has examined the long-run trend in tax receipts forecast errors to determine if errors in the forecasting of tax receipts are contributing to errors in forecasting the cash balance.

Figure 2 – Tax receipts forecast errors, one-year-ahead forecasts of Budget years 1972 to 2006



Source: The Treasury

Similar to the net cash balance chart, Figure 2 shows more-or-less random errors through the early part of the time period, and errors following the economic cycle from the 1990s onwards. Again, there was insufficient evidence to conclude that the tax receipts forecasts were persistently too high or too low, although there were seven positive errors in a row from 2000 to 2006.

From Figures 1 and 2, it appears plausible that the cash balance forecast errors might be influenced by the tax receipts forecast errors, but strong evidence for correlation between tax receipts forecast errors and net cash balance forecast errors could not be found.

The analysis failed to come up with conclusive evidence of statistical bias in the net cash balance and tax receipts forecasts. Nevertheless, the one-year-ahead forecasts of both of these aggregates have been too low for the last six-or-seven years in a row. This causes significant difficulties for the Government in its budget planning and management. The Treasury has taken, and will continue to take, steps to remedy this problem.

Ongoing work

The programme of work initially focused on revenue forecasting and has also begun to deal with expense forecasting.

Revenue forecasts

In October 2005, the Treasury commissioned a review of its tax forecasting function ("Examination of the New Zealand Treasury's tax forecasting methods and processes", Schoefisch U. D.). This report found that "there are no obvious grounds to suggest that the tax forecasts are not being prepared with diligence and best professional judgement based on the input of all information available at the time". Nevertheless, Schoefisch recommended 12 actions for the Treasury to undertake to improve the performance of its tax forecasts.

Some of these recommendations were process improvements, which the Treasury has subsequently implemented. Other recommendations identified areas where further Treasury research could be most beneficial.

One such recommendation was to investigate the source of the tax forecast errors. Differences between actual tax outcomes and forecasts will arise principally from three sources:

- forecast errors in the macroeconomic inputs into the tax forecasting models
- forecast errors that arise from the tax forecasting models themselves, and
- other more-or-less random errors.

Recent research found that macroeconomic forecast errors have made the largest contribution to under-estimation in the tax forecasts, and tax modelling forecast errors have contributed most to the variability of the overall tax forecasting errors over the past decade. This was the case for all of the major tax types. In short, the Treasury underestimated the strength and durability of the current economic cycle as well as some of its drivers, particularly the sustained growth in employment.

The Treasury is doing several things that should help to address these findings:

- A set of alternative tax forecasting models is being developed which will replace the existing tax models if they prove to be more accurate (when tested on past data).
- After steadily increasing the amount of interaction and integration between the macroeconomic and tax forecasting teams over the past two years, the two teams will be formally merged into a single forecasting unit early in the New Year.

A full report on the decomposition of the tax forecasting errors will be released early in 2007.

The Treasury is also now using its general equilibrium model of the New Zealand economy (New Zealand Treasury Model (NZTM)) as its primary macroeconomic forecasting tool. This will allow for better and more consistent evaluation of historical forecast errors that should inform forecasting.

Expense forecasts

On the expense side, current year forecasts of expenses have been consistently too high for the past several years, implying systematic under-spending. Although the Treasury compiles expense forecasts, individual expense items are not forecast directly; rather, they are aggregated from the expense forecasts prepared by each Government department. The Treasury is investigating whether it is appropriate to make a top-down adjustment to total expense forecasts, similar to that currently done for total cash expenditure forecasts.

Conclusion

Based solely on international comparisons, the New Zealand Treasury's fiscal forecasts compare well with those of comparable agencies. Nevertheless, there is a marked pattern, at least in recent years, of the forecasts lagging reality. As a consequence, revenue forecasts are too low when the economy is growing strongly and too high in a down-turn.

This pattern causes difficulties for Government forward planning and Budget decision-making, and is a priority for the Treasury to correct, if that is possible. Work completed or underway in the Treasury has identified overall system weaknesses, along with sources of error in the revenue forecasts. Revised processes for macroeconomic forecasting should reduce some of the sources of error in the revenue forecasts. Other work is underway to further improve the forecasting methods.