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## Pre-election Update 2011 Additional Information

The following information forms part of the *Pre-election Economic and Fiscal Update 2011 (Pre-election Update)*, released by the Treasury on 25 October 2011. This information provides further details on the *Pre-election Update* and should be read in conjunction with the published document. The additional information includes:

- Detailed economic forecast information – detailed tables providing breakdowns of the economic forecasts.
- Treasury and Inland Revenue tax forecasts – detailed tax revenue and receipts tables comparing Treasury’s forecasts with IRD’s forecasts.
- Additional fiscal indicators – estimates of the cyclically-adjusted balance and fiscal impulse.
- Government Finance Statistics (GFS) for central government – fiscal tables presented under a GFS presentation framework to help with cross-country comparisons.
- Accounting policies – outline of the specific Crown accounting policies. The published forecast financial statements only provide a summary.

## Detailed Economic Forecast Information

The following tables provide additional detail on the economic forecasts presented in the *Pre-election Update*.

- Table 1 – Real gross domestic product.
- Table 2 – Consumers price index and exchange rates.
- Table 3 – Gross domestic expenditure and income.
- Tables 4 & 5 – Labour market indicators.
- Table 6 – Current account.
- Table 7 – Exports – SNA basis.
- Table 8 – Imports – SNA basis.

**Table 1 – Real Gross Domestic Product**

Chain-volume series expressed in 1995/96 prices

	Actual			Seasonally Adjusted	
	\$ million	Annual % change	Annual Average % change	\$million	Quarterly % change
2009Q1	32,850	-3.5	-1.5	33,129	-1.1
2009Q2	32,544	-2.7	-2.4	33,186	0.2
2009Q3	32,850	-2.0	-2.7	33,260	0.2
2009Q4	34,913	0.2	-2.0	33,564	0.9
2010Q1	33,453	1.8	-0.7	33,736	0.5
2010Q2	33,162	1.9	0.5	33,820	0.2
2010Q3	33,367	1.6	1.4	33,791	-0.1
2010Q4	35,372	1.3	1.6	33,997	0.6
2011Q1	34,003	1.6	1.6	34,293	0.9
2011Q2	33,658	1.5	1.5	34,325	0.1
2011Q3	34,199	2.5	1.7	34,634	0.9
2011Q4	36,359	2.8	2.1	34,946	0.9
2012Q1	34,840	2.5	2.3	35,137	0.5
2012Q2	34,778	3.3	2.8	35,467	0.9
2012Q3	35,289	3.2	2.9	35,738	0.8
2012Q4	37,550	3.3	3.1	36,091	1.0
2013Q1	36,112	3.7	3.4	36,420	0.9
2013Q2	36,008	3.5	3.4	36,722	0.8
2013Q3	36,529	3.5	3.5	36,993	0.7
2013Q4	38,772	3.3	3.5	37,265	0.7
2014Q1	37,216	3.1	3.3	37,534	0.7
2014Q2	37,077	3.0	3.2	37,811	0.7
2014Q3	37,594	2.9	3.1	38,072	0.7
2014Q4	39,878	2.9	2.9	38,327	0.7
2015Q1	38,255	2.8	2.9	38,581	0.7
2015Q2	38,061	2.7	2.8	38,815	0.6
2015Q3	38,517	2.5	2.7	39,006	0.5
2015Q4	40,796	2.3	2.5	39,211	0.5
2016Q1	39,105	2.2	2.4	39,438	0.6
2016Q2	38,918	2.3	2.3	39,689	0.6

Source: Statistics New Zealand, The Treasury

**Table 2** – Consumers Price Index and Exchange Rates

	Consumers Price Index			Exchange rates	
	Index	Quarterly % change	Annual % change	TWI	USD
2009Q1	1075	0.3	3.0	53.7	0.53
2009Q2	1081	0.6	1.9	58.4	0.60
2009Q3	1095	1.3	1.7	62.6	0.67
2009Q4	1093	-0.2	2.0	65.5	0.73
2010Q1	1097	0.4	2.0	65.3	0.71
2010Q2	1099	0.2	1.7	66.7	0.70
2010Q3	1111	1.1	1.5	66.9	0.72
2010Q4	1137	2.3	4.0	67.8	0.76
2011Q1	1146	0.8	4.5	67.2	0.76
2011Q2	1157	1.0	5.3	69.1	0.79
2011Q3	1166	0.8	5.0	72.0	0.83
2011Q4	1172	0.5	3.1	70.0	0.79
2012Q1	1178	0.5	2.8	70.0	0.79
2012Q2	1183	0.4	2.2	70.0	0.79
2012Q3	1189	0.6	2.0	70.0	0.79
2012Q4	1195	0.5	2.0	70.0	0.79
2013Q1	1204	0.8	2.2	70.1	0.79
2013Q2	1212	0.7	2.5	70.1	0.79
2013Q3	1219	0.6	2.5	70.0	0.79
2013Q4	1226	0.6	2.6	69.9	0.78
2014Q1	1233	0.6	2.4	69.6	0.78
2014Q2	1240	0.6	2.3	69.1	0.77
2014Q3	1248	0.6	2.4	68.6	0.76
2014Q4	1256	0.6	2.5	67.9	0.75
2015Q1	1264	0.6	2.5	67.2	0.74
2015Q2	1273	0.7	2.6	66.3	0.72
2015Q3	1281	0.7	2.6	65.3	0.71
2015Q4	1290	0.7	2.7	64.3	0.69
2016Q1	1299	0.7	2.7	63.3	0.67
2016Q2	1308	0.7	2.8	62.3	0.66

Source: Statistics New Zealand, The Treasury

Table 3 – Gross Domestic Expenditure and Income

March Year	2011			2012			2013			2014			2015			2016		
	Estimate	%vol	%pr	Forecast	%vol	%pr	Forecast	%vol	%pr	Forecast	%vol	%pr	Forecast	%vol	%pr	Forecast	%vol	%pr
	\$ mill			\$ mill			\$ mill			\$ mill			\$ mill			\$ mill		
Consumption:																		
- Private	115,155	2.1	3.0	121,078	2.2	1.6	125,674	2.9	2.0	131,915	2.9	2.0	138,478	2.2	2.0	144,734	2.2	2.3
- Public	40,529	1.8	2.9	42,439	-1.5	2.1	42,708	-0.2	2.3	43,600	0.5	2.3	44,859	0.7	2.3	46,222	0.7	2.3
Gross Fixed Capital Formation:																		
- Residential	8,487	-8.4	3.8	8,074	37.6	5.5	11,740	34.9	6.4	16,828	14.2	4.9	20,138	5.5	5.0	22,297	5.5	5.0
- Market *	27,120	8.9	0.0	29,516	9.8	4.1	33,761	10.3	1.4	37,747	4.1	1.6	39,934	-0.3	2.3	40,713	-0.3	2.3
- Non-market **	3,208	1.1	2.9	3,330	-8.8	2.4	3,110	3.2	2.4	3,292	5.7	2.4	3,561	3.4	2.4	3,772	3.4	2.4
- Total all sectors	38,809	5.0	0.4	40,930	16.2	2.3	48,634	14.4	4.0	57,890	6.4	3.3	63,657	1.2	3.7	66,804	1.2	3.7
Change in Stocks	682			-352			316			2			205			720		
Gross National Expenditure	195,174	2.1	2.5	204,095	4.8	1.6	217,332	5.4	1.9	233,407	3.7	2.1	247,199	1.9	2.6	258,480	1.9	2.6
Exports	58,157	2.8	2.9	61,443	2.3	-4.2	60,227	1.9	1.4	62,241	1.9	1.4	66,680	1.7	5.3	74,303	1.8	9.4
Imports	55,288	3.6	-1.4	56,515	6.1	-2.0	58,803	8.0	1.2	64,295	8.0	1.2	70,621	4.3	5.3	78,526	0.7	10.5
Expenditure on GDP	198,042	2.0	3.5	209,024	3.2	1.5	218,755	3.3	2.4	231,353	3.3	2.4	243,258	2.8	2.2	254,256	2.4	2.1
Statistical Discrepancy	447			447			447			447			447			447		
Gross Domestic Product	198,489			209,471			219,202			231,800			243,705			254,703		
Compensation of employees	87,458		5.3	92,091		4.6	96,298		5.5	101,606		5.6	107,338		5.4	113,153		5.4
Operating Surplus, net:																		
- Agriculture	7,250		6.2	7,700		-6.4	7,211		1.3	7,307		5.1	7,679		8.7	8,349		8.7
- Other	48,401		3.2	49,963		5.7	52,807		6.3	56,120		3.6	58,121		1.4	58,953		1.4
- Total all sectors	55,651		3.6	57,663		4.1	60,018		5.7	63,427		3.7	65,800		2.3	67,302		2.3
Consumption of fixed capital	30,094		5.5	31,750		5.5	33,496		5.5	35,338		5.5	37,282		5.5	39,332		5.5
Indirect Taxes	25,939		10.3	28,621		5.0	30,044		6.8	32,083		5.8	33,940		4.8	35,570		4.8
Less subsidies	654		0.0	654		0.0	654		0.0	654		0.0	654		0.0	654		0.0
Gross Domestic Product	198,489		5.5	209,471		4.6	219,202		5.7	231,800		5.1	243,705		4.5	254,703		4.5

\* Includes Local Government and Non-profit Organisations  
 \*\* Central Government (includes Crown Entities but not SOEs)

Source: Statistics New Zealand, The Treasury

**Tables 4 & 5 – Labour Market Indicators**

<b>Annual Average Percentage Change</b>						
<b>March Year</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Real GDP (production basis)	1.6	2.3	3.4	3.3	2.9	2.4
Working Age Population	1.4	1.0	0.9	1.1	1.1	1.0
Labour Force	1.5	1.3	0.6	1.1	1.2	1.2
Employment - Total	1.2	1.8	1.5	1.5	1.4	1.3
Labour Productivity *	-0.4	0.7	2.2	1.9	1.5	1.1
CPI (annual percentage change)	4.5	2.8	2.2	2.4	2.5	2.7
Average Ordinary Time Hourly Wages	1.6	3.4	3.5	4.0	4.2	4.1
Average Weekly Earnings	2.7	3.4	3.2	3.9	4.1	4.0
Real Wages	-1.2	-0.6	1.3	1.5	1.7	1.4
Compensation of Employees	3.7	5.3	4.6	5.5	5.6	5.4
Unit Labour Costs (Hours worked basis)	2.1	2.7	1.3	2.1	2.7	2.9
Real Unit Labour Costs	-0.7	-1.4	-0.8	-0.4	0.2	0.3

\* Hours worked basis

<b>Number (000's)</b>						
<b>As at March Quarter</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Total Population	4,403	4,430	4,469	4,513	4,554	4,593
Natural Increase	34	28	31	29	30	29
Net Migration	6	-1	8	15	11	10
Annual Change	41	27	39	44	41	39
Working Age Population	3,458	3,483	3,518	3,556	3,594	3,630
Annual Change	46	25	35	39	38	36
Not in the labour force (s.a.)	1,082	1,093	1,114	1,123	1,132	1,139
Annual Change	-7	11	20	10	8	7
Labour Force (s.a.)	2,367	2,382	2,398	2,427	2,457	2,486
Annual Change	52	15	16	29	30	28
Total Employment (s.a.)	2,213	2,244	2,274	2,308	2,342	2,369
Annual Change	40	31	30	34	33	27
Unemployment (s.a.)	154	138	124	119	116	117
Annual Change	13	-16	-14	-5	-4	1
Participation Rate (% s.a)	68.6	68.4	68.2	68.3	68.4	68.5
Unemployment Rate (% s.a)	6.5	5.8	5.2	4.9	4.7	4.7

Source: Statistics New Zealand, The Treasury

**Table 6** – Current Account

<b>\$NZ Million</b>						
<b>Year ended March</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Exports Goods	45,523	48,101	47,215	49,203	53,361	60,321
<i>annual % Change</i>	13.5	5.7	-1.8	4.2	8.5	13.0
Imports Goods	42,093	42,999	44,979	49,656	54,648	60,716
<i>annual % Change</i>	12.3	2.2	4.6	10.4	10.1	11.1
Balance on Goods	3,431	5,102	2,236	-453	-1,287	-394
<i>% of Nominal GDP</i>	1.7	2.4	1.0	-0.2	-0.5	-0.2
Exports Services	12,633	13,399	12,972	12,984	13,256	13,907
<i>annual % change</i>	-1.4	6.1	-3.2	0.1	2.1	4.9
Imports Services	13,195	13,516	13,825	14,639	15,973	17,811
<i>annual % change</i>	6.0	2.4	2.3	5.9	9.1	11.5
Balance on Services	-562	-116	-852	-1,655	-2,716	-3,904
<i>% of Nominal GDP</i>	-0.3	-0.1	-0.4	-0.7	-1.1	-1.5
Balance on Goods & Services	2,869	4,985	1,383	-2,108	-4,003	-4,298
<i>% of Nominal GDP</i>	1.4	2.4	0.6	-0.9	-1.6	-1.7
Income and Transfers Balance	-10,063	-10,011	-9,254	-10,469	-11,594	-13,296
<i>% of Nominal GDP</i>	-5.1	-4.8	-4.2	-4.5	-4.8	-5.2
<b>Current Account Balance</b>	<b>-7,196</b>	<b>-5,026</b>	<b>-7,871</b>	<b>-12,576</b>	<b>-15,597</b>	<b>-17,594</b>
<i>% of Nominal GDP</i>	<b>-3.6</b>	<b>-2.4</b>	<b>-3.6</b>	<b>-5.4</b>	<b>-6.4</b>	<b>-6.9</b>

Source: Statistics New Zealand, The Treasury

**Table 7** – Exports – SNA basis

<b>Breakdown of Exports</b>											
<b>March Years</b>	<b>Dairy Products</b>			<b>Meat and Meat Products</b>			<b>Non-Commodity*</b>				
	%v	%p	\$ mn	%v	%p	\$ mn	%v	%p	\$ mn		
<b>2008</b>	-0.9	25.7	9,434	-2.9	-5.1	4,656	0.7	6.3	12,456		
<b>2009</b>	-15.1	27.9	10,101	1.5	23.2	5,796	1.6	16.8	14,804		
<b>2010</b>	30.8	-31.9	9,078	-1.1	-7.5	5,332	-5.6	-6.7	13,052		
<b>2011</b>	0.5	29.4	11,668	-2.4	6.3	5,550	6.2	2.4	14,173		
<b>2012</b>	3.1	4.4	12,620	-3.3	14.5	6,098	6.8	-3.2	14,672		
<b>2013</b>	1.1	-9.4	11,588	0.3	-7.1	5,699	2.2	1.5	15,211		
<b>2014</b>	2.0	-0.4	11,792	3.2	-0.2	5,864	2.1	4.3	16,183		
<b>2015</b>	2.0	4.5	12,579	2.8	4.0	6,274	2.4	8.5	17,980		
<b>2016</b>	2.0	9.0	13,994	2.8	8.6	7,006	2.7	13.2	20,893		

<b>Total Exports</b>											
<b>March Years</b>	<b>Total Goods**</b>			<b>Services</b>			<b>Total Exports</b>				
	%v	%p	\$ mn	%v	%p	\$ mn	%v	%p	\$ mn		
<b>2008</b>	4.5	3.9	38,718	0.4	2.2	12,988	3.4	3.3	51,705		
<b>2009</b>	-2.6	17.6	44,248	-4.1	6.9	13,309	-3.0	15.1	57,556		
<b>2010</b>	6.8	-15.4	40,092	-1.9	-1.8	12,809	4.8	-12.5	52,900		
<b>2011</b>	2.7	10.7	45,523	-1.0	-0.5	12,633	1.9	7.9	58,157		
<b>2012</b>	3.3	2.2	48,101	2.5	3.5	13,399	2.8	2.9	61,443		
<b>2013</b>	2.7	-4.4	47,215	0.6	-3.6	12,972	2.3	-4.2	60,227		
<b>2014</b>	2.1	2.1	49,203	0.9	-0.9	12,984	1.9	1.4	62,241		
<b>2015</b>	2.0	6.4	53,361	0.7	1.3	13,256	1.7	5.3	66,680		
<b>2016</b>	2.0	10.8	60,321	1.0	3.8	13,907	1.8	9.4	74,303		

\* Consists of 'Metal Products and Machinery Equipment', 'Chemicals, Rubber and Other Non-Metallic Goods' and 'Textile, Apparel and Leather'

\*\* Note that Statistics NZ withholds data for some components of exports for confidentiality reasons. As a result we have not published the "Wood and Wood Products" and 'Other Goods' components of exports.



**Table 8 – Imports – SNA basis**

Breakdown of Imports														
March Years	Capital Goods (VFD)		Mineral Fuel* (VFD)		Intermediate Goods** (VFD)		Consumption Goods (VFD)		Total	Total	Total	Total	Total	
	%v	\$ mn	%v	\$ mn	%v	\$ mn	%v	\$ mn						%v
2008	10.2	7,213	15.8	6,982	10.3	6,982	6.9	16,225	10.3	6,982	-6.4	16,225	6.9	16,225
2009	3.5	8,292	-6.3	8,186	-6.3	8,186	-2.7	18,452	-6.3	8,186	21.9	18,452	-2.7	18,452
2010	-28.2	6,202	1.5	6,059	-11.1	6,059	-4.1	14,818	-11.1	6,059	-9.9	14,818	-4.1	14,818
2011	25.3	7,436	-2.0	6,945	12.9	6,945	7.7	16,943	12.9	6,945	1.2	16,943	7.7	16,943
2012	3.6	7,026	6.3	8,321	0.9	8,321	4.4	16,968	0.9	8,321	-0.9	16,968	4.4	16,968
2013	16.3	7,280	0.2	8,338	5.0	8,338	6.3	17,866	5.0	8,338	0.3	17,866	6.3	17,866
2014	16.7	8,896	4.4	8,832	5.6	8,832	6.5	19,364	5.6	8,832	2.7	19,364	6.5	19,364
2015	5.1	9,425	3.8	9,650	4.4	9,650	5.0	21,537	4.4	9,650	6.5	21,537	5.0	21,537
2016	-2.3	9,534	1.6	10,779	1.8	10,779	2.7	24,390	1.8	10,779	11.2	24,390	2.7	24,390

March Years	Total Goods (VFD)		Services		Total	
	%v	\$ mn	%v	\$ mn	%v	\$ mn
2008	10.3	40,596	10.9	12,725	10.4	53,321
2009	-4.3	45,768	-4.2	14,091	-4.3	59,859
2010	-10.5	37,471	-6.1	12,453	-9.4	49,925
2011	11.6	42,093	7.3	13,195	10.5	55,288
2012	3.0	42,999	4.3	13,516	3.6	56,515
2013	7.8	44,979	0.4	13,825	6.1	58,803
2014	9.2	49,656	3.9	14,639	8.0	64,295
2015	4.6	54,648	3.3	15,973	4.3	70,621
2016	0.6	60,716	1.1	17,811	0.7	78,526

\* Consists of 'Fuels and Lubricants' and 'Petrol and Aviation Gas'

\*\* Consists of 'Intermediate Goods' excluding 'Fuels and Lubricants' and 'Passenger Cars'

## Treasury and Inland Revenue Tax Forecasts

In line with established practice, Inland Revenue has also prepared a set of tax forecasts, which, like the Treasury's tax forecasts, is based on the Treasury's macroeconomic forecasts. The two sets of forecasts differ from each other because of the different modelling approaches used by the two agencies and the various assumptions and judgements made by the forecasting teams in producing their forecasts.

The Treasury's total tax forecasts are higher than Inland Revenue's in every June year from 2012 through to 2016 by, on average, \$0.7 billion pa, a difference of approximately 1% of total tax revenue. The difference is spread across all of the major tax types, although Inland Revenue forecasts overall higher net other persons tax.

**Table 9** – Summary of Treasury and Inland Revenue forecasts of total Crown tax revenue

Year ended 30 June \$ billion	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast
<b>Source deductions</b>					
Treasury	21.3	22.7	24.3	26.1	27.8
Inland Revenue	21.0	22.5	24.2	25.9	27.7
Difference	0.3	0.2	0.1	0.2	0.1
<b>Corporate taxes</b>					
Treasury	8.4	8.8	9.5	10.0	10.3
Inland Revenue	8.2	8.5	9.1	9.5	9.6
Difference	0.2	0.3	0.4	0.5	0.7
<b>Goods and services tax</b>					
Treasury	15.1	16.2	17.4	18.4	19.3
Inland Revenue	15.1	16.0	17.2	18.2	19.1
Difference	-	0.2	0.2	0.2	0.2
<b>Other taxes</b>					
Treasury	10.2	10.9	11.7	12.4	13.2
Inland Revenue	10.1	10.8	11.7	12.6	13.5
Difference	0.1	0.1	-	(0.2)	(0.3)
<b>Total tax</b>					
Treasury	55.0	58.6	62.9	66.9	70.6
Inland Revenue	54.4	57.8	62.2	66.2	69.9
Difference	0.6	0.8	0.7	0.7	0.7
<b>Total tax (% of GDP)</b>					
Treasury	26.0	26.4	26.8	27.2	27.5
Inland Revenue	25.7	26.1	26.5	26.9	27.2
Difference	0.3	0.3	0.3	0.3	0.3

The Treasury's and Inland Revenue's source deductions (mainly PAYE) are similar to each other, with the average difference across all five years being less than 1%.

In corporate tax, the Treasury's view of current corporate profitability is higher than Inland Revenue's view. This in turn causes the Treasury's corporate tax forecast to be higher than Inland Revenue's in 2012 and the gap persists through the forecast period as the Treasury's 2012 profit assumption raises the base level of profits through all forecast years. In addition, the Treasury's forecast includes a more cyclical recovery than Inland Revenue's

in that it has tax loss usage abating from 2014 onwards. This increases the gap between the two forecasts as Inland Revenue has made no explicit assumption regarding the level of tax loss usage in the forecast period.

The difference in the GST forecasts is caused by the different treatment of residential investment in the respective forecasting models. The Treasury's GST forecasting model explicitly includes forecasts of residential investment as an input whereas Inland Revenue's forecasts of GST related to residential investment are judgement based. Residential investment grows strongly in the Treasury's macroeconomic forecast over the year ending June 2013 and the difference in approach is reflected in the Treasury's higher GST forecast from 2013 onwards.

Forecasts of other taxes, in total, are broadly similar to each other, with some offsetting differences across various minor taxes. For instance, Inland Revenue's forecast for other taxes is higher than the Treasury's in 2015 and 2016 owing to different judgements around the cyclical profile of refunds to individuals. Inland Revenue expects that refunds to individuals and business (other persons) will abate once the recent spate of 'catch up' refunds for salary and wage earners runs its course and will settle out at a lower level. The Treasury considers that refunds to businesses and individuals (other persons) will remain at a higher level.

- Table 10 – Treasury and Inland Revenue forecasts of tax revenue (accrual).
- Table 11 – Treasury and Inland Revenue forecasts of tax receipts (cash).

**Table 10 – Treasury and Inland Revenue forecasts of tax revenue (accrual)**

	2010/11 Actual		2011/12 Forecast		2012/13 Forecast		2013/14 Forecast		2014/15 Forecast		2015/16 Forecast		
	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference	
<b>Direct tax</b>													
<b>Individuals</b>													
Source deductions	21,243	21,676	23,117	22,900	217	24,716	24,561	155	26,439	26,302	137	28,217	28,056
Other persons tax	3,791	4,290	4,426	4,375	51	4,633	4,865	(232)	4,804	5,036	(232)	5,028	5,124
Returns	(1,679)	(1,616)	(1,531)	(1,500)	(31)	(1,499)	(1,360)	(139)	(1,444)	(1,300)	(144)	(1,456)	(1,240)
Fringe benefit tax	462	440	458	464	(6)	482	480	2	512	497	15	542	506
<b>Subtotal: individuals</b>	<b>23,817</b>	<b>24,790</b>	<b>26,470</b>	<b>26,239</b>	<b>231</b>	<b>28,332</b>	<b>28,546</b>	<b>(214)</b>	<b>30,311</b>	<b>30,555</b>	<b>(224)</b>	<b>32,329</b>	<b>32,446</b>
<b>Company tax (net)</b>	<b>7,727</b>	<b>8,421</b>	<b>8,961</b>	<b>8,636</b>	<b>325</b>	<b>9,656</b>	<b>9,158</b>	<b>498</b>	<b>10,107</b>	<b>9,572</b>	<b>535</b>	<b>10,414</b>	<b>9,690</b>
<b>Withholding taxes on:</b>													
Resident interest income	1,704	1,646	1,874	1,855	19	2,251	1,979	272	2,645	2,462	183	3,069	3,088
Non-resident income	467	427	478	533	(65)	536	598	(62)	589	658	(69)	630	700
Foreign-source dividends	..	..	..	..	(1)	..	1	(1)	..	1	(1)	..	1
Resident dividend income	195	207	216	293	(6)	470	470	..	487	479	8	498	483
<b>Subtotal: Withholding tax</b>	<b>2,366</b>	<b>2,280</b>	<b>2,639</b>	<b>2,682</b>	<b>(43)</b>	<b>3,257</b>	<b>3,048</b>	<b>209</b>	<b>3,721</b>	<b>3,600</b>	<b>121</b>	<b>4,197</b>	<b>4,272</b>
<b>Total income tax</b>	<b>33,910</b>	<b>35,491</b>	<b>38,070</b>	<b>37,557</b>	<b>513</b>	<b>41,245</b>	<b>40,752</b>	<b>493</b>	<b>44,139</b>	<b>43,707</b>	<b>432</b>	<b>46,940</b>	<b>46,408</b>
Other: Estate and gift duties	2	..	..	..	..	..	..	..	..	..	..	..	..
<b>Total direct tax</b>	<b>33,912</b>	<b>35,491</b>	<b>38,070</b>	<b>37,557</b>	<b>513</b>	<b>41,245</b>	<b>40,752</b>	<b>493</b>	<b>44,139</b>	<b>43,707</b>	<b>432</b>	<b>46,940</b>	<b>46,408</b>
<b>Indirect tax</b>													
<b>GST (net)</b>	<b>19,461</b>	<b>21,486</b>	<b>22,426</b>	<b>22,230</b>	<b>196</b>	<b>23,650</b>	<b>23,462</b>	<b>188</b>	<b>24,870</b>	<b>24,665</b>	<b>205</b>	<b>25,888</b>	<b>25,686</b>
<b>Excise duties on:</b>													
Alcoholic drinks	623	712	746	732	14	777	769	8	812	808	4	849	851
Tobacco products	220	210	219	211	8	212	213	(1)	206	208	(2)	207	209
Petroleum fuels	872	921	938	948	(10)	979	987	(8)	1,016	1,016	0	1,055	1,046
<b>Subtotal: excise duties</b>	<b>1,715</b>	<b>1,843</b>	<b>1,903</b>	<b>1,891</b>	<b>12</b>	<b>1,968</b>	<b>1,969</b>	<b>(1)</b>	<b>2,034</b>	<b>2,032</b>	<b>2</b>	<b>2,111</b>	<b>2,106</b>
<b>Other indirect tax</b>													
Customs duty	1,916	2,019	2,076	2,032	44	2,079	2,055	24	2,082	2,065	17	2,113	2,083
Road user charges	1,016	1,073	1,142	1,125	17	1,223	1,195	28	1,297	1,265	32	1,367	1,330
Gaming duties	266	271	277	275	2	282	279	3	282	283	4	292	287
Motor vehicle fees	172	168	166	180	(14)	169	185	(16)	173	190	(17)	176	195
Exhaustible resource levy	36	38	36	34	2	36	36	(0)	36	39	(3)	36	42
Approved issuer levy, cheque duty & other	91	90	104	93	(2)	91	91	..	91	89	2	91	87
<b>Subtotal: Other indirect tax</b>	<b>3,497</b>	<b>3,659</b>	<b>3,788</b>	<b>3,739</b>	<b>49</b>	<b>3,880</b>	<b>3,841</b>	<b>39</b>	<b>3,965</b>	<b>3,931</b>	<b>34</b>	<b>4,075</b>	<b>4,024</b>
<b>Total indirect tax</b>	<b>24,673</b>	<b>26,988</b>	<b>28,117</b>	<b>27,860</b>	<b>257</b>	<b>29,498</b>	<b>29,272</b>	<b>226</b>	<b>30,869</b>	<b>30,628</b>	<b>241</b>	<b>32,074</b>	<b>31,816</b>
<b>Total tax</b>	<b>58,585</b>	<b>62,479</b>	<b>66,187</b>	<b>65,417</b>	<b>770</b>	<b>70,743</b>	<b>70,024</b>	<b>719</b>	<b>75,008</b>	<b>74,335</b>	<b>673</b>	<b>79,014</b>	<b>78,224</b>
Total tax (% of GDP)	29.2%	29.5%	29.3%	29.5%	0.3%	30.2%	29.9%	0.3%	30.5%	30.2%	0.3%	30.8%	30.4%
<b>less Core Crown tax eliminations</b>													
Core Crown income tax	872	220	403	403	441	441	441	441	482	482	482	527	527
GST on Crown expenses and departmental outputs	5,753	6,417	6,191	6,191	6,264	6,264	6,264	6,474	6,474	6,474	6,606	6,606	6,606
Crown ESCT	373	362	369	369	373	373	373	373	377	377	382	382	382
Crown AIL	29	30	30	30	30	30	30	30	30	30	30	30	30
<b>Core Crown taxation</b>	<b>51,558</b>	<b>55,451</b>	<b>59,195</b>	<b>58,425</b>	<b>770</b>	<b>63,635</b>	<b>62,916</b>	<b>719</b>	<b>67,644</b>	<b>66,971</b>	<b>673</b>	<b>71,468</b>	<b>70,678</b>
Core Crown tax (% of GDP)	25.7%	26.2%	26.7%	26.3%	0.3%	27.2%	26.8%	0.3%	27.5%	27.2%	0.3%	27.8%	27.5%
<b>less Total Crown tax eliminations</b>													
Income tax from SOEs and CEs	365	436	564	564	688	688	688	688	712	712	712	762	762
Other Crown GST	..	..	..	..	..	..	..	..	..	..	..	..	..
ESCT from SOEs and CEs	13	10	10	10	10	10	10	10	10	10	10	10	10
Lottery duty	52	47	50	50	53	53	53	54	54	54	54	54	54
<b>Total Crown taxation</b>	<b>51,128</b>	<b>54,958</b>	<b>58,572</b>	<b>57,802</b>	<b>770</b>	<b>62,885</b>	<b>62,166</b>	<b>719</b>	<b>66,868</b>	<b>66,195</b>	<b>673</b>	<b>70,642</b>	<b>69,852</b>
Total Crown tax (% of GDP)	25.5%	26.0%	25.7%	25.6%	0.3%	26.8%	26.5%	0.3%	27.2%	26.8%	0.3%	27.5%	27.2%
Nominal GDP	200,291	211,773	221,864	221,864	234,325	234,325	234,325	246,189	246,189	246,189	256,939	256,939	256,939

Table 11 – Treasury and Inland Revenue forecasts of tax receipts (cash)

\$ million	2010/11 Actual		2011/12 Forecast		2012/13 Forecast		2013/14 Forecast		2014/15 Forecast		2015/16 Forecast	
	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference
<b>Direct tax</b>												
<b>Individuals</b>												
Source deductions	21,081	21,281	23,013	22,811	202	24,608	24,468	140	26,327	26,205	28,105	27,959
Other persons tax	4,386	4,570	5,002	4,880	122	5,164	5,350	(186)	5,309	5,480	5,484	5,600
Refunds	(2,463)	(2,342)	(2,350)	(2,290)	(60)	(2,270)	(2,150)	(120)	(2,206)	(2,090)	(2,180)	(1,980)
Fringe benefit tax	457	439	447	457	(8)	481	473	8	511	489	541	505
<b>Subtotal: Individuals</b>	<b>23,461</b>	<b>23,888</b>	<b>26,122</b>	<b>25,858</b>	<b>264</b>	<b>27,983</b>	<b>28,141</b>	<b>(158)</b>	<b>29,941</b>	<b>30,084</b>	<b>31,950</b>	<b>32,084</b>
<b>Company tax (net)</b>	<b>7,717</b>	<b>8,255</b>	<b>8,785</b>	<b>8,455</b>	<b>330</b>	<b>9,635</b>	<b>9,000</b>	<b>635</b>	<b>10,038</b>	<b>9,365</b>	<b>10,305</b>	<b>9,555</b>
<b>Withholding taxes on:</b>												
Resident interest income	1,701	1,768	1,873	1,854	19	2,250	1,978	272	2,644	2,461	3,068	3,087
Non-resident income	462	427	478	533	(55)	536	598	(62)	589	658	630	700
Foreign-source dividends	(1)	1	(1)	1	(1)	(1)	1	(1)	(1)	1	(1)	(1)
Resident dividend income	196	206	215	292	(6)	469	469	(1)	486	478	497	482
<b>Subtotal: Withholding tax</b>	<b>2,358</b>	<b>2,461</b>	<b>2,637</b>	<b>2,680</b>	<b>(43)</b>	<b>3,255</b>	<b>3,046</b>	<b>209</b>	<b>3,719</b>	<b>3,598</b>	<b>4,195</b>	<b>4,270</b>
<b>Total income tax</b>	<b>33,536</b>	<b>35,370</b>	<b>37,544</b>	<b>36,993</b>	<b>551</b>	<b>40,873</b>	<b>40,187</b>	<b>686</b>	<b>43,698</b>	<b>43,047</b>	<b>46,450</b>	<b>45,909</b>
<b>Other: Estate and gift duties</b>	<b>2</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>
<b>Total direct tax</b>	<b>33,538</b>	<b>35,370</b>	<b>37,544</b>	<b>36,993</b>	<b>551</b>	<b>40,873</b>	<b>40,187</b>	<b>686</b>	<b>43,698</b>	<b>43,047</b>	<b>46,450</b>	<b>45,909</b>
<b>Indirect tax</b>												
<b>GST (net)</b>	<b>18,796</b>	<b>20,927</b>	<b>22,053</b>	<b>21,933</b>	<b>120</b>	<b>23,261</b>	<b>23,146</b>	<b>115</b>	<b>24,466</b>	<b>24,331</b>	<b>25,485</b>	<b>25,352</b>
<b>Excise duties on:</b>												
Alcoholic drinks	625	712	746	732	14	777	769	8	812	808	849	851
Tobacco products	181	210	213	211	8	212	213	(1)	206	208	207	209
Petroleum fuels	869	921	939	948	(10)	979	987	(8)	1,016	1,016	1,055	1,046
<b>Subtotal: Excise duties</b>	<b>1,675</b>	<b>1,843</b>	<b>1,903</b>	<b>1,891</b>	<b>12</b>	<b>1,968</b>	<b>1,969</b>	<b>(1)</b>	<b>2,034</b>	<b>2,032</b>	<b>2,111</b>	<b>2,106</b>
<b>Other indirect tax</b>												
Customs duty	2,005	2,019	2,076	2,032	44	2,079	2,055	24	2,082	2,065	2,113	2,083
Road user charges	1,015	1,073	1,142	1,125	17	1,223	1,195	28	1,297	1,265	1,367	1,330
Gaming duties	268	272	277	275	2	282	279	3	287	283	292	287
Motor vehicle fees	171	168	175	180	(14)	169	185	(16)	173	190	176	195
Exhaustible resource levy	36	38	36	34	2	36	36	(0)	36	39	36	42
Approved issuer levy, cheque duty & other	89	91	104	93	(2)	91	91	(1)	91	89	91	87
<b>Subtotal: Other indirect tax</b>	<b>3,584</b>	<b>3,661</b>	<b>3,788</b>	<b>3,739</b>	<b>49</b>	<b>3,880</b>	<b>3,841</b>	<b>39</b>	<b>3,965</b>	<b>3,931</b>	<b>4,075</b>	<b>4,024</b>
<b>Total indirect tax</b>	<b>24,055</b>	<b>26,431</b>	<b>27,744</b>	<b>27,563</b>	<b>181</b>	<b>29,109</b>	<b>28,956</b>	<b>153</b>	<b>30,465</b>	<b>30,294</b>	<b>31,671</b>	<b>31,482</b>
<b>Total tax (% of GDP)</b>	<b>57,593</b>	<b>61,127</b>	<b>65,288</b>	<b>64,556</b>	<b>732</b>	<b>69,982</b>	<b>69,143</b>	<b>839</b>	<b>74,163</b>	<b>73,341</b>	<b>78,121</b>	<b>77,391</b>
<b>less Core Crown tax eliminations</b>	<b>28.8%</b>	<b>29.2%</b>	<b>28.9%</b>	<b>28.9%</b>	<b>0.3%</b>	<b>29.4%</b>	<b>29.1%</b>	<b>0.4%</b>	<b>30.1%</b>	<b>29.8%</b>	<b>30.4%</b>	<b>30.1%</b>
<b>Core Crown income tax</b>	517	415	354	354		452	452		491	491	535	535
GST on Crown expenses and departmental outputs	5,741	6,441	6,194	6,194		6,258	6,258		6,462	6,462	6,600	6,600
Crown ESCT	370	359	365	365		369	369		374	374	379	379
Crown AIL	29	30	30	30		30	30		30	30	30	30
<b>Core Crown taxation</b>	<b>50,936</b>	<b>54,555</b>	<b>53,881</b>	<b>57,613</b>	<b>732</b>	<b>62,872</b>	<b>62,034</b>	<b>839</b>	<b>66,807</b>	<b>65,984</b>	<b>70,577</b>	<b>69,847</b>
<b>Core Crown tax (% of GDP)</b>	<b>25.4%</b>	<b>25.8%</b>	<b>25.4%</b>	<b>26.0%</b>	<b>0.3%</b>	<b>26.3%</b>	<b>26.5%</b>	<b>0.4%</b>	<b>27.1%</b>	<b>26.8%</b>	<b>27.5%</b>	<b>27.2%</b>
<b>less Total Crown tax eliminations</b>												
Income tax from SOEs and CEs	384	422	480	480		582	582		608	608	639	639
Other Crown GST	70	11	(0)	(0)		3	3		(28)	(28)	6	6
ESCT from SOEs and CEs	12	5	5	5		5	5		5	5	5	5
Lottery duty	52	47	47	50		53	53		54	54	54	54
<b>Total Crown taxation</b>	<b>50,418</b>	<b>54,071</b>	<b>53,396</b>	<b>57,078</b>	<b>732</b>	<b>62,230</b>	<b>61,391</b>	<b>839</b>	<b>66,168</b>	<b>65,346</b>	<b>69,873</b>	<b>69,143</b>
<b>Total Crown tax (% of GDP)</b>	<b>25.2%</b>	<b>25.5%</b>	<b>25.2%</b>	<b>25.7%</b>	<b>0.3%</b>	<b>26.1%</b>	<b>26.2%</b>	<b>0.4%</b>	<b>26.9%</b>	<b>26.5%</b>	<b>27.2%</b>	<b>26.9%</b>

## Additional Fiscal Indicators

There are different approaches to assessing the relationship between the economy and the fiscal position, and the relationship between fiscal policy and the economy. One approach to assessing these relationships uses summary fiscal indicators. A discussion of the Treasury's perspective on these indicators, their use and limitations, and the relationship between them, can be found in the 2010 *Budget Update* Additional Information.<sup>1</sup>

The Treasury estimates two summary fiscal indicators: the cyclically-adjusted balance (CAB) and the fiscal impulse indicator. The fiscal impulse indicator uses the change in a cash-based version of the cyclically-adjusted balance (and includes capital expenditure). The cyclically-adjusted balance indicator is subject to uncertainty because it uses estimated variables and is sensitive to new information, particularly regarding the output gap. Further information on the methodology behind the indicators can be found in Treasury Working Papers 02/30 and 10/08.<sup>2</sup>

### **Main indicators**

This section discusses the Treasury's central estimates of the cyclically-adjusted balance and fiscal impulse. Detailed tables of data can be found at the end of the Additional Fiscal Indicators section.

The significant "one-off" impact on expenses of the Canterbury earthquake is removed from estimates of the cyclically-adjusted balance. This is to give a better indication of the underlying fiscal position. Earthquake expenditure is not removed when calculating the fiscal impulse indicator, since it is expected to add to demand pressure along with other government expenditure.

### *Cyclically-adjusted balance*

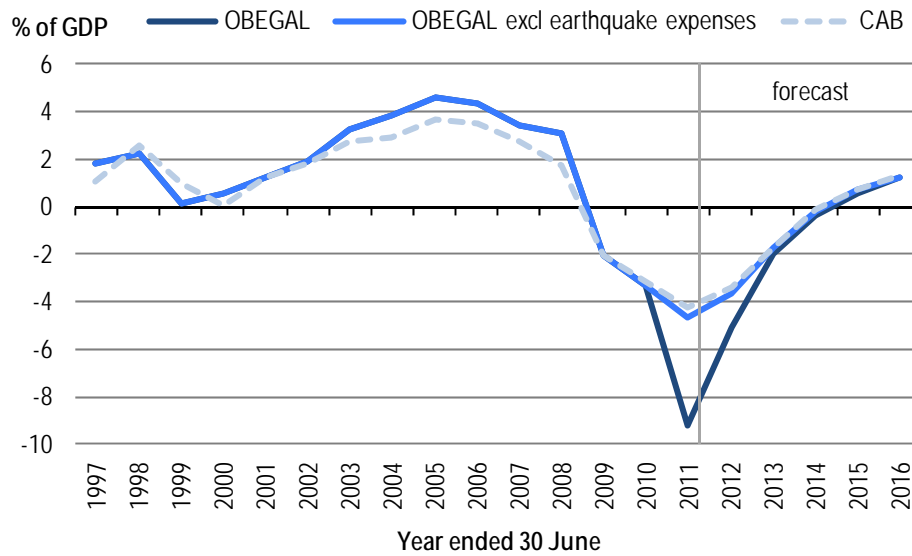
The operating balance (before gains and losses) and the cyclically-adjusted balance are shown in Figure 1. The headline OBEGAL deficit is forecast to be 5.1% of GDP in 2011/12 (*Budget Update*: 4.7% of GDP). The cyclically-adjusted balance, adjusting for the one-off earthquake expenses, is estimated to be a deficit of 3.4% of GDP (*Budget Update*: 3.6% of GDP). The difference between the headline and cyclically-adjusted balance comprises the impact of the automatic stabilisers of 0.3% of GDP and the earthquake-adjustment of 1.4% of GDP. As consolidation measures take hold, the cyclically-adjusted deficit is projected to unwind over the forecast horizon. A surplus is projected on both a cyclically-adjusted and headline basis for 2014/15.

<sup>1</sup> Available at <http://www.treasury.govt.nz/budget/forecasts/befu2010/befu10-pt6of6.pdf>.

<sup>2</sup> Renee Philip and John Janssen (2002) "Indicators of Fiscal Impulse for New Zealand" New Zealand Treasury Working Paper 02/30, December 2002 <<http://www.treasury.govt.nz/publications/research-policy/wp/2002/02-30/>>.

Oscar Parkyn (2010) "Estimating New Zealand's Structural Budget Balance" New Zealand Treasury Working Paper 10/08, December 2010 <<http://www.treasury.govt.nz/publications/research-policy/wp/2010/10-08/>>.

**Figure 1** – Cyclically-adjusted balance



Source: The Treasury

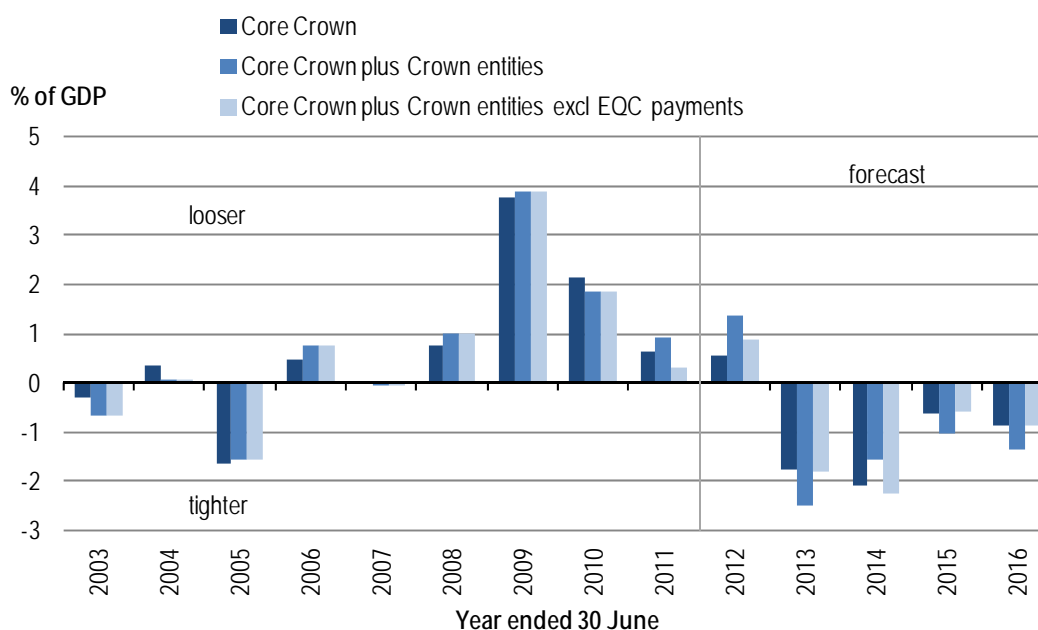
**Fiscal impulse**

The fiscal impulse indicator is shown in Figure 2. As has been noted in previous *Economic and Fiscal Updates*, capital expenditure on defence, KiwiSaver subsidies and Deposit Guarantee Scheme payments are excluded from the measure of fiscal impulse since these are expected to have a limited direct impact on aggregate demand.

The fiscal impulse is shown for both the core Crown and combined core Crown and Crown entity segments. The core Crown indicator mostly reflects changes in receipts and expenditure which are impacted by Budget decisions, whereas the core Crown plus Crown entity indicator provides a better indication of the total impact of central government activities.

The fiscal impulse indicator suggests that core Crown discretionary fiscal policy will add net stimulus of 0.6% of GDP in 2011/12 (*Budget Update*: 0.0% of GDP) and then tightening of 1.8% of GDP in 2012/13 (*Budget Update*: 2.1% of GDP) and 2.1% of GDP in 2013/14 (*Budget Update*: 1.9% of GDP). The core Crown plus Crown entity indicator excluding EQC payments shows a broadly similar picture to the core Crown indicator.

The looser fiscal stance estimated for 2011/12 compares with the neutral stance forecast in the *Budget Update*. This is largely due to the expected timing of some expenditure relating to the Canterbury earthquakes shifting from 2010/11 to 2011/12. The fiscal impulse estimate for 2010/11 has reduced from 1.3% to 0.6% of GDP, while the 2011/12 estimate increased from 0.0% to 0.6% of GDP.

**Figure 2** – Fiscal impulse estimates

Source: The Treasury

### Uncertainty

As noted above, there is much uncertainty about the indicator estimates. There are two broad sources of uncertainty which can lead to revisions in the indicator estimates:

- estimation uncertainty of the key model parameters (ie, the output gap and the average sensitivity of tax revenues to changes in the output gap), and
- forecast uncertainty relating to future fiscal and economic developments.

In addition, summary indicators such as fiscal impulse do not allow for the composition of fiscal policy changes or how a change in fiscal policy will be transmitted through the economy. Treasury research using time series statistical analysis indicates that spending and taxes have different effects on New Zealand GDP.<sup>3</sup> Therefore the fiscal impulse indicator is only a very imprecise guide to the impact of fiscal policy on the economy.

Sensitivity analysis is performed by calculating the indicators using alternative output gaps (from the RBNZ, IMF and OECD) and values for the elasticity of tax revenues with respect to the output gap which are half and twice the magnitude of the baseline estimate. The range of alternative estimates is plotted in Figures 4 to 6 (with data reported in Tables 16 and 17). Differences in the output gap estimates are the result of differences in estimation technique, other adjustments based on expert judgment, differences about the underlying forecast outlook and the availability of data at the time of forecast finalisation.

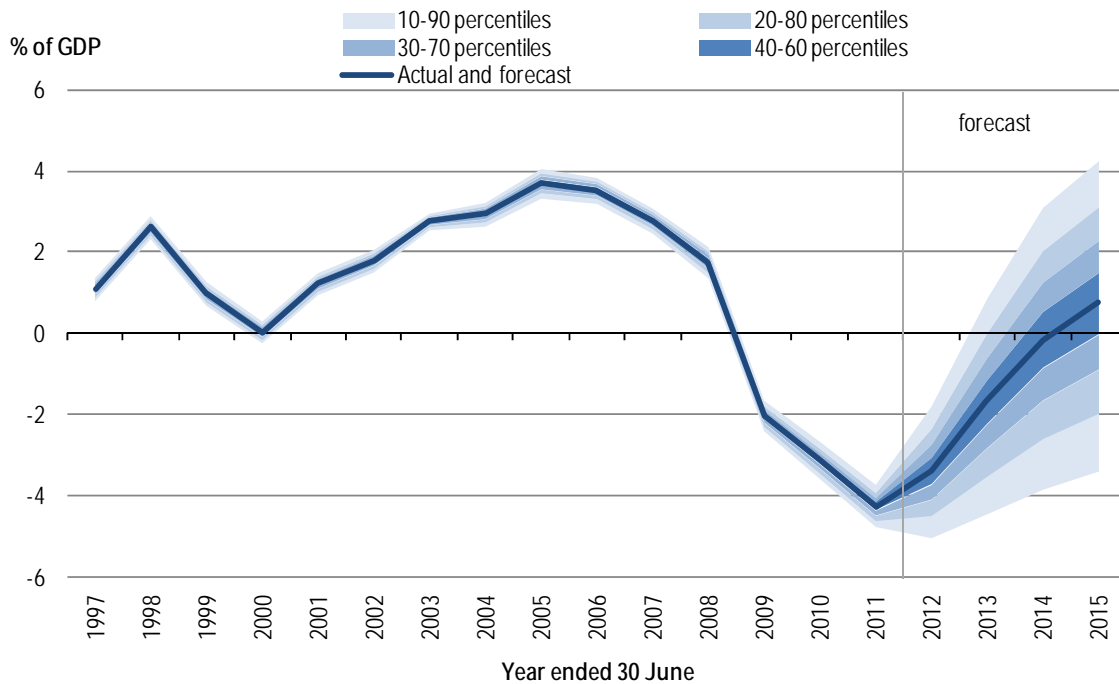
An alternative means of showing uncertainty is to compute confidence intervals based on historical forecast errors of observable economic and fiscal variables and historical revisions to the Treasury's output gap estimates. This is shown for the cyclically-adjusted

<sup>3</sup> See Treasury Working Paper 06/08 - refer <http://www.treasury.govt.nz/publications/researchpolicy/wp/2006/06-08/>. The degree to which the fiscal impulse indicator matches the time series estimates depends on the exact form of the latter. In neither of the time series specifications does the summary indicator match the time series estimate across the entire sample period.



balance indicator in Figure 3. The confidence interval calculated is conditional on current policy and reflects only observed revisions to the Treasury’s official output gap estimate, rather than the full uncertainty implied by different estimation techniques. Details of the methodology and parameter values for the confidence intervals are reported in Treasury Working Paper 10/08.<sup>4</sup> This analysis would suggest that there is a structural fiscal deficit with a high degree of confidence.

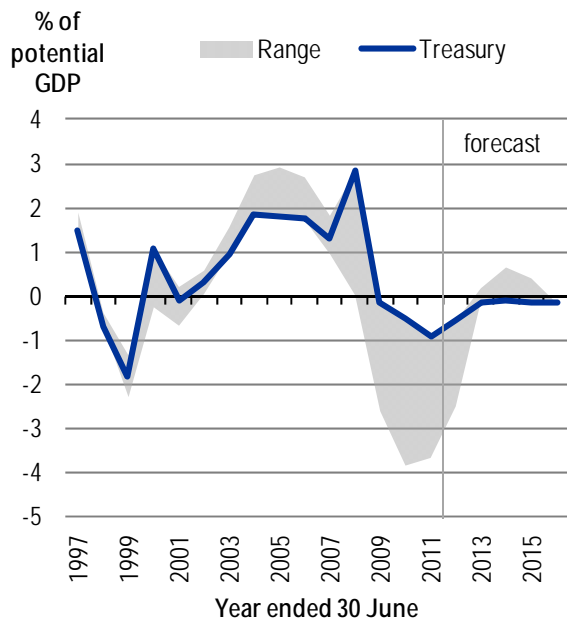
**Figure 3** – Fan chart for cyclically-adjusted balance



Source: The Treasury. Note: the coloured bands represents sequential deciles such that the difference between the 10th and 90th percentiles represents an 80% confidence interval.

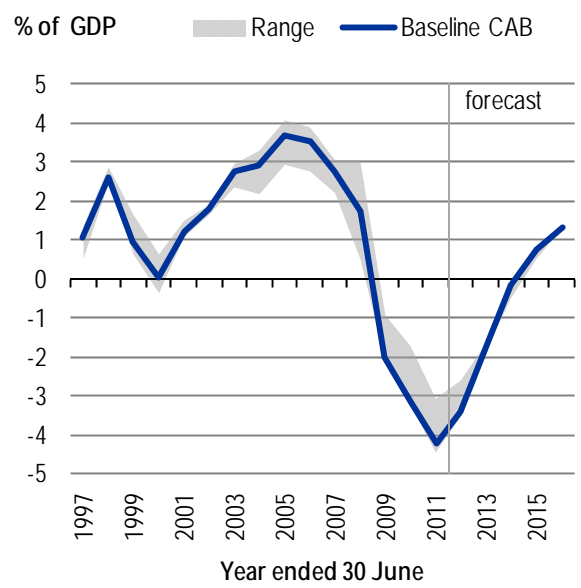
<sup>4</sup> Available at <http://www.treasury.govt.nz/publications/research-policy/wp/2010/10-08/>.

**Figure 4 – Output gap range**



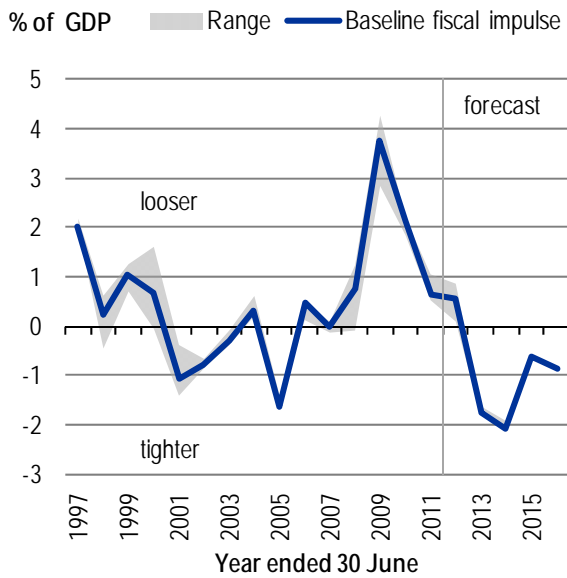
Source: The Treasury

**Figure 5 – Cyclically-adjusted balance range**



Source: The Treasury

**Figure 6 – Core Crown fiscal impulse range**



Source: The Treasury

### ***Terms-of-trade adjustment***

Following the review of the structural budget balance methodology in Treasury Working Paper 10/08, the Treasury has decided to publish an estimate of the terms-of-trade effect on the budget balance.

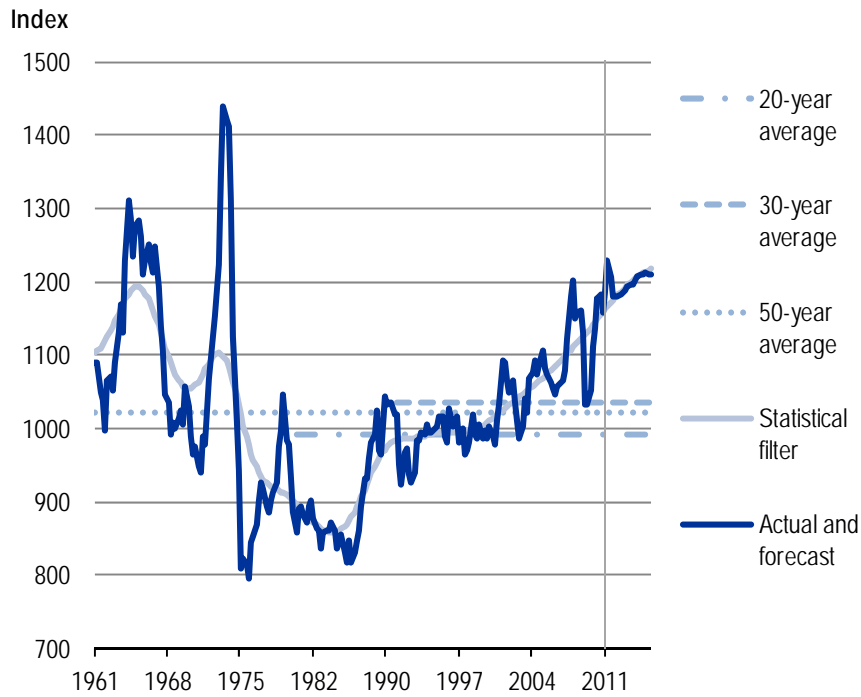
Estimating the terms-of-trade effect means calculating the approximate amount of tax revenue which is due to deviations in the terms of trade from some specified structural, or long-run, level. The main Budget forecast has the terms of trade remaining at a relatively elevated level throughout the forecast horizon. A terms-of-trade adjustment to the fiscal balance should be seen as an exercise in seeing what the fiscal position would be under a different assumption (ie, a scenario), rather than being a central view. The purpose is to produce information which helps to make judgements about the fiscal position from a medium-term perspective, without compromising the forecasts' role of estimating the most likely near-term outcome.

Figure 7 shows New Zealand's terms of trade and historical average levels (50-, 30- and 20-year averages) and a time-varying trend using a statistical filter.<sup>5</sup> The historical average and trend estimates are used as estimates of the structural level of the terms of trade. A terms-of-trade adjustment, for each alternate assumption, is reported in Table 18. The adjusted structural budget balance estimate is plotted in Figure 8. This analysis would suggest that, using an historical average, a terms-of-trade adjustment would subtract between 1.7 to 2.3% of GDP from structural tax revenues in 2011/12 resulting in a larger structural budget deficit than without the terms-of-trade adjustment. Alternately, a time-varying trend, which smoothes out volatility in the data, would suggest a terms-of-trade adjustment which subtracts only 0.3% of GDP from the structural budget balance in 2011/12, and fully unwinds in the forecast horizon. Using the statistical filter runs the risk of interpreting long cycles as structural shifts in real time, whereas using an historical average suffers from the opposite risk.

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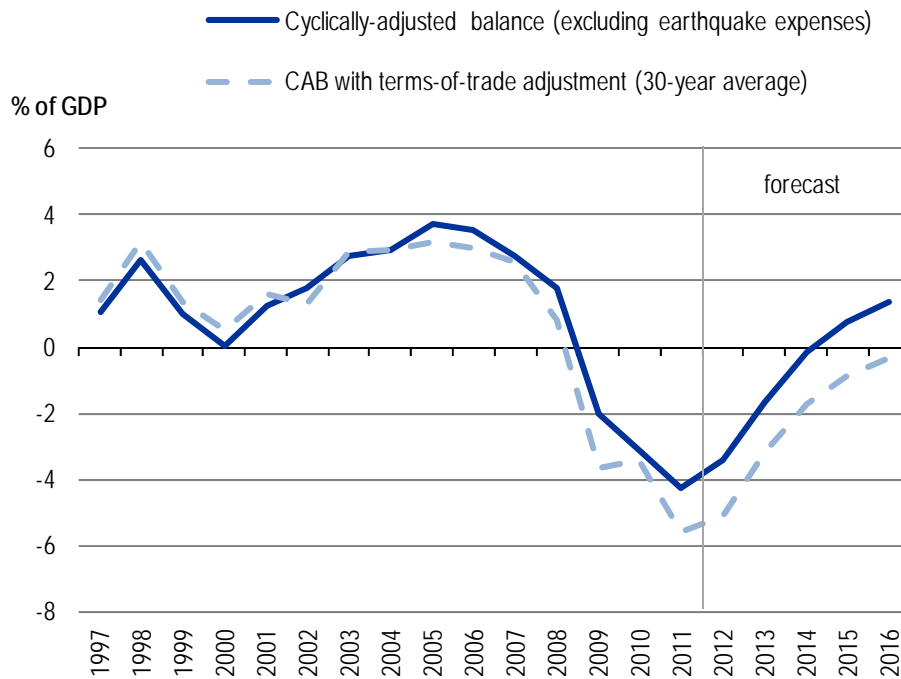
<sup>5</sup> Note that the statistical series used to measure the terms of trade has changed from the *Budget Update* to better match the series used in the Treasury's forecasts. A Hodrick-Prescott filter is used on quarterly data with a smoothing parameter of 1600.

**Figure 7** – Merchandise terms of trade with historical average and time-varying trend



Sources: Statistics New Zealand, The Treasury

**Figure 8** – Cyclically-adjusted balance with terms-of-trade adjustment



Source: The Treasury

**Data tables for summary fiscal indicators**

**Table 12** – Central estimates of output gap, cyclically-adjusted balance and fiscal impulse (% of GDP)

June year	Output gap	OBEGAL	OBEGAL excl earthquake expenses	CAB	Fiscal impulse (core Crown)	Fiscal impulse (core Crown plus Crown entity)	Fiscal impulse (core Crown plus CE) excluding EQC payouts
1997	1.5	1.8		1.1	2.0		
1998	-0.7	2.3		2.6	0.3		
1999	-1.8	0.1		1.0	1.0		
2000	1.1	0.5		0.0	0.7		
2001	-0.1	1.2		1.2	-1.1		
2002	0.3	1.9		1.8	-0.8		
2003	1.0	3.2		2.8	-0.3	-0.7	-0.7
2004	1.9	3.8		2.9	0.3	0.1	0.1
2005	1.8	4.6		3.7	-1.6	-1.6	-1.6
2006	1.8	4.4		3.5	0.5	0.8	0.8
2007	1.3	3.4		2.8	0.0	0.0	0.0
2008	2.8	3.1		1.8	0.8	1.0	1.0
2009	-0.2	-2.1		-2.0	3.8	3.9	3.9
2010	-0.5	-3.3		-3.1	2.1	1.8	1.8
2011	-0.9	-9.2	-4.6	-4.2	0.6	0.9	0.3
2012	-0.6	-5.1	-3.7	-3.4	0.6	1.4	0.9
2013	-0.1	-2.0	-1.7	-1.7	-1.8	-2.5	-1.8
2014	-0.1	-0.4	-0.2	-0.1	-2.1	-1.6	-2.3
2015	-0.1	0.6	0.7	0.7	-0.6	-1.0	-0.6
2016	-0.2	1.2	1.3	1.3	-0.9	-1.4	-0.9

Source: The Treasury

**Table 13** – Sources for alternative output gaps

Institution	Source	Publication date
The Treasury	<i>Pre-election Economic and Fiscal Update</i>	October 2011
RBNZ	<i>Monetary Policy Statement</i>	September 2011
IMF	<i>World Economic Outlook</i>	September 2011
OECD	<i>Economic Outlook</i>	June 2011

**Table 14** – Elasticity values used in sensitivity analysis

Elasticities	Base case	Low	High
Individual income tax	0.9	0.5	1.8
Company tax	1.4	0.7	2.8
GST	1.0	0.5	2.0
Excise duties	1.0	0.5	2.0
Other indirect tax	1.0	0.5	2.0
Interest, profits and dividends	0.0	0.0	0.0
Other receipts	1.0	0.5	2.0

Source: The Treasury

**Table 15** – Output gap estimates used in sensitivity analysis (% of potential GDP)

June year	The Treasury	RBNZ	IMF	OECD
1997	1.5	1.9	1.6	1.2
1998	-0.7	-0.4	-0.4	-0.7
1999	-1.8	-2.3	-1.4	-1.4
2000	1.1	0.4	-0.3	-0.2
2001	-0.1	-0.7	0.2	-0.1
2002	0.3	0.1	0.6	0.5
2003	1.0	1.3	1.4	1.6
2004	1.9	2.8	2.1	2.3
2005	1.8	2.9	2.5	2.7
2006	1.8	2.7	1.8	1.7
2007	1.3	1.8	1.2	1.0
2008	2.8	2.5	0.5	0.0
2009	-0.2	-1.4	-1.9	-2.6
2010	-0.5	-2.1	-3.1	-3.9
2011	-0.9	-2.1	-2.3	-3.7
2012	-0.6	-0.6	-1.3	-2.5
2013	-0.1	0.2		
2014	-0.1	0.7		
2015	-0.1	0.4		
2016	-0.2			

Sources: The Treasury, RBNZ, IMF, OECD

**Table 16** – Cyclically-adjusted balance with alternative output gap and elasticity values (% of GDP)

June year	OBEGAL	Baseline CAB	CAB using alternative output gaps			CAB using alternative elasticities	
			RBNZ	IMF	OECD	Low	High
1997	1.8	1.1	0.9	1.0	1.2	1.4	0.5
1998	2.3	2.6	2.5	2.5	2.6	2.5	2.9
1999	0.1	1.0	1.2	0.8	0.7	0.6	1.7
2000	0.5	0.0	0.3	0.6	0.6	0.2	-0.4
2001	1.2	1.2	1.5	1.1	1.2	1.2	1.3
2002	1.9	1.8	1.9	1.7	1.7	1.8	1.7
2003	3.2	2.8	2.6	2.5	2.5	3.0	2.4
2004	3.8	2.9	2.5	2.8	2.7	3.3	2.2
2005	4.6	3.7	3.2	3.3	3.3	4.1	2.9
2006	4.4	3.5	3.1	3.5	3.5	3.9	2.8
2007	3.4	2.8	2.5	2.8	3.0	3.1	2.2
2008	3.1	1.8	1.9	2.8	3.1	2.4	0.5
2009	-2.1	-2.0	-1.5	-1.2	-0.9	-2.1	-2.0
2010	-3.3	-3.1	-2.5	-2.0	-1.7	-3.2	-2.9
2011	-9.2	-4.2	-3.8	-3.7	-3.1	-4.4	-3.9
2012	-5.1	-3.4	-3.4	-3.1	-2.6	-3.5	-3.2
2013	-2.0	-1.7	-1.8			-1.7	-1.6
2014	-0.4	-0.1	-0.5			-0.2	-0.1
2015	0.6	0.7	0.5			0.7	0.8
2016	1.2	1.3				1.3	1.4

Source: The Treasury

**Table 17** – Core Crown fiscal impulse with alternative output gap and elasticity values (% of GDP)

June year	Fiscal impulse	Fiscal impulse using alternative output gaps			Fiscal impulse using alternative elasticities	
		RBNZ	IMF	OECD	Low	High
1997	2.0	2.2	2.0	2.0	2.1	1.9
1998	0.3	0.4	0.3	0.4	0.6	-0.5
1999	1.0	0.9	1.1	1.2	1.2	0.7
2000	0.7	0.3	-0.1	-0.1	0.2	1.6
2001	-1.1	-0.9	-0.4	-0.5	-0.9	-1.4
2002	-0.8	-0.7	-0.8	-0.7	-0.9	-0.7
2003	-0.3	-0.2	-0.2	-0.1	-0.4	-0.1
2004	0.3	0.4	0.2	0.3	0.2	0.6
2005	-1.6	-1.5	-1.4	-1.4	-1.6	-1.6
2006	0.5	0.5	0.2	0.1	0.5	0.5
2007	0.0	-0.1	0.0	-0.1	0.1	-0.1
2008	0.8	0.4	0.0	-0.1	0.5	1.2
2009	3.8	3.6	4.0	4.0	4.3	2.8
2010	2.1	2.1	1.9	1.8	2.2	2.0
2011	0.6	0.8	1.0	0.7	0.7	0.5
2012	0.6	0.9	0.8	0.1	0.5	0.7
2013	-1.8	-1.7			-1.8	-1.6
2014	-2.1	-1.9			-2.1	-2.1
2015	-0.6	-0.7			-0.6	-0.6
2016	-0.9				-0.8	-0.9

Source: The Treasury

**Table 18** – Terms-of-trade adjustment to the cyclically-adjusted balance (% of GDP)

June year	Baseline CAB	Terms-of-trade adjustment (impact on CAB)				CAB with terms-of-trade adjustment			
		50-year average	30-year average	20-year average	Statistical filter	50-year average	30-year average	20-year average	Statistical filter
1997	1.1	0.2	0.3	-0.1	-0.1	1.3	1.4	1.0	1.0
1998	2.6	0.4	0.6	0.1	0.2	3.1	3.2	2.8	2.8
1999	1.0	0.2	0.4	-0.1	0.0	1.2	1.3	0.9	1.0
2000	0.0	0.3	0.5	0.0	0.2	0.3	0.5	0.0	0.2
2001	1.2	0.2	0.4	-0.2	0.2	1.4	1.6	1.1	1.4
2002	1.8	-0.7	-0.5	-1.1	-0.6	1.1	1.3	0.7	1.2
2003	2.8	0.0	0.1	-0.4	0.2	2.7	2.9	2.3	2.9
2004	2.9	-0.1	0.0	-0.5	0.2	2.8	2.9	2.5	3.1
2005	3.7	-0.7	-0.5	-1.0	-0.2	3.0	3.2	2.7	3.5
2006	3.5	-0.7	-0.5	-1.0	-0.1	2.8	3.0	2.5	3.5
2007	2.8	-0.4	-0.2	-0.7	0.3	2.4	2.6	2.0	3.1
2008	1.8	-1.1	-0.9	-1.5	-0.1	0.6	0.8	0.2	1.6
2009	-2.0	-1.8	-1.6	-2.3	-0.6	-3.9	-3.7	-4.3	-2.6
2010	-3.1	-0.4	-0.3	-0.8	0.7	-3.6	-3.4	-3.9	-2.4
2011	-4.2	-1.5	-1.4	-1.9	-0.1	-5.8	-5.6	-6.2	-4.3
2012	-3.4	-1.9	-1.7	-2.3	-0.3	-5.3	-5.1	-5.7	-3.7
2013	-1.7	-1.7	-1.5	-2.0	0.0	-3.3	-3.2	-3.7	-1.7
2014	-0.1	-1.8	-1.6	-2.1	0.0	-1.9	-1.7	-2.3	-0.1
2015	0.7	-1.8	-1.6	-2.2	0.0	-1.1	-0.9	-1.4	0.8
2016	1.3	-1.9	-1.7	-2.2	0.0	-0.5	-0.4	-0.9	1.4

Source: The Treasury

## Government Finance Statistics for Central Government

Government Finance Statistics (GFS) is a fiscal reporting framework developed by the International Monetary Fund (IMF) and is specifically designed for government reporting. The main purpose for having a common government reporting framework is to more easily enable cross-country comparisons of fiscal data and assessment of fiscal policy (e.g. as in the case of the IMF's Article IV consultation with New Zealand). It is important to note that even though the GFS framework provides a consistent presentation format there are still underlying measurement and recognition point differences that make it difficult to do cross-country comparisons. Further information on GFS can be found on the IMF's website: <http://www.imf.org/external/pubs/ft/gfs/manual/index.htm>

The following section provides fiscal forecasts for central Government on a GFS basis, prepared by applying top-down adjustments to the Generally Accepted Accounting Practice (GAAP) accounts as a base and making the following adjustments:

Coverage	The Central Government entity is defined here as the consolidation of core Crown (excluding Reserve Bank) and Crown entities, as opposed to the emphasis on the total Crown in the Pre-Election Update document. As a result, the government's interest in the Reserve Bank and State-owned enterprises is equity accounted rather than consolidated line-by-line.
Other economic flows	The GFS operating balance excludes valuation changes on assets and liabilities, which are instead reported in a Statement of Other Economic Flows.
Transactions	Defence weapons are treated as being expensed at the time of purchase. In addition there are some reclassifications of transactions (eg, some levies move to taxation revenue).

The GFS data presented in this section is experimental. Statistics New Zealand is working towards an official GFS series, which will also include local government. Table 19 outlines some of the key indicators for the central government under a GFS presentation.

**Table 19** – Summary indicators for central government

	2011	2012	2013	2014	2015	2016
	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
<b>\$million</b>						
Net operating balance	(13,906)	(5,812)	(1,518)	1,854	3,905	5,749
Fiscal Balance (Net lending/borrowing)	(14,815)	(8,160)	(3,467)	549	2,576	3,913
Cash surplus/(deficit)	(10,144)	(12,450)	(7,336)	(3,497)	(1,290)	2,357
Net worth	77,841	65,210	62,783	64,303	68,259	73,950
Net financial worth	5,398	20,377	24,753	24,538	21,911	18,056
Borrowing	62,606	71,592	71,185	80,377	79,219	81,229
<b>%GDP</b>						
Net operating balance	(6.9)	(2.7)	(0.7)	0.8	1.6	2.2
Fiscal Balance (Net lending/borrowing)	(7.4)	(3.9)	(1.6)	0.2	1.0	1.5
Cash surplus/(deficit)	(5.1)	(5.9)	(3.3)	(1.5)	(0.5)	0.9
Net worth	38.9	30.8	28.3	27.4	27.7	28.8
Net financial worth	2.7	9.6	11.2	10.5	8.9	7.0
Borrowing	31.3	33.8	32.1	34.3	32.2	31.6



The following tables provide additional detail around the calculation of the key indicators.

- Table 20 – Statement of Operations
  - records the results of all transactions during an accounting period.
- Table 21 – Statement of Other Economic Flows
  - records changes to stocks of assets, liabilities and net worth that come about from sources other than transactions.
- Table 22 – Statement of Sources and Uses of Cash
  - records cash inflow and outflows using classifications similar to the Statement of Operations.
- Table 23 – Balance Sheet
  - records the stocks of assets, liabilities and net worth.
- Table 24 – Statement of Stocks and Flows
  - shows how the operating balance is applied to capital investment and debt repayment at a component level.
- Table 25 – Reconciliation between GAAP and GFS operating balance
  - records the adjustments between the GAAP and GFS operating balance.
- Table 26 – Reconciliation between GAAP residual cash and GFS cash surplus/(deficit)
  - records the adjustments between the GAAP and GFS cash indicators.

The GFS manual (on IMF's website) should assist with definitions for some of the terminology used in this section.

**Table 20** – Statement of Operations

for the years ended 30 June

	2011 Actual \$m	2012 Forecast \$m	2013 Forecast \$m	2014 Forecast \$m	2015 Forecast \$m	2016 Forecast \$m
<b>Revenue</b>						
Taxation revenue	55,754	59,699	63,488	68,267	72,749	77,082
Interest revenue and dividends	2,984	2,516	2,772	2,812	3,114	3,254
Sale of goods and services and other revenue	13,411	9,145	9,266	9,376	9,265	9,345
<b>Total revenue</b>	<b>72,149</b>	<b>71,360</b>	<b>75,526</b>	<b>80,455</b>	<b>85,128</b>	<b>89,681</b>
<b>Expenses</b>						
Compensation of employees	18,847	19,172	19,319	19,422	19,602	19,765
Consumption of capital	3,370	3,200	3,264	3,331	3,376	3,404
Social benefits	21,709	22,036	22,662	23,152	23,981	25,032
Grants and subsidies	4,686	4,963	4,673	4,752	4,828	4,884
Finance costs	2,707	2,958	3,111	3,195	3,556	3,468
Other expenses	34,736	25,470	23,221	23,061	23,048	23,520
Forecast for new operating spending and top-down adjustment	-	(627)	794	1,688	2,832	3,859
<b>Total expenses</b>	<b>86,055</b>	<b>77,172</b>	<b>77,044</b>	<b>78,601</b>	<b>81,223</b>	<b>83,932</b>
<b>Net operating balance</b>	<b>(13,906)</b>	<b>(5,812)</b>	<b>(1,518)</b>	<b>1,854</b>	<b>3,905</b>	<b>5,749</b>
<b>Net acquisition of non-financial assets</b>						
Acquisition of non-financial assets	4,417	5,858	5,051	4,771	4,917	5,394
Disposal of non-financial assets	(165)	(185)	(172)	(228)	(223)	(219)
Consumption of fixed assets	(3,370)	(3,200)	(3,264)	(3,331)	(3,376)	(3,404)
Change in inventories	27	(17)	7	2	1	-
Forecast for new capital spending and top-down adjustment	-	(108)	327	91	10	65
<b>Fiscal Balance (Net lending/borrowing)</b>	<b>(14,815)</b>	<b>(8,160)</b>	<b>(3,467)</b>	<b>549</b>	<b>2,576</b>	<b>3,913</b>
<b>Net acquisition of financial assets</b>						
Receivables	8,007	(1,484)	(864)	1,192	1,359	1,877
Advances	1,577	1,493	1,686	1,454	1,465	1,180
Other financial assets	8,114	(3,136)	(8,435)	4,705	(3,198)	3,416
Other assets	1,751	154	(25)	(104)	(32)	(41)
	<b>19,449</b>	<b>(2,973)</b>	<b>(7,638)</b>	<b>7,247</b>	<b>(406)</b>	<b>6,432</b>
<b>Net incurrence of liabilities</b>						
Borrowings	20,849	8,739	(212)	9,356	(1,086)	1,984
Accounts payable	2,391	508	(307)	688	488	789
Other liabilities	11,024	(4,060)	(3,652)	(3,346)	(2,384)	(254)
	<b>34,264</b>	<b>5,187</b>	<b>(4,171)</b>	<b>6,698</b>	<b>(2,982)</b>	<b>2,519</b>
<b>Difference between net lending/borrowing and financing</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Table 21** – Statement of Other Economic Flows

for the years ended 30 June

	2011 Actual \$m	2012 Forecast \$m	2013 Forecast \$m	2014 Forecast \$m	2015 Forecast \$m	2016 Forecast \$m
<b>Other Economic Flows</b>						
Impairments and write-offs of financial assets	(1,997)	(2,520)	(2,596)	(2,657)	(2,499)	(2,546)
GSF valuations changes	(574)	(900)	-	-	-	-
Other gains/(losses) on non financial instruments (includes ACC)	43	(2,538)	(398)	(444)	(702)	(1,031)
Derivatives gains	2,028	648	466	493	555	594
Derivatives losses	1,836	(360)	154	136	57	(24)
Gains/(losses) on financial assets	607	(140)	1,126	1,668	1,826	2,043
Gains/(losses) on financial liabilities	405	113	41	28	15	(2)
Expenses relating to earthquake provisions	(1,121)	(1,750)	(250)	(250)	(150)	(70)
Reserve bank equity accounted	(147)	(82)	117	13	24	29
SOEs equity accounted	(639)	633	349	600	848	868
Other items	92	77	82	79	77	81
<b>Total other economic flows</b>	<b>533</b>	<b>(6,819)</b>	<b>(909)</b>	<b>(334)</b>	<b>51</b>	<b>(58)</b>

**Table 22 – Statement of Sources and Uses of Cash**

for the years ended 30 June

	2011	2012	2013	2014	2015	2016
	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
	\$m	\$m	\$m	\$m	\$m	\$m
<b>Cash receipts from operating activities</b>						
Total tax receipt	54,774	58,570	62,198	66,717	70,790	74,860
Interest and dividends	2,929	2,505	2,808	2,883	3,196	3,340
Sale of goods and services and other receipts	8,249	10,454	10,997	9,590	9,353	8,904
<b>Total receipts</b>	<b>65,952</b>	<b>71,529</b>	<b>76,003</b>	<b>79,190</b>	<b>83,339</b>	<b>87,104</b>
<b>Cash payments from operating activities</b>						
Compensation of employees and other payments	(41,327)	(46,655)	(43,846)	(42,643)	(42,022)	(39,824)
Social benefits	(22,172)	(23,090)	(23,265)	(23,782)	(24,634)	(25,685)
Grants and subsidies	(5,976)	(6,272)	(7,075)	(6,728)	(6,759)	(6,673)
Finance costs	(2,193)	(3,084)	(3,566)	(3,417)	(3,937)	(3,774)
Forecast for new operating spending and top-down adjustment	-	477	(644)	(1,688)	(2,832)	(3,859)
<b>Total payments</b>	<b>(71,668)</b>	<b>(78,624)</b>	<b>(78,396)</b>	<b>(78,258)</b>	<b>(80,184)</b>	<b>(79,815)</b>
<b>Net cash inflow/(outflow) from operating activities</b>	<b>(5,716)</b>	<b>(7,095)</b>	<b>(2,393)</b>	<b>932</b>	<b>3,155</b>	<b>7,289</b>
<b>Net cash outflow from investments in non-financial assets</b>						
Acquisition of non-financial assets	(4,593)	(5,648)	(4,788)	(4,566)	(4,658)	(5,086)
Disposal of non-financial assets	165	185	172	228	223	219
Forecast for new capital spending and top-down adjustment	-	108	(327)	(91)	(10)	(65)
<b>Cash surplus/(deficit)</b>	<b>(10,144)</b>	<b>(12,450)</b>	<b>(7,336)</b>	<b>(3,497)</b>	<b>(1,290)</b>	<b>2,357</b>
<b>Net acquisition of financial assets</b>						
Advances	(1,041)	(929)	(989)	(721)	(690)	(379)
Share investments	(2,685)	(1,687)	4,205	(9,172)	(1,945)	(9,047)
Net purchase of investments	224	20	14	11	11	11
Capital contributions	(380)	(250)	-	-	-	-
<b>Net incurrence of liabilities</b>						
Issues of circulating currency	-	-	-	-	-	-
New Zealand dollar borrowings	(951)	10,456	453	1,294	3,347	(191)
Foreign currency borrowings	1,356	(7,410)	(216)	(560)	(567)	(1,061)
Government stock	21,382	9,726	3,910	13,125	1,241	8,623
<b>Net cash inflows from financing activities</b>	<b>17,905</b>	<b>9,926</b>	<b>7,377</b>	<b>3,977</b>	<b>1,397</b>	<b>(2,044)</b>
<b>Net change in the stock of cash</b>	<b>7,761</b>	<b>(2,524)</b>	<b>41</b>	<b>480</b>	<b>107</b>	<b>313</b>

**Table 23** – Balance Sheet

as at 30 June

	2011 Actual \$m	2012 Forecast \$m	2013 Forecast \$m	2014 Forecast \$m	2015 Forecast \$m	2016 Forecast \$m
<b>Assets</b>						
Cash and cash equivalents	20,459	17,935	17,976	18,456	18,563	18,876
Receivables	19,318	16,280	13,832	13,386	13,255	13,590
Marketable securities, deposits and derivatives in gain	21,260	16,760	7,489	12,152	8,920	12,115
Share investments	14,015	18,352	20,615	22,222	24,425	26,879
Advances	11,366	11,952	12,750	13,301	13,862	14,129
Inventory	631	614	621	623	624	624
Other assets	1,465	1,402	1,403	1,395	1,407	1,429
Property, plant & equipment	82,608	85,081	86,696	87,908	89,226	90,997
Equity accounted investments	34,178	34,760	35,210	35,781	36,711	37,664
Intangible assets and goodwill	1,582	1,845	1,917	1,942	1,917	1,879
Forecast for new capital spending and top-down adjustment	-	(108)	219	310	320	385
<b>Total assets</b>	<b>206,882</b>	<b>204,873</b>	<b>198,728</b>	<b>207,476</b>	<b>209,230</b>	<b>218,567</b>
<b>Liabilities</b>						
Payables	9,885	10,451	10,175	10,887	11,378	12,167
Deferred revenue	1,429	1,371	1,340	1,316	1,313	1,313
Borrowings	62,606	71,592	71,185	80,377	79,219	81,229
Insurance liabilities	37,559	36,697	35,336	34,021	33,798	35,651
Retirement plan liabilities	10,155	10,576	10,184	9,864	9,591	9,340
Provisions	7,407	8,976	7,725	6,708	5,672	4,917
<b>Total liabilities</b>	<b>129,041</b>	<b>139,663</b>	<b>135,945</b>	<b>143,173</b>	<b>140,971</b>	<b>144,617</b>
<b>Net Worth</b>	<b>77,841</b>	<b>65,210</b>	<b>62,783</b>	<b>64,303</b>	<b>68,259</b>	<b>73,950</b>

**Table 24 – Statement of Stocks and Flows**

for the year ended 30 June 2011

Opening balance statement	\$million	Statement of operations	\$million	Other economic flows	\$million	Closing balance sheet	\$million
Opening net worth	91,834	Operating balance	(13,906)	Holding gains	(87)	Closing net worth	77,841
<i>Equals</i>		<i>Equals</i>					
Non-financial assets	82,950	Transactions	909	Valuation changes	(620)	Non-financial assets	83,239
<i>plus</i>		<i>plus</i>		<i>plus</i>		<i>plus</i>	
<b>Net financial worth</b>	<b>8,884</b>	<b>Net lending</b>	<b>(14,815)</b>	<b>Change in net financial worth</b>	<b>(707)</b>	<b>Net financial worth</b>	<b>(6,638)</b>
<i>Equals</i>		<i>Equals</i>					
Financial assets	104,250	Transactions in financial assets	19,449	Changes in financial assets	(56)	Closing financial assets	123,643
<i>less</i>		<i>less</i>		<i>less</i>		<i>less</i>	
Opening liabilities	95,366	Transactions in liabilities	34,264	Changes in liabilities	(589)	Closing liabilities	129,041

for the year ended 30 June 2012

Opening balance statement	\$million	Statement of operations	\$million	Other economic flows	\$million	Closing balance sheet	\$million
Opening net worth	77,841	Operating balance	(5,812)	Holding gains	(6,819)	Closing net worth	65,210
<i>Equals</i>		<i>Equals</i>					
Non-financial assets	83,239	Transactions	2,348	Valuation changes	-	Non-financial assets	85,587
<i>plus</i>		<i>plus</i>		<i>plus</i>		<i>plus</i>	
<b>Net financial worth</b>	<b>(5,398)</b>	<b>Net lending</b>	<b>(8,160)</b>	<b>Change in net financial worth</b>	<b>(6,819)</b>	<b>Net financial worth</b>	<b>(20,377)</b>
<i>Equals</i>		<i>Equals</i>					
Financial assets	123,643	Transactions in financial assets	(2,973)	Changes in financial assets	(1,384)	Closing financial assets	119,286
<i>less</i>		<i>less</i>		<i>less</i>		<i>less</i>	
Opening liabilities	129,041	Transactions in liabilities	5,187	Changes in liabilities	5,435	Closing liabilities	139,663

for the year ended 30 June 2013

Opening balance statement	\$million	Statement of operations	\$million	Other economic flows	\$million	Closing balance sheet	\$million
Opening net worth	65,210	Operating balance	(1,518)	Holding gains	(909)	Closing net worth	62,783
<i>Equals</i>		<i>Equals</i>					
Non-financial assets	85,587	Transactions	1,949	Valuation changes	-	Non-financial assets	87,536
<i>plus</i>		<i>plus</i>		<i>plus</i>		<i>plus</i>	
<b>Net financial worth</b>	<b>(20,377)</b>	<b>Net lending</b>	<b>(3,467)</b>	<b>Change in net financial worth</b>	<b>(909)</b>	<b>Net financial worth</b>	<b>(24,753)</b>
<i>Equals</i>		<i>Equals</i>					
Financial assets	119,286	Transactions in financial assets	(7,638)	Changes in financial assets	(456)	Closing financial assets	111,192
<i>less</i>		<i>less</i>		<i>less</i>		<i>less</i>	
Opening liabilities	139,663	Transactions in liabilities	(4,171)	Changes in liabilities	453	Closing liabilities	135,945

for the year ended 30 June 2014

Opening balance statement	\$million	Statement of operations	\$million	Other economic flows	\$million	Closing balance sheet	\$million
Opening net worth	62,783	Operating balance	1,854	Holding gains	(334)	Closing net worth	64,303
<i>Equals</i>		<i>Equals</i>					
Non-financial assets	87,536	Transactions	1,305	Valuation changes	-	Non-financial assets	88,841
<i>plus</i>		<i>plus</i>		<i>plus</i>		<i>plus</i>	
<b>Net financial worth</b>	<b>(24,753)</b>	<b>Net lending</b>	<b>549</b>	<b>Change in net financial worth</b>	<b>(334)</b>	<b>Net financial worth</b>	<b>(24,538)</b>
<i>Equals</i>		<i>Equals</i>					
Financial assets	111,192	Transactions in financial assets	7,247	Changes in financial assets	196	Closing financial assets	118,635
<i>less</i>		<i>less</i>		<i>less</i>		<i>less</i>	
Opening liabilities	135,945	Transactions in liabilities	6,698	Changes in liabilities	530	Closing liabilities	143,173

for the year ended 30 June 2015

Opening balance statement	\$million	Statement of operations	\$million	Other economic flows	\$million	Closing balance sheet	\$million
Opening net worth	64,303	Operating balance	3,905	Holding gains	51	Closing net worth	68,259
<i>Equals</i>		<i>Equals</i>					
Non-financial assets	88,841	Transactions	1,329	Valuation changes	-	Non-financial assets	90,170
<i>plus</i>		<i>plus</i>		<i>plus</i>		<i>plus</i>	
<b>Net financial worth</b>	<b>(24,538)</b>	<b>Net lending</b>	<b>2,576</b>	<b>Change in net financial worth</b>	<b>51</b>	<b>Net financial worth</b>	<b>(21,911)</b>
<i>Equals</i>		<i>Equals</i>					
Financial assets	118,635	Transactions in financial assets	(406)	Changes in financial assets	831	Closing financial assets	119,060
<i>less</i>		<i>less</i>		<i>less</i>		<i>less</i>	
Opening liabilities	143,173	Transactions in liabilities	(2,982)	Changes in liabilities	780	Closing liabilities	140,971

for the year ended 30 June 2016

Opening balance statement	\$million	Statement of operations	\$million	Other economic flows	\$million	Closing balance sheet	\$million
Opening net worth	68,259	Operating balance	5,749	Holding gains	(58)	Closing net worth	73,950
<i>Equals</i>		<i>Equals</i>					
Non-financial assets	90,170	Transactions	1,836	Valuation changes	-	Non-financial assets	92,006
<i>plus</i>		<i>plus</i>		<i>plus</i>		<i>plus</i>	
<b>Net financial worth</b>	<b>(21,911)</b>	<b>Net lending</b>	<b>3,913</b>	<b>Change in net financial worth</b>	<b>(58)</b>	<b>Net financial worth</b>	<b>(18,056)</b>
<i>Equals</i>		<i>Equals</i>					
Financial assets	119,060	Transactions in financial assets	6,432	Changes in financial assets	1,069	Closing financial assets	126,561
<i>less</i>		<i>less</i>		<i>less</i>		<i>less</i>	
Opening liabilities	140,971	Transactions in liabilities	2,519	Changes in liabilities	1,127	Closing liabilities	144,617

**Table 25** – Reconciliation between GAAP and GFS operating balance

	2011 Actual \$m	2012 Forecast \$m	2013 Forecast \$m	2014 Forecast \$m	2015 Forecast \$m	2016 Forecast \$m
<b>Operating balance per GAAP</b>	<b>(13,360)</b>	<b>(12,601)</b>	<b>(2,375)</b>	<b>1,576</b>	<b>3,974</b>	<b>5,701</b>
Remove gains/losses and net surpluses from associates and joint ventures	(5,036)	1,792	(2,063)	(2,519)	(2,524)	(2,625)
<b>Operating balance before gains and losses (OBEGAL)</b>	<b>(18,396)</b>	<b>(10,809)</b>	<b>(4,438)</b>	<b>(943)</b>	<b>1,450</b>	<b>3,076</b>
Remove SOE portion of OBEGAL (incl. eliminations)	81	(547)	(109)	(296)	(545)	(544)
Remove ETS expenses	860	1,178	380	395	656	988
Remove impairments and write-offs on financial assets	1,997	2,520	2,596	2,657	2,499	2,546
Remove expenses relating to earthquake provisions	1,121	1,750	250	250	150	70
Tertiary institutions included on a line-by-line basis	168	169	169	169	169	169
Reserve Bank (equity accounted)	255	(71)	(362)	(379)	(478)	(558)
Other adjustments	8	(2)	(4)	1	4	2
<b>Net operating balance per GFS</b>	<b>(13,906)</b>	<b>(5,812)</b>	<b>(1,518)</b>	<b>1,854</b>	<b>3,905</b>	<b>5,749</b>

**Table 26** – Reconciliation between GAAP residual cash and GFS cash surplus/(deficit)

	Actual \$m	Forecast \$m	Forecast \$m	Forecast \$m	Forecast \$m	Forecast \$m
<b>Residual cash per GAAP</b>	<b>(13,343)</b>	<b>(13,636)</b>	<b>(9,866)</b>	<b>(4,976)</b>	<b>(4,056)</b>	<b>(1,580)</b>
Back out advances	1,242	1,125	952	813	1,162	553
Back out investments	1,292	1,160	1,222	1,428	1,297	1,638
Add in cash flows from Crown entities	633	(1,123)	411	(656)	441	1,900
Remove cash flows from the Reserve Bank	48	12	(135)	(22)	(31)	(34)
Other adjustments (mainly impact of NZS Fund)	(16)	12	80	(84)	(103)	(120)
<b>Cash surplus/(deficit)</b>	<b>(10,144)</b>	<b>(12,450)</b>	<b>(7,336)</b>	<b>(3,497)</b>	<b>(1,290)</b>	<b>2,357</b>

## Accounting Policies

The forecast financial statements contained in the published *Pre-election Economic and Fiscal Update 2011* are based on the following accounting policies.

### **Statement of compliance**

These forecast financial statements have been prepared in accordance with the Public Finance Act 1989 and with New Zealand Generally Accepted Accounting Practice (NZ GAAP). The accounting policies applied in the statements are the same as those applied in the audited, actual financial statements of the Government for the year ended 30 June 2011.

For the purposes of these forecast financial statements, the government reporting entity has been designated as a public benefit entity. The forecast financial statements comply with FRS-42: *Prospective Financial Statements* and NZ GAAP as it relates to prospective financial statements.

### **Reporting entity**

The Government reporting entity as defined in section 2(1) of the Public Finance Act 1989 means:

- the Sovereign in right of New Zealand, and
- the legislative, executive, and judicial branches of the Government of New Zealand.

### **Basis of preparation**

These forecast financial statements have been prepared on the basis of historic cost modified by the revaluation of certain assets and liabilities.

The forecast financial statements are prepared on an accrual basis, unless otherwise specified (for example, the Statement of Cash Flows).

The forecast financial statements are presented in New Zealand dollars rounded to the nearest million, unless otherwise specified.

### **Judgements and estimations**

The preparation of these forecast financial statements requires judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. For example, the present value of large cash flows that are predicted to occur a long time into the future, as with the settlement of ACC outstanding claim obligations and Government Superannuation retirement benefits, depends critically on judgements regarding future cash flows, including inflation assumptions and the risk free discount rate used to calculate present values.

The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

A second area of uncertainty relates to the immature nature of the claims experience available to assist in estimating the claims and provisions arising from the Canterbury

earthquakes. Actuarial valuations of these liabilities using the best available information have been used, however it is common in such cases for adjustments to be required as the claims experience develops.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised, if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

More details on these judgements and estimations are available in the Financial Statements of the Government of New Zealand for the year ended 30 June 2011.

### ***Early adoption of standards and interpretations***

The Government has elected to early-adopt all NZ IFRSs and Interpretations that had been approved by the New Zealand Accounting Standards Review Board as at 30 June 2011 but that are not yet effective, with the exception of *NZ IFRS 9: Financial Instruments*. The first of three phases of this new standard (which is incomplete) were approved by the Accounting Standards Review Board in November 2009 and November 2010. The standard addresses the issues of classification and measurement of financial assets and financial liabilities and becomes effective for annual reporting periods commencing on or after 1 January 2013.

An initial assessment of standards approved since 30 June 2011 does not indicate any issues which would have a material impact on these forecast financial statements.

### ***Reporting and forecast period***

The reporting period for these forecast financial statements is the year ended 30 June 2012 to 30 June 2016.

The “2011 Actual” figures reported in the statements are the audited results reported in the Financial Statements of Government for the year ended 30 June 2011. The “2012 Previous Budget” figures are the original forecasts to 30 June 2012, as presented in the 2011 Budget. The “2012 Forecast” figures incorporate actual financial results up to 31 August 2011.

Where necessary, the financial information for State-owned enterprises and Crown entities that have a balance date other than 30 June has been adjusted for any transactions or events that have occurred since their most recent balance date and that are significant for the Government’s financial statements. Such entities are primarily in the education sector.



### ***Basis of combination***

These forecast financial statements combine the following entities using the acquisition method of combination:

#### **Core Entities**

- Ministers of the Crown
- Government departments
- Offices of Parliament
- the Reserve Bank of New Zealand
- New Zealand Superannuation Fund

#### **Other entities**

- State-owned enterprises
- Crown entities (excluding Tertiary Education Institutions)
- Air New Zealand Limited
- AMI Insurance Limited
- Organisations listed in Schedule 4 of the Public Finance Act 1989

Corresponding assets, liabilities, income and expenses, are added together line by line. Transactions and balances between these sub-entities are eliminated on combination. Where necessary, adjustments are made to the financial statements of subsidiaries to bring the accounting policies into line with those used by the Government reporting entity.

Tertiary education institutions are equity-accounted for the reasons explained in the notes to the Government's financial statements for the period ended 30 June 2011. This treatment recognises these entities' net assets, including asset revaluation movements, surpluses and deficits.

The basis of combination for joint ventures depends on the form of the joint venture.

- *Jointly controlled operations:* The Government reporting entity recognises the assets it controls, the liabilities and expenses that it incurs, and its share of the jointly controlled operations' income
- *Jointly controlled assets:* The Government reporting entity recognises its share of the jointly controlled assets, its share of any liabilities and expenses incurred jointly, any other liabilities and expenses it has incurred in respect of the jointly controlled asset, and income from the sale or use of its share of the output of the jointly controlled assets, and
- *Jointly controlled entities:* Jointly controlled entities are equity accounted, whereby the Government reporting entity initially recognises its share of interest in these entities' net assets at cost and subsequently adjusts the cost for changes in net assets. The Government reporting entity's share of the jointly controlled entities' surpluses and deficits are recognised in the statement of financial performance.

### ***Accounting policies***

The accounting policies set out below have been applied consistently to all periods in the *Pre-election Update*.

## ***Income***

### *Taxation revenue levied through the Crown's sovereign power*

The Government provides many services and benefits that do not give rise to revenue. Further, payment of tax does not of itself entitle a taxpayer to an equivalent value of services or benefits, since there is no relationship between paying tax and receiving Crown services and transfers. Such revenue is received through the exercise of the sovereign power of the Crown in Parliament.

Where possible, taxation revenue is recognised at the time the debt to the Crown arises.

<b>Revenue type</b>	<b>Revenue recognition point</b>
Source deductions	When an individual earns income that is subject to PAYE
Resident withholding tax (RWT)	When an individual is paid interest or dividends subject to deduction at source
Fringe benefit tax (FBT)	When benefits are provided that give rise to FBT
Provisional tax	When taxable income is earned
Terminal tax	Assessment filed date
Goods and services tax (GST)	When the liability to the Crown is incurred
Customs and excise duty	When goods become subject to duty
Road user charges and motor vehicle fees	When payment of the fee or charge is made
Stamp, cheque and credit card duties	When the liability to the Crown is incurred
Exhaustible resources levy	When the resource is extracted
Other indirect taxes	When the debt to the Crown arises
Levies (eg, ACC levies)	When the obligation to pay the levy is incurred

### *Revenue earned through operations*

Revenue from the supply of goods and services to third parties is measured at the fair value of consideration received. Revenue from the supply of goods is recognised when the significant risks and rewards of ownership have been transferred to the buyer. Revenue from the supply of services is recognised on a straight-line basis over the specified period for the services unless an alternative method better represents the stage of completion of the transaction.

### *Interest income*

Interest income is accrued using the effective interest rate method.

The effective interest rate exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount. The method applies this rate to the principal outstanding to determine interest income each period.

### *Dividend income*

Dividend income from investments is recognised when the Government's rights as a shareholder to receive payment have been established.

### *Rental income*

Rental income is recognised in the statement of financial performance on a straight-line basis over the term of the lease. Lease incentives granted are recognised evenly over the term of the lease as a reduction in total rental income.

### *Donated or subsidised assets*

Where an asset is acquired for nil or nominal consideration, the fair value of the asset received is recognised as income in the statement of financial performance.

## **Expenses**

### *General*

Expenses are recognised in the period to which they relate.

### *Welfare benefits and entitlements*

Welfare benefits and entitlements, including New Zealand Superannuation, are recognised in the period when an application for a benefit has been received and the eligibility criteria has been met.

### *Grants and subsidies*

Where grants and subsidies are discretionary until payment, the expense is recognised when the payment is made. Otherwise, the expense is recognised when the specified criteria have been fulfilled and notice has been given to the Crown.

### *Interest expense*

Interest expense is accrued using the effective interest rate method.

The effective interest rate exactly discounts estimated future cash payments through the expected life of the financial liability to that liability's net carrying amount. The method applies this rate to the principal outstanding to determine interest expense each period.

## **Foreign currency**

Transactions in foreign currencies are initially translated at the foreign exchange rate at the date of the transaction. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of financial performance, except when recognised in the statement of comprehensive income when hedge accounting is applied.

Non-monetary assets and liabilities measured at historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies and measured at fair value are translated into New Zealand dollars at the exchange rate applicable at the fair value date. The associated foreign exchange gains or losses follow the fair value gains or losses to either the statement of financial performance or the statement of comprehensive income.

Foreign exchange gains and losses arising from translating monetary items that form part of the net investment in a foreign operation are reported in a translation reserve in net worth and recognised in the statement of comprehensive income.

### ***Sovereign receivables and taxes repayable***

Receivables from taxes, levies and fines (and any penalties associated with these activities) as well as social benefit receivables which do not arise out of a contract are collectively referred to as sovereign receivables.

Sovereign receivables are initially assessed at nominal amount or face value; that is, the receivable reflects the amount of tax owed, levy, fine charged, or social benefit debt payable. These receivables are subsequently adjusted for penalties and interest as they are charged, and tested for impairment. Interest and penalties charged on tax receivables are presented as tax revenue in the statement of financial performance.

Taxes repayable represent refunds due to taxpayers and are recognised at their nominal value. They are subsequently adjusted for interest once account and refund reviews are complete.

### ***Financial instruments***

#### *Financial assets*

Financial assets are designated into the following categories: loans and receivables, financial instruments available-for-sale, financial assets held-for-trading, and financial instruments designated as fair value through profit and loss. This designation is made by reference to the purpose of the financial instruments, policies and practices for their management, their relationship with other instruments and the reporting costs and benefits associated with each designation.

The maximum loss due to default on any financial asset is the carrying value reported in the statement of financial position.

<b>Major financial asset type</b>	<b>Designation</b>
Trade and other receivables	All designated as loans and receivables
Student loans	All designated as loans and receivables
Kiwibank mortgages	Generally designated as loans and receivables
Other advances	Generally designated as loans and receivables
IMF financial assets	All designated as loans and receivables
Share investments	Generally designated as fair value through profit and loss
Marketable securities	Generally designated as fair value through profit and loss

Loans and receivables are recognised initially at fair value plus transaction costs and subsequently measured at amortised cost using the effective interest rate method (refer interest income policy). Loans and receivables issued with a duration of less than 12 months are recognised at their nominal value, unless the effect of discounting is material. Allowances for estimated irrecoverable amounts are recognised when there is objective

evidence that the asset is impaired. Interest, impairment losses and foreign exchange gains and losses are recognised in the statement of financial performance.

Financial assets held for trading and financial assets designated at fair value through profit or loss are recorded at fair value with any realised and unrealised gains or losses recognised in the statement of financial performance.

A financial asset is designated at fair value through profit and loss if acquired principally for the purpose of trading in the short term. It may also be designated into this category if the accounting treatment results in more relevant information because it either significantly reduces an accounting mismatch with related liabilities or is part of a group of financial assets that is managed and evaluated on a fair value basis, such as with the NZ Superannuation Fund. Gains or losses from interest, foreign exchange and other fair value movements are separately reported in the statement of financial performance. Transaction costs are expensed as they are incurred.

Available-for-sale financial assets are initially recorded at fair value plus transaction costs. They are subsequently recorded at fair value with any resultant fair value gains or losses recognised in the statement of comprehensive income with some exceptions. Those exceptions are for impairment losses, any interest calculated using the effective interest method and, in the case of monetary items (such as debt securities), foreign exchange gains and losses resulting from translation differences due to changes in amortised cost of the asset. These latter items are recognised in the statement of financial performance. For non-monetary available-for-sale financial assets (eg, some unlisted equity instruments) the fair value movements recognised in the statement of comprehensive income include any related foreign exchange component. At derecognition, the cumulative fair value gain or loss previously recognised in the statement of comprehensive income, is recognised in the statement of financial performance.

Cash and cash equivalents include cash on hand, cash in transit, bank accounts and deposits with an original maturity of no more than three months.

Fair values of quoted investments are based on current bid prices. Regular way purchases and sales of all financial assets are accounted for at trade date. If the market for a financial asset is not active, fair values for initial recognition and, where appropriate, subsequent measurement are established by using valuation techniques, as set out in the notes to the financial statements. At each balance date an assessment is made whether there is objective evidence that a financial asset or group of financial assets is impaired.

*Financial liabilities*

<b>Major financial liability type</b>	<b>Designation</b>
Accounts payable	All designated at amortised cost
Government stock	Generally designated at amortised cost
Treasury bills	Generally designated at amortised cost
Government retail stock	All designated at amortised cost
Settlement deposits with Reserve Bank	All designated as fair value through profit and loss
Issued currency	Not designated: Recognised at face value

Financial liabilities held for trading and financial liabilities designated at fair value through profit or loss are recorded at fair value with any realised and unrealised gains or losses recognised in the statement of financial performance. A financial liability is designated at fair value through profit and loss if acquired principally for the purpose of trading in the short term. It may also be designated into this category if the accounting treatment results in more relevant information because it either eliminates or significantly reduces an accounting mismatch with related assets or is part of a group of financial liabilities that is managed and evaluated on a fair value basis. Gains or losses from interest, foreign exchange and other fair value movements are separately reported in the statement of financial performance. Transaction costs are expensed as they are incurred.

Other financial liabilities are recognised initially at fair value less transaction costs and subsequently measured at amortised cost using the effective interest rate method. Financial liabilities entered into with durations of less than 12 months are recognised at their nominal value. Amortisation and, in the case of monetary items, foreign exchange gains and losses, are recognised in the statement of financial performance as is any gain or loss when the liability is derecognised.

Currency issued for circulation, including demonetised currency after 1 July 2004, is recognised at face value. Currency issued represents a liability in favour of the holder.

*Derivatives*

Derivative financial instruments are recognised both initially and subsequently at fair value. They are reported as either assets or liabilities depending on whether the derivative is in a net gain or net loss position respectively. Recognition of the movements in the value of derivatives depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged (see Hedging section below).

Derivatives that are not designated for hedge accounting are classified as held-for-trading financial instruments with fair value gains or losses recognised in the statement of financial performance. Such derivatives may be entered into for risk management purposes, although not formally designated for hedge accounting, or for tactical trading.

## *Hedging*

Individual entities consolidated within the Government reporting entity apply hedge accounting after considering the costs and benefits of adopting hedge accounting, including:

- whether an economic hedge exists and the effectiveness of that hedge,
- whether the hedge accounting qualifications could be met, and
- the extent to which it would improve the relevance of reported results.

Transactions between entities within the Government reporting entity do not qualify for hedge accounting in the financial statements of the Government (although they may qualify for hedge accounting in the separate financial statements of the individual entities). Where a derivative is used to hedge the foreign exchange exposure of a monetary asset or liability, the effects of the hedge relationship are automatically reflected in the statement of financial performance so hedge accounting is not necessary.

### (a) Cash flow hedge

Where a derivative qualifies as a hedge of variability in asset or liability cash flows (cash flow hedge), the effective portion of any gain or loss on the derivative is recognised in the statement of comprehensive income and the ineffective portion is recognised in the statement of financial performance. Where the hedge of a forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability (eg, where the hedge relates to the purchase of an asset in a foreign currency), the amount recognised in the statement of comprehensive income is included in the initial cost of the asset or liability. Otherwise, gains or losses recognised in the statement of comprehensive income transfer to the statement of financial performance in the same period as when the hedged item affects the statement of financial performance (eg, when the forecast sale occurs). Effective portions of the hedge are recognised in the same area of the statement of financial performance as the hedged item.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in net worth at that time remains in net worth and is recognised when the forecast transaction is ultimately recognised in the statement of financial performance. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in the statement of comprehensive income is transferred to the statement of financial performance.

### (b) Fair value hedge

Where a derivative qualifies as a hedge of the exposure to changes in fair value of an asset or liability (fair value hedge) any gain or loss on the derivative is recognised in the statement of financial performance together with any changes in the fair value of the hedged asset or liability.

The carrying amount of the hedged item is adjusted by the fair value gain or loss on the hedged item in respect of the risk being hedged. Effective parts of the hedge are recognised in the same area of the statement of financial performance as the hedged item.

### ***Financial instruments – forecasting policies***

For forecasting purposes, financial instruments held after 30 June 2011 are assumed to be held until they mature. Additional gains and losses on financial assets measured at fair value are based on long-run rate of return assumptions appropriate to the forecast portfolio mix, after adjusting for interest revenue and dividend revenue which are reported separately. Gains and losses on financial liabilities measured at fair value are assumed to unwind over the period to maturity, as they are assumed to be redeemed at par value.

Forecast sales and purchases of financial instruments are assumed to be issued at par value, with no premiums or discounts forecast. The exceptions are interest-free assets with long maturities, such as student loans and some sovereign receivables, where a write-down to fair value is recognised when the loan or receivable is issued.

Forecasts of borrowings incorporate a number of technical assumptions regarding the use of the Crown's fiscal surplus for domestic debt reduction. These assumptions may not reflect the actual future composition of the domestic debt programmes, as these decisions have yet to be made.

Derivatives held for trading are measured at fair value, which is nil when initially entered into. That is, fair value changes are only recognised after the derivative is created and as a result of changes in underlying variables such as exchange rates. Hence, forecasts for derivatives expected to be entered into over the forecast period are assumed to have a nil balance. Forward margins on forward-exchange contracts existing as at 30 June 2011 are amortised over the period of the contract on a straight line basis.

Gains and losses are not forecast for financial assets measured at amortised cost.

### ***Inventories***

Inventories are recorded at the lower of cost (calculated using weighted average method) and net realisable value. Inventories held for distribution for public benefit purposes are recorded at cost adjusted where applicable for any loss of service potential. Where inventories are acquired at no cost, or for nominal consideration, the cost is deemed to be the current replacement cost at the date of acquisition.

Inventories include unissued currency and harvested agricultural produce (eg, logs, wool).

The cost of harvested agricultural produce is measured at fair value less estimated point-of-sale costs at the point of harvest.

### ***Property, plant and equipment***

Items of property, plant and equipment are initially recorded at cost. Cost may include transfers from net worth of any gains or losses on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment. Where an asset is acquired for nil or nominal consideration the asset is recognised initially at fair value, where fair value can be reliably determined, as income in the statement of financial performance.

Revaluations are carried out for a number of classes of property, plant and equipment to reflect the service potential or economic benefit obtained through control of the asset. Revaluation is based on the fair value of the asset, with changes reported by class of asset.



Subsequent to initial recognition, classes of property, plant and equipment are accounted for as set out below.

<b>Class of PPE</b>	<b>Accounting policy</b>
Land and buildings	<p>Land and buildings are recorded at fair value less impairment losses and, for buildings, less depreciation accumulated since the assets were last revalued.</p> <p>Valuations undertaken in accordance with standards issued by the New Zealand Property Institute are used where available.</p> <p>Otherwise, valuations conducted in accordance with the Rating Valuation Act 1998, may be used if they have been confirmed as appropriate by an independent valuer.</p> <p>When revaluing buildings, there must be componentisation to the level required to ensure adequate representation of the material components of the buildings. At a minimum, this requires componentisation to three levels: structure, building services and fit-out.</p>
Specialist military equipment	<p>Specialist military equipment is recorded on a depreciated replacement cost basis less depreciation and impairment losses accumulated since the assets were last revalued.</p> <p>Valuations are obtained through specialist assessment by New Zealand Defence Force advisers, and the bases of these valuations are confirmed as appropriate by an independent valuer.</p>
State highways	<p>State highways are recorded on a depreciated replacement cost basis less depreciation and impairment losses accumulated since the assets were last revalued. Land associated with the state highways is valued using an opportunity cost based on adjacent use, as an approximation to fair value.</p>
Rail network	<p>The rail network is recorded on a depreciated replacement cost basis less depreciation and impairment losses accumulated since the assets were last revalued. Land associated with the rail network is valued using an opportunity cost based on adjacent use, as an approximation to fair value.</p>
Aircraft	<p>Aircraft (excluding Specialised Military Equipment) are recorded at fair value less depreciation and impairment losses accumulated since the assets were last revalued.</p>
Electricity distribution	<p>Electricity distribution network assets are recorded at cost, less depreciation and impairment losses accumulated since the assets were purchased.</p>
Electricity generation	<p>Electricity generation assets are recorded at fair value less depreciation and impairment losses accumulated since the assets were last revalued.</p>
Specified cultural and heritage assets	<p>Specified cultural and heritage assets comprise national parks, conservation areas and related recreational facilities, as well as National Archives holdings and the collections of the National Library, Parliamentary Library and Te Papa. Such physical assets are recorded at fair value less subsequent impairment losses and, for non-land assets, less subsequent accumulated depreciation. Assets are not reported with a financial value in cases where they are not realistically able to be reproduced or replaced, and when they do not generate cash flows and where no market exists to provide a valuation.</p>
Other plant and equipment	<p>Other plant and equipment, which includes motor vehicles and office equipment, are recorded at cost less depreciation and impairment losses accumulated since the assets were purchased.</p>

Classes of property, plant and equipment that are revalued are revalued at least every five years or whenever the carrying amount differs materially to fair value.

Items of property are revalued to fair value for the highest and best use of the item on the basis of the market value of the item, or on the basis of market evidence, such as discounted cash flow calculations. If no market evidence of fair value exists, an optimised depreciated replacement cost approach is used as the best proxy for fair value. Where an item of property is recorded at its optimised depreciated replacement cost, this cost is based on the estimated present cost of constructing the existing item of property by the most appropriate method of construction, less allowances for physical deterioration and optimisation for obsolescence and relevant surplus capacity. Where an item of property is recorded at its optimised depreciated replacement cost, the cost does not include any borrowing costs.

Unrealised gains and losses arising from changes in the value of property, plant and equipment are recognised as at balance date. To the extent that a gain reverses a loss previously charged to the statement of financial performance for the asset class, the gain is credited to the statement of financial performance. Otherwise, gains are credited to an asset revaluation reserve for that class of asset. To the extent that there is a balance in the asset revaluation reserve for the asset class any loss is debited to the reserve. Otherwise, losses are reported in the statement of financial performance.

Realised gains and losses arising from disposal of property, plant and equipment are recognised in the statement of financial performance in the period in which the transaction occurs. Any balance attributable to the disposed asset in the asset revaluation reserve is transferred to taxpayer funds.

Generally, Government borrowings are not directly attributable to individual assets. Therefore, any borrowing costs incurred during the period required to complete and prepare assets for their intended use are expensed rather than capitalised.

Where an asset's recoverable amount is less than its carrying amount, it is reported at its recoverable amount and an impairment loss is recognised. The main reason for holding some assets (for example, electricity generation assets) is to generate cash. For these assets the recoverable amount is the higher of the amount that could be recovered by sale (after deducting the costs of sale) or the amount that will be generated by using the asset through its useful life. Some assets do not generate cash (for example, state highways) and for those assets, depreciated replacement cost is used. Losses resulting from impairment are reported in the statement of financial performance, unless the asset is carried at a revalued amount in which case any impairment loss is treated as a revaluation decrease.

Depreciation is charged on a straight-line basis at rates calculated to allocate the cost or valuation of an item of property, plant and equipment, less any estimated residual value, over its remaining useful life.

Typically, the estimated useful lives of different classes of property, plant and equipment are as follows:

<b>Class of PPE</b>	<b>Estimated useful lives</b>
Buildings	25 to 60 years
Specialist military equipment	5 to 55 years
State highways:	
Pavement (surfacing)	7 years
Pavement (other)	50 years
Bridges	70 to 105 years
Rail Network:	
Track and ballast	25 to 40 years
Tunnels and bridges	60 to 100 years
Overhead traction and signalling	10 to 40 years
Aircraft (excluding specialist military equipment)	10 to 20 years
Electricity distribution network	2 to 80 years
Electricity generation assets	25 to 55 years
Other plant and equipment	3 to 30 years

Specified heritage and cultural assets are generally not depreciated.

### ***Property, plant and equipment***

Forecasts of the value of property, plant and equipment (including state highways and rail infrastructure) use the valuations recorded in the Financial Statements of the Government for the prior year and any additional valuations that have occurred up to the forecast reference date. As a consequence, no further realised or unrealised gains or losses are forecast for the entire forecast period.

### ***Equity accounted investments***

The applicable financial reporting standards that determine the basis of combination of entities that make up the Government reporting entity are NZ IAS 27: *Consolidated and Separate Financial Statements* and NZ IAS 28: *Investments in Associates*. NZ IAS 27 refers to guidance provided in IPSAS 6: *Consolidated and Separate Financial Statements* and FRS 37: *Consolidating Investments in Subsidiaries* which shall be used by public benefit entities in determining whether they control another entity.

These standards are, however, not clear about how the definitions of control and significant influence should be applied in some circumstances in the public sector, particularly where legislation provides public sector entities with statutory autonomy and independence, in particular with Tertiary Education Institutions. Treasury's view is that because the Government cannot determine their operating and financing policies, but does have a number of powers in relation to these entities, it is appropriate to treat them as associates.

**Biological assets**

Biological assets (eg, trees and sheep) managed for harvesting into agricultural produce (eg, logs and wool) or for transforming into additional biological assets are measured at fair value less estimated costs to sell, with any realised and unrealised gains or losses reported in the statement of financial performance. Where fair value cannot be reliably determined, the asset is recorded at cost less accumulated depreciation and accumulated impairment losses. For commercial forests, fair value takes into account age, quality of timber and the forest management plan.

Biological assets not managed for harvesting into agricultural produce, or being transformed into additional biological assets are reported as property, plant and equipment in accordance with the policies for property, plant and equipment.

**Intangible assets**

Intangible assets are initially recorded at cost. Where an intangible asset is created for nil or nominal consideration it is also initially carried at cost, which by definition is nil/nominal.

The cost of an internally generated intangible asset represents expenditure incurred in the development phase of the asset only. The development phase occurs after the following can be demonstrated: technical feasibility; ability to complete the asset; intention and ability to sell or use; and development expenditure can be reliably measured. Research is “original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding”. Expenditure incurred on the research phase of an internally generated intangible asset is expensed when it is incurred. Where the research phase cannot be distinguished from the development phase, the expenditure is expensed when it is incurred.

The Government’s holdings of assigned amount units arising from the Kyoto protocol are reported at fair value. Other intangible assets with finite lives are subsequently recorded at cost less any amortisation and impairment losses. Amortisation is charged to the statement of financial performance on a straight-line basis over the useful life of the asset. Typically, the estimated useful life of computer software is three to five years.

Intangible assets with indefinite useful lives are not amortised, but are tested at least annually for impairment.

Realised gains and losses arising from disposal of intangible assets are recognised in the statement of financial performance in the period in which the transaction occurs.

Intangible assets with finite lives are reviewed at least annually to determine if there is any indication of impairment. Where an intangible asset’s recoverable amount is less than its carrying amount, it is reported at its recoverable amount and an impairment loss is recognised. Losses resulting from impairment are reported in the statement of financial performance.

Goodwill is tested for impairment annually.

**Non-current assets held for sale and discontinued operations**

Non-current assets or disposal groups are separately classified where their carrying amount will be recovered through a sale transaction rather than continuing use; that is,

where such assets are available for immediate sale and where sale is highly probable. Non-current assets or disposal groups are recorded at the lower of their carrying amount and fair value less costs to sell.

### ***Investment property***

Investment property is property held primarily to earn rentals or for capital appreciation or both. It does not include property held primarily for strategic purposes or to provide a social service (eg, affordable housing) even though such property may earn rentals or appreciate in value – such property is reported as property, plant and equipment.

Investment properties are measured at fair value. Gains or losses arising from fair value changes are included in the statement of financial performance. Valuations are undertaken in accordance with standards issued by the New Zealand Property Institute.

### ***Employee benefits***

#### *Pension liabilities*

Obligations for contributions to defined contribution retirement plans are recognised in the statement of financial performance as they fall due. Obligations for defined benefit retirement plans are recorded at the latest actuarial value of the Crown liability. All movements in the liability, including actuarial gains and losses, are recognised in full in the statement of financial performance in the period in which they occur.

#### *Other employee entitlements*

Employee entitlements to salaries and wages, annual leave, long service leave, retiring leave and other similar benefits are recognised in the statement of financial performance when they accrue to employees. Employee entitlements to be settled within 12 months are reported at the amount expected to be paid. The liability for long-term employee entitlements is reported as the present value of the estimated future cash outflows.

#### *Termination benefits*

Termination benefits are recognised in the statement of financial performance only when there is a demonstrable commitment to either terminate employment prior to normal retirement date or to provide such benefits as a result of an offer to encourage voluntary redundancy. Termination benefits settled within 12 months are reported at the amount expected to be paid, otherwise they are reported as the present value of the estimated future cash outflows.

### ***Insurance contracts***

The future cost of outstanding insurance claims liabilities are valued annually based on the latest actuarial information. The estimate includes estimated payments associated with claims reported and accepted, claims incurred but not reported, claims that may be re-opened, and the costs of managing these claims. Movements of the claims liabilities are reflected in the statement of financial performance. Financial assets backing these liabilities are designated at fair value through profit and loss.

### *Reinsurance*

Premiums paid to reinsurers are recognised as reinsurance expense in the statement of financial performance from the attachment date over the period of indemnity of the reinsurance contract, in accordance with the expected pattern of the incidence of risk. Prepaid reinsurance premiums are included in prepayments in the Statement of Financial Position.

### *Reinsurance and other recoveries receivable*

Reinsurance and other recoveries receivable on paid claims, reported claims not yet paid, and unexpired risk liabilities are recognised as income in the statement of financial performance.

Recoveries receivable are assessed in a manner similar to the assessment of outstanding claims and are measured as the present value of the expected future receipts.

### *Deferred acquisition costs*

Accident compensation and earthquake commission levies are imposed through regulation and do not attract acquisition costs. Costs incurred in obtaining other insurance contracts are deferred and recognised as assets where they can be reliably measured and where it is probable that they will give rise to premium revenue that will be recognised in the Statement of Comprehensive Income in subsequent reporting periods.

Deferred acquisition costs are amortised systematically in accordance with the expected pattern of the incidence of risk under the insurance contracts to which they relate. This pattern of amortisation corresponds to the earning pattern of the corresponding premium revenue. Risks under the Group's general insurance contracts cover a period of up to 12 months, therefore, deferred acquisition costs are amortised within 1 year.

### **Leases**

Finance leases transfer to the Crown as lessee substantially all the risks and rewards incident on the ownership of a leased asset. Initial recognition of a finance lease results in an asset and liability being recognised at amounts equal to the lower of the fair value of the leased property or the present value of the minimum lease payments. The capitalised values are amortised over the period in which the Crown expects to receive benefits from their use.

Operating leases, where the lessor substantially retains the risks and rewards of ownership, are recognised in a systematic manner over the term of the lease. Leasehold improvements are capitalised and the cost is amortised over the unexpired period of the lease or the estimated useful life of the improvements, whichever is shorter. Lease incentives received are recognised evenly over the term of the lease as a reduction in rental expense.

### ***Other liabilities and provisions***

Other liabilities and provisions are recorded at the best estimate of the expenditure required to settle the obligation. Liabilities and provisions to be settled beyond 12 months are recorded at the present value of their estimated future cash outflows.

### ***Contingent liabilities and contingent assets***

Contingent liabilities and contingent assets are reported at the point at which the contingency is evident or when a present liability is unable to be measured with sufficient reliability to be recorded in the financial statements (unquantifiable liability). Contingent liabilities, including unquantifiable liabilities, are disclosed if the possibility that they will crystallise is not remote. Contingent assets are disclosed if it is probable that the benefits will be realised.

### ***Commitments***

Commitments are future expenses and liabilities to be incurred on contracts that have been entered into at balance date.

Cancellable commitments that have penalty or exit costs explicit in the agreement on exercising the option to cancel are reported at the value of those penalty or exit costs (ie, the minimum future payments).

Commitments are classified as:

- capital commitments: aggregate amount of capital expenditure contracted for but not recognised as paid or provided for at balance date
- non-cancellable operating leases with a lease term of more than one year; and
- other non-cancellable commitments (these may include consulting contracts, cleaning contracts and ship charters).

Interest commitments on debts and commitments relating to employment contracts are not included in the Statement of Commitments.

### ***Comparatives***

When presentation or classification of items in the financial statements is amended or accounting policies are changed voluntarily, comparative figures have been restated to ensure consistency with the current period unless it is impracticable to do so.

Comparatives referred to as Previous Budget were forecasts published in the *2011 Budget Economic and Fiscal Update*. These forecasts include budget adjustments for new unallocated spending during the year (both operating and capital) and top-down adjustments which reduce the bias for forecast expenditure by departments to reflect maximum spending limits instead of mid-point estimates.

### **Segment analysis**

The Government Reporting Entity is not required to provide segment reporting as it is a public benefit entity. Nevertheless, information is presented for material institutional components and major economic activities within or undertaken by the Government Reporting Entity. The three major institutional components of the Crown are:

- **Core Crown:** This group, which includes Ministers, government departments, Offices of Parliament, the Reserve Bank of New Zealand and the New Zealand Superannuation Fund most closely represents the budget sector and provides information that is useful for fiscal analysis purposes.
- **State-owned enterprises:** This group includes entities governed by the State-owned Enterprises Act 1986, and (for the purposes of these statements) also includes Air New Zealand represents entities that undertake commercial activity.
- **Crown entities:** This group includes entities governed by the Crown Entities Act 2004. These entities have separate legal form and specified government frameworks (including the degree to which each Crown entity is required to give effect to, or be independent of, government policy).

Functional analysis is also provided of a number of financial statements items. This functional analysis is drawn from the *Classification of the Functions of Government* as developed by the Organisation for Economic Co-operation and Development (OECD).

### **Related parties**

Related parties of the Government include key management personnel, and their close family members. Key management personnel are Ministers of the Crown, and their close family members are their spouses, children and dependants. Transactions between these related parties and a Government entity are disclosed in these financial statements only if they have taken place within a Minister's portfolio and they are not transactions entered into in the same capacity as an ordinary citizen.

Tertiary Education Institutions, joint ventures and the Government Superannuation Fund are also related parties of the Government due to the Government's influence over these entities. Transactions between these entities and Government entities are separately disclosed where material.

There are no other related parties as no other parties control the Government, and no other parties are controlled by the Government, other than those that are consolidated into the Government's financial statements.

The Government comprises a large number of commonly controlled entities. Transactions between these entities are eliminated in these financial statements and therefore not separately disclosed.

Transactions where the financial results may have been affected by the existence of a related party relationship are disclosed in the financial statements.