Half Year Economic and Fiscal Update 2013 Additional Information

The following information forms part of the *Half Year Economic and Fiscal Update 2013* (*Half Year Update*), released by the Treasury on 17 December 2013. This information provides further details on the *Half Year Update* and should be read in conjunction with the published document. The additional information includes:

- **Detailed economic forecast information** – 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.

Detailed Economic Forecast Information

This section includes a series of tables to provide additional detail on the economic forecasts presented in the *Half Year Update.*

Table 1	Real Gross Domestic Product
Table 2	Consumers price index and exchange rates
Table 3	Gross domestic expenditure and income
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Table 1 – Real Gross Domestic Product (production measure)

Chain-volume series expressed in 1995/96 prices
Seasonally Adjusted

	$ million	Quarterly % change	Annual % change	Annual Average % change
2011Q1	35,231	0.7	0.8	1.6
2011Q2	35,459	0.6	0.7	1.0
2011Q3	35,730	0.8	1.7	0.8
2011Q4	35,844	0.3	2.5	1.4
2012Q1	36,213	1.0	2.8	1.9
2012Q2	36,348	0.4	2.5	2.4
2012Q3	36,461	0.3	2.0	2.5
2012Q4	37,045	1.6	3.4	2.7
2013Q1	37,190	0.4	2.7	2.7
2013Q2	37,255	0.2	2.5	2.6
2013Q3	37,628	1.0	3.2	2.9
2013Q4	37,891	0.7	2.3	2.7
2014Q1	38,271	1.0	2.9	2.7
2014Q2	38,596	0.9	3.6	3.0
2014Q3	38,972	1.0	3.6	3.1
2014Q4	39,277	0.8	3.7	3.4
2015Q1	39,565	0.7	3.4	3.6
2015Q2	39,822	0.6	3.2	3.4
2015Q3	40,055	0.6	2.8	3.2
2015Q4	40,250	0.5	2.5	2.9
2016Q1	40,430	0.4	2.2	2.7
2016Q2	40,652	0.6	2.1	2.4
2016Q3	40,828	0.4	1.9	2.2
2016Q4	41,033	0.5	1.9	2.0
2017Q1	41,220	0.5	2.0	2.0
2017Q2	41,448	0.6	2.0	1.9
2017Q3	41,696	0.6	2.1	2.0
2017Q4	41,940	0.6	2.2	2.1
2018Q1	42,172	0.6	2.3	2.2
2018Q2	42,398	0.5	2.3	2.2

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
2011Q1	1146	0.8	4.5	67.2	0.76
2011Q2	1157	1.0	5.3	69.1	0.80
2011Q3	1162	0.4	4.6	72.0	0.83
2011Q4	1158	-0.3	1.8	68.7	0.78
2012Q1	1164	0.5	1.6	72.5	0.82
2012Q2	1168	0.3	1.0	71.3	0.79
2012Q3	1171	0.3	0.8	72.7	0.81
2012Q4	1169	-0.2	0.9	73.6	0.82
2013Q1	1174	0.4	0.9	75.9	0.83
2013Q2	1176	0.2	0.7	76.5	0.82
2013Q3	1187	0.9	1.4	75.3	0.80
2013Q4	1184	-0.3	1.3	77.0	0.83
2014Q1	1191	0.6	1.4	77.0	0.83
2014Q2	1195	0.4	1.6	76.2	0.82
2014Q3	1205	0.8	1.5	75.4	0.80
2014Q4	1206	0.1	1.9	75.4	0.80
2015Q1	1219	1.0	2.4	75.3	0.80
2015Q2	1224	0.4	2.4	75.2	0.80
2015Q3	1235	0.9	2.6	75.0	0.79
2015Q4	1238	0.2	2.6	74.5	0.79
2016Q1	1248	0.8	2.4	73.9	0.78
2016Q2	1255	0.5	2.5	73.2	0.78
2016Q3	1265	0.9	2.4	72.3	0.77
2016Q4	1267	0.1	2.3	71.2	0.76
2017Q1	1276	0.8	2.3	70.0	0.75
2017Q2	1284	0.6	2.3	68.8	0.73
2017Q3	1295	0.9	2.3	67.6	0.72
2017Q4	1295	0.1	2.3	66.4	0.71
2018Q1	1305	0.7	2.2	65.3	0.70
2018Q2	1312	0.6	2.2	64.2	0.69

Source: RBNZ, Statistics New Zealand, The Treasury

Table 3 – Expenditure on Gross Domestic Product and Gross Domestic Product (income) in current prices

March Year	2013 Estimate			2014 Forecast			2015 Forecast			2016 Forecast			2017 Forecast			2018 Forecast
	$million	%volume	%price	$million	%volume	%price	$million	%volume	%price	$million	%volume	%price	$million	%volume	%price	$million
Consumption:																
- *Private*	127,108	3.7	0.6	132,532	2.8	1.8	138,810	2.8	2.3	145,973	1.9	2.2	151,975	1.6	2.2	157,724
- *Public*	42,251	0.1	1.3	42,835	0.4	2.0	43,876	0.7	2.2	45,150	0.6	2.2	46,436	0.7	1.9	47,656
Gross Fixed Capital Formation:																
- *Residential*	9,932	16.7	4.7	12,135	25.5	4.8	15,962	16.4	4.7	19,437	3.7	4.6	21,087	0.6	4.8	22,221
- *Market **	27,458	11.7	3.2	31,655	8.1	0.8	34,510	3.1	2.5	36,465	0.7	2.7	37,724	1.0	2.7	39,115
- *Non-market ***	3,018	15.2	4.3	3,628	-3.7	3.8	3,631	2.4	2.4	3,808	2.4	2.4	3,995	2.4	2.4	4,191
- *Total all sectors*	40,396	14.6	2.1	47,288	12.1	1.3	53,702	6.2	4.0	59,310	1.7	3.5	62,407	1.1	3.3	65,127
Change in Stocks	813			2,090			1,190			845			745			891
Gross National Expenditure	210,585	5.7	1.0	224,836	4.4	1.2	237,583	3.3	2.4	251,282	1.6	2.5	261,567	1.3	2.4	271,401
Exports	60,669	-2.2	3.7	61,596	2.4	-1.6	62,089	1.9	3.1	65,270	2.9	6.2	71,299	3.0	9.1	80,169
Imports	60,203	7.3	-5.1	61,351	5.1	-0.9	63,916	4.3	1.8	67,864	2.1	6.8	74,026	0.8	10.7	82,558
Expenditure on GDP	211,024	2.4	3.9	224,649	3.4	1.5	235,753	2.5	2.6	248,012	2.0	2.0	258,007	2.2	1.5	267,642
Statistical Discrepancy	472			471			470			469			468			467
Gross Domestic Product	211,496			225,120			236,223			248,481			258,475			268,109
Compensation of employees	94,592			99,168			103,791			108,062			112,714			117,847
Operating Surplus, net:																
- *Agriculture*	6,504			8,257			7,280			7,627			8,282			8,880
- *Other*	51,026			55,427			59,427			63,401			64,834			65,531
- *Total all sectors*	57,530			63,684			66,707			71,029			73,115			74,411
Consumption of fixed capital	30,613			32,143			33,751			35,438			37,210			39,070
Indirect Taxes	29,762			31,125			32,976			34,953			36,437			37,782
Less subsidies	1001			1001			1001			1001			1001			1001
Gross Domestic Product	211,496			225,120			236,223			248,481			258,475			268,109

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

Source: Statistics New Zealand, The Treasury

Table 4 – Labour market indicators

Annual Average Percentage Change March Year	2013 Actual	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast
Real GDP (production basis)	2.7	2.7	3.6	2.7	2.0	2.2
Working Age Population	0.8	1.1	1.4	1.2	1.1	1.1
Labour Force	0.5	1.3	2.0	1.2	0.8	0.8
Employment	0.3	2.0	2.6	1.4	1.0	1.3
Labour Productivity*	1.9	0.7	1.3	1.7	1.1	0.9
CPI (annual percentage change)	0.9	1.4	2.4	2.4	2.3	2.2
Average Ordinary Time Hourly Wages	2.6	2.5	3.0	3.1	3.4	3.3
Average Weekly Earnings	2.9	2.4	2.1	2.7	3.2	3.3
Real Wages	1.7	1.3	1.1	0.6	1.0	1.0
Compensation of Employees	3.4	4.8	4.7	4.1	4.3	4.6
Unit Labour Costs (Hours worked basis)	0.6	1.8	1.7	1.4	2.3	2.3
Real Unit Labour Costs	-0.3	0.6	-0.2	-1.0	-0.1	0.1

* Hours worked basis

Number (000's) As at March Quarter	2013 Actual	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast
Total Population	4,464	4,516	4,569	4,614	4,656	4,699
Natural Increase	31	27	31	32	31	31
Net Migration	2	26	22	13	12	12
Annual Change	33	52	53	45	43	43
Working Age Population	3,511	3,559	3,606	3,649	3,689	3,727
Annual Change	29	48	47	42	40	38
Not in the labour force (s.a.)	1,128	1,121	1,122	1,140	1,162	1,176
Annual Change	36	-7	1	18	22	14
Labour Force (s.a.)	2,383	2,438	2,484	2,509	2,527	2,551
Annual Change	-7	55	46	24	19	24
Total Employment (s.a.)	2,235	2,296	2,345	2,373	2,397	2,431
Annual Change	8	61	49	28	24	34
Unemployment (s.a.)	148	142	139	136	130	120
Annual Change	-15	-6	-3	-3	-5	-10
Participation Rate (%sa)	67.9	68.5	68.9	68.7	68.5	68.5
Unemployment Rate (%sa)	6.2	5.8	5.6	5.4	5.2	4.7

Source: Statistics New Zealand, the Treasury

Table 5 – Exports – SNA basis

March	Dairy Products			Meat and Meat Products			Non-Commodity*		
Years	%volume	%price	$million	%volume	%price	$million	%volume	%price	$million
2010	32.5	-32.0	9,047	-1.9	-7.6	5,289	-5.3	-7.4	13,267
2011	-0.7	29.7	11,668	-2.6	6.4	5,491	6.7	2.4	14,485
2012	8.9	0.5	12,772	-5.2	10.5	5,754	3.5	2.1	15,318
2013	18.1	-16.5	12,570	10.0	-8.9	5,757	-2.1	-4.8	14,271
2014	-9.5	22.9	14,019	-4.1	-2.4	5,399	-2.2	-0.2	13,927
2015	5.3	-13.0	12,832	2.7	-1.8	5,451	4.8	4.2	15,213
2016	0.3	0.8	12,964	2.9	2.5	5,747	1.7	5.2	16,271
2017	3.2	5.5	14,126	2.3	6.0	6,233	2.1	8.6	18,043
2018	3.2	9.1	15,913	2.0	9.6	6,968	2.9	11.9	20,779

March	Total Goods**			Services			Total Exports		
Years	%volume	%price	$million	%volume	%price	$million	%volume	%price	$million
2010	6.8	-15.4	40,057	-1.0	-1.2	13,685	4.9	-12.1	53,742
2011	3.3	10.1	45,571	0.8	-0.5	13,728	2.7	7.4	59,299
2012	2.7	3.2	48,296	3.9	1.1	14,417	3.0	2.7	62,713
2013	5.3	-8.0	46,775	-4.3	0.7	13,895	3.0	-6.0	60,669
2014	-2.9	4.3	47,390	1.7	0.6	14,205	-2.2	3.7	61,596
2015	3.9	-2.8	47,853	-2.7	2.9	14,237	2.4	-1.6	62,089
2016	1.5	3.1	50,116	3.5	2.9	15,154	1.9	3.1	65,270
2017	2.4	7.1	54,979	4.4	3.1	16,321	2.9	6.2	71,299
2018	2.6	10.6	62,419	4.4	4.2	17,750	3.0	9.1	80,169

* 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 6 – Imports – SNA basis

March	Capital Goods (Value for Duty)			Mineral Fuel* (VFD)			Intermediate Goods** (VFD)			Consumption Goods (VFD)		
Years	%volume	%price	$million	%volume	%price	$million	%volume	%price	$million	%volume	%price	$million
2010	-27.1	1.3	6,204	1.6	-27.4	6,059	-10.7	-9.8	14,827	-4.0	-1.0	10,280
2011	25.5	-4.4	7,424	-1.7	16.4	6,945	13.4	0.6	16,947	7.5	-4.5	10,560
2012	13.9	-5.8	7,970	5.8	19.5	8,795	6.3	0.4	18,068	3.8	-1.8	10,759
2013	6.3	-5.3	8,040	-3.0	0.5	8,537	0.9	-2.4	17,795	2.6	-1.4	10,882
2014	13.2	-2.3	8,895	-0.3	-5.9	8,037	7.2	-4.1	18,314	4.2	-3.6	10,920
2015	8.9	-8.1	8,892	4.1	-5.7	7,890	3.5	2.5	19,426	7.3	1.5	11,898
2016	6.0	-1.4	9,291	3.8	-3.0	7,947	3.4	4.0	20,882	6.6	3.2	13,091
2017	1.1	3.8	9,757	3.3	1.5	8,330	2.9	8.1	23,226	3.9	7.3	14,601
2018	-0.4	7.2	10,414	2.1	6.5	9,063	1.7	11.8	26,409	2.2	10.9	16,542

March	Total Goods (VFD)			Services			Total		
Years	%volume	%price	$million	%volume	%price	$million	%volume	%price	$million
2010	-10.4	-8.4	37,505	-4.2	-6.0	13,246	-8.9	-7.8	50,751
2011	12.3	-0.2	42,080	8.5	-1.1	14,238	11.3	-0.4	56,317
2012	6.3	2.0	45,645	5.9	-0.3	15,035	6.2	1.5	60,680
2013	1.2	-2.0	45,296	-0.7	-0.2	14,906	0.7	-1.5	60,203
2014	8.4	-5.6	46,342	4.1	-3.3	15,008	7.3	-5.1	61,351
2015	5.9	-1.9	48,134	2.3	2.8	15,782	5.1	-0.9	63,916
2016	4.9	1.5	51,239	2.1	3.1	16,625	4.3	1.8	67,864
2017	2.3	6.7	55,942	1.6	7.1	18,084	2.1	6.8	74,026
2018	0.9	10.6	62,456	0.4	10.7	20,102	0.8	10.7	82,558

* Consists of 'Fuels and Lubricants' and 'Petrol and Aviation Gas'
** Consists of 'Intermediate Goods' excluding 'Fuels and Lubricants' and 'Passenger Cars'

Source: Statistics New Zealand, the Treasury

Table 7 – Balance of payments – current account

$NZ Million Year ended March	2013 Actual	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast
Exports Goods	46,775	47,390	47,853	50,116	54,979	62,419
annual % change	*-3.1*	*1.3*	*1.0*	*4.7*	*9.7*	*13.5*
Imports Goods	45,296	46,342	48,134	51,239	55,942	62,456
annual % change	*-0.8*	*2.3*	*3.9*	*6.5*	*9.2*	*11.6*
Balance on Goods	1,479	1,048	-282	-1,123	-963	-37
% of nominal GDP	*0.7*	*0.5*	*-0.1*	*-0.5*	*-0.4*	*0.0*
Exports Services	13,895	14,205	14,237	15,154	16,321	17,750
annual % change	*-3.6*	*2.2*	*0.2*	*6.4*	*7.7*	*8.8*
Imports Services	14,906	15,008	15,782	16,625	18,084	20,102
annual % change	*-0.9*	*0.7*	*5.2*	*5.3*	*8.8*	*11.2*
Balance on services	-1,011	-803	-1,545	-1,471	-1,764	-2,352
% of nominal GDP	*-0.5*	*-0.4*	*-0.7*	*-0.6*	*-0.7*	*-0.9*
Balance on goods & services	468	245	-1,826	-2,594	-2,727	-2,389
% of nominal GDP	*0.2*	*0.1*	*-0.8*	*-1.0*	*-1.1*	*-0.9*
Income and transfers balance	-9,975	-9,753	-11,182	-13,077	-13,961	-14,850
% of nominal GDP	*-4.7*	*-4.3*	*-4.7*	*-5.3*	*-5.4*	*-5.5*
Current account balance	-9,491	-9,470	-13,008	-15,671	-16,688	-17,239
% of nominal GDP	*-4.5*	*-4.2*	*-5.5*	*-6.3*	*-6.5*	*-6.4*

Source: Statistics New Zealand, the Treasury

Treasury and Inland Revenue Tax Forecasts

In line with established practice, the Inland Revenue Department (IRD) has also prepared a set of tax forecasts, which, like the Treasury's tax forecasts, were based on the Treasury's macroeconomic forecasts. The two sets of forecasts 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.

In this *Half Year Update*, the two sets of tax forecasts are close to each other, with the largest difference in the tax revenue forecasts in any one year being $368 million (0.14% of GDP) in 2017/18. Neither agency's forecasts are consistently higher or lower than the other agency's forecasts, and the differences are spread across a number of tax types.

There were no significant new tax policy changes included in these forecasts.

The following two tables detail the respective forecasts by the Treasury and the IRD for tax revenue and receipts across each of the various sources:

Table 8 Treasury and IRD forecasts of tax revenue (accrual)

Table 9 Treasury and IRD forecasts of tax receipts (cash)

Table 8 – Treasury and IRD forecasts of tax revenue (accrual)

$ million	2012/13 Actual	2013/14 Forecast Treasury	2013/14 Forecast IRD	2013/14 Difference	2014/15 Forecast Treasury	2014/15 Forecast IRD	2014/15 Difference	2015/16 Forecast Treasury	2015/16 Forecast IRD	2015/16 Difference	2016/17 Forecast Treasury	2016/17 Forecast IRD	2016/17 Difference	2017/18 Forecast Treasury	2017/18 Forecast IRD	2017/18 Difference
Direct tax																
Individuals																
Source deductions	22,768	24,287	24,281	6	25,588	25,804	(216)	26,952	27,122	(170)	28,417	28,522	(105)	30,075	30,092	(17)
Other persons tax	5,210	5,263	5,284	(21)	5,525	5,310	215	5,798	5,570	228	6,061	5,772	289	6,307	6,045	262
Refunds	(1,644)	(1,465)	(1,477)	12	(1,491)	(1,512)	21	(1,524)	(1,463)	(61)	(1,527)	(1,468)	(59)	(1,579)	(1,523)	(56)
Fringe benefit tax	480	480	481	(1)	502	496	6	522	511	11	544	525	19	568	538	30
Subtotal: Individuals	**26,814**	**28,565**	**28,569**	**(4)**	**30,124**	**30,098**	**26**	**31,748**	**31,740**	**8**	**33,495**	**33,351**	**144**	**35,371**	**35,152**	**219**
Company tax (net)	**10,026**	**10,017**	**10,121**	**(104)**	**10,572**	**10,460**	**112**	**11,229**	**11,005**	**224**	**11,495**	**11,265**	**230**	**11,805**	**11,514**	**291**
Withholding taxes on:																
Resident interest income	1,631	1,673	1,641	32	1,905	1,876	29	2,419	2,632	(213)	2,879	3,157	(278)	3,271	3,632	(361)
Non-resident income	420	394	370	24	459	462	(3)	521	511	10	559	542	17	585	560	25
Foreign-source dividends	2	2	1	1	2	1	1	2	1	1	2	1	1	2	..	2
Resident dividend income	516	460	404	56	492	455	37	520	479	41	530	490	40	540	497	43
Subtotal: Withholding tax	**2,569**	**2,529**	**2,416**	**113**	**2,858**	**2,794**	**64**	**3,462**	**3,623**	**(161)**	**3,970**	**4,190**	**(220)**	**4,398**	**4,689**	**(291)**
Total income tax	**39,409**	**41,111**	**41,106**	**5**	**43,554**	**43,352**	**202**	**46,439**	**46,368**	**71**	**48,960**	**48,806**	**154**	**51,574**	**51,355**	**219**
Other: Estate and gift duties	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total direct tax	**39,409**	**41,111**	**41,106**	**5**	**43,554**	**43,352**	**202**	**46,439**	**46,368**	**71**	**48,960**	**48,806**	**154**	**51,574**	**51,355**	**219**
Indirect tax																
GST (net)	**21,356**	**22,855**	**22,901**	**(46)**	**24,099**	**24,167**	**(68)**	**25,392**	**25,486**	**(94)**	**26,432**	**26,563**	**(131)**	**27,495**	**27,359**	**136**
Excise duties on:																
Alcoholic drinks	663	655	660	(5)	680	715	(35)	711	740	(29)	743	780	(37)	775	815	(40)
Tobacco products	281	294	270	24	298	285	13	305	300	5	318	305	13	318	310	8
Petroleum fuels	855	938	950	(12)	995	990	5	1,055	1,040	15	1,084	1,060	24	1,112	1,080	32
Subtotal: excise duties	**1,799**	**1,887**	**1,880**	**7**	**1,973**	**1,990**	**(17)**	**2,071**	**2,080**	**(9)**	**2,145**	**2,145**	**..**	**2,205**	**2,205**	**..**
Other indirect tax																
Customs duty	2,056	2,201	2,150	51	2,292	2,230	62	2,403	2,350	53	2,479	2,430	49	2,503	2,470	33
Road user charges	1,066	1,155	1,180	(25)	1,250	1,285	(35)	1,346	1,385	(39)	1,412	1,440	(28)	1,470	1,495	(25)
Gaming duties	267	264	268	(4)	266	271	(5)	270	274	(4)	273	277	(4)	277	281	(4)
Motor vehicle fees	174	183	185	(2)	191	190	1	196	195	1	200	200	..	203	205	(2)
Exhaustible resource levy	34	36	29	7	36	27	9	36	27	9	36	25	11	36	25	11
Approved issuer levy, cheque duty & other	87	95	93	2	95	95	..	95	95	..	95	95	..	95	95	..
Subtotal: Other indirect tax	**3,684**	**3,934**	**3,905**	**29**	**4,130**	**4,098**	**32**	**4,346**	**4,326**	**20**	**4,495**	**4,467**	**28**	**4,584**	**4,571**	**13**
Total indirect tax	**26,839**	**28,676**	**28,686**	**(10)**	**30,202**	**30,255**	**(53)**	**31,809**	**31,892**	**(83)**	**33,072**	**33,175**	**(103)**	**34,284**	**34,135**	**149**
Total tax	**66,248**	**69,787**	**69,792**	**(5)**	**73,756**	**73,607**	**149**	**78,248**	**78,260**	**(12)**	**82,032**	**81,981**	**51**	**85,858**	**85,490**	**368**
Total tax (% of GDP)	31.1%	30.6%	30.6%	0.0%	30.8%	30.8%	0.0%	31.2%	31.2%	0.0%	31.5%	31.5%	0.0%	31.8%	31.6%	0.2%
less Core Crown tax eliminations																
Core Crown income tax	984	554	554		547	547		589	589		637	637		688	688	
GST on Crown expenses and departmental outputs	6,151	6,257	6,257		6,415	6,415		6,582	6,582		6,706	6,706		6,807	6,807	
Crown ESCT	421	455	455		447	447		453	453		459	459		464	464	
Crown AIL	41	30	30		30	30		30	30		30	30		30	30	
Core Crown taxation	**58,651**	**62,491**	**62,496**	**(5)**	**66,317**	**66,168**	**149**	**70,594**	**70,606**	**(12)**	**74,200**	**74,149**	**51**	**77,869**	**77,501**	**368**
Core Crown tax (% of GDP)	27.6%	27.4%	27.4%	0.0%	27.7%	27.7%	0.0%	28.2%	28.2%	0.0%	28.5%	28.5%	0.0%	28.8%	28.7%	0.1%
less Total Crown tax eliminations																
Income tax from SOEs and CEs	446	459	459		549	549		588	588		635	635		668	668	
Other Crown GST	..	..	..		..	..		..	..		..	..		..	..	
ESCT from SOEs and CEs	17	7	7		7	7		8	8		8	8		8	8	
Lottery duty	54	56	56		59	59		60	60		64	64		66	66	
Total Crown taxation	**58,134**	**61,969**	**61,974**	**(5)**	**65,702**	**65,553**	**149**	**69,938**	**69,950**	**(12)**	**73,493**	**73,442**	**51**	**77,127**	**76,759**	**368**
Total Crown tax (% of GDP)	27.3%	27.2%	27.2%	0.0%	27.5%	27.4%	0.1%	27.9%	27.9%	0.0%	28.2%	28.2%	0.0%	28.5%	28.4%	0.1%
Nominal GDP	212,721	227,793	227,793		239,172	239,172		250,494	250,494		260,334	260,334		270,295	270,295	

Table 9 – Treasury and IRD forecasts of tax receipts (cash)

	2012/13 Actual	2013/14 Forecast			2014/15 Forecast			2015/16 Forecast			2016/17 Forecast			2017/18 Forecast		
$ million		**Treasury**	**IRD**	**Difference**	**Treasury**	**IRD**	**Difference**	**Treasury**	**IRD**	**Difference**	**Treasury**	**IRD**	**Difference**	**Treasury**	**IRD**	**Difference**
Direct tax																
Individuals																
Source deductions	22,618	24,149	24,143	6	25,444	25,660	(216)	26,802	26,972	(170)	28,267	28,372	(105)	29,918	29,935	(17)
Other persons tax	5,194	5,667	5,457	210	5,764	5,727	37	6,046	5,920	126	6,348	6,219	129	6,591	6,453	138
Refunds	(2,251)	(2,084)	(2,115)	31	(2,005)	(2,245)	240	(2,067)	(2,136)	69	(2,140)	(2,216)	76	(2,226)	(2,271)	45
Fringe benefit tax	465	478	477	1	500	492	8	520	507	13	542	523	19	566	539	27
Subtotal: Individuals	**26,026**	**28,210**	**27,962**	**248**	**29,703**	**29,634**	**69**	**31,301**	**31,263**	**38**	**33,017**	**32,898**	**119**	**34,849**	**34,656**	**193**
Company tax (net)	**9,319**	**9,974**	**9,885**	**89**	**10,499**	**10,287**	**212**	**11,033**	**10,812**	**221**	**11,353**	**11,124**	**229**	**11,601**	**11,312**	**289**
Withholding taxes on:																
Resident interest income	1,635	1,672	1,640	32	1,904	1,875	29	2,417	2,630	(213)	2,877	3,155	(278)	3,269	3,630	(361)
Non-resident income	451	392	368	24	457	460	(3)	519	509	10	557	540	17	583	558	25
Foreign-source dividends	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1
Resident dividend income	516	460	404	56	492	455	37	520	479	41	530	490	40	540	497	43
Subtotal: Withholding tax	**2,603**	**2,526**	**2,413**	**113**	**2,855**	**2,791**	**64**	**3,458**	**3,619**	**(161)**	**3,966**	**4,186**	**(220)**	**4,394**	**4,686**	**(292)**
Total income tax	**37,948**	**40,710**	**40,260**	**450**	**43,057**	**42,712**	**345**	**45,792**	**45,694**	**98**	**48,336**	**48,208**	**128**	**50,844**	**50,654**	**190**
Other: Estate and gift duties	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total direct tax	**37,948**	**40,710**	**40,260**	**450**	**43,057**	**42,712**	**345**	**45,792**	**45,694**	**98**	**48,336**	**48,208**	**128**	**50,844**	**50,654**	**190**
Indirect tax																
GST (net)	**20,978**	**22,480**	**22,532**	**(52)**	**23,721**	**23,780**	**(59)**	**25,000**	**25,082**	**(82)**	**26,040**	**26,159**	**(119)**	**27,084**	**26,938**	**146**
Excise duties on:																
Alcoholic drinks	666	655	660	(5)	680	715	(35)	711	740	(29)	743	780	(37)	775	815	(40)
Tobacco products	287	294	270	24	298	285	13	305	300	5	318	305	13	318	310	8
Petroleum fuels	865	938	950	(12)	995	990	5	1,055	1,040	15	1,084	1,060	24	1,112	1,080	32
Subtotal: Excise duties	**1,818**	**1,887**	**1,880**	**7**	**1,973**	**1,990**	**(17)**	**2,071**	**2,080**	**(9)**	**2,145**	**2,145**	**..**	**2,205**	**2,205**	**..**
Other indirect tax																
Customs duty	2,035	2,201	2,150	51	2,292	2,230	62	2,403	2,350	53	2,479	2,430	49	2,503	2,470	33
Road user charges	1,064	1,155	1,180	(25)	1,250	1,285	(35)	1,346	1,385	(39)	1,412	1,440	(28)	1,470	1,495	(25)
Gaming duties	268	262	268	(6)	266	271	(5)	270	274	(4)	273	277	(4)	277	281	(4)
Motor vehicle fees	179	183	185	(2)	191	190	1	196	195	1	200	200	..	203	205	(2)
Exhaustible resource levy	34	36	29	7	36	27	9	36	27	9	36	25	11	36	25	11
Approved issuer levy, cheque duty & other	87	96	93	3	95	95	..	95	95	..	95	95	..	95	95	..
Subtotal: Other indirect tax	**3,667**	**3,933**	**3,905**	**28**	**4,130**	**4,098**	**32**	**4,346**	**4,326**	**20**	**4,495**	**4,467**	**28**	**4,584**	**4,571**	**13**
Total indirect tax	**26,463**	**28,300**	**28,317**	**(17)**	**29,824**	**29,868**	**(44)**	**31,417**	**31,488**	**(71)**	**32,680**	**32,771**	**(91)**	**33,873**	**33,714**	**159**
Total tax	**64,411**	**69,010**	**68,577**	**433**	**72,881**	**72,580**	**301**	**77,209**	**77,182**	**27**	**81,016**	**80,979**	**37**	**84,717**	**84,368**	**349**
Total tax (% of GDP)	30.3%	30.3%	30.1%	0.2%	30.5%	30.3%	0.2%	30.8%	30.8%	0.0%	31.1%	31.1%	0.0%	31.3%	31.2%	0.1%
less Core Crown tax eliminations																
Core Crown income tax	877	600	600		552	552		581	581		627	627		678	678	
GST on Crown expenses and departmental outputs	6,145	6,239	6,239		6,389	6,389		6,559	6,559		6,707	6,707		6,827	6,827	
Crown ESCT	415	427	427		434	434		441	441		448	448		448	448	
Crown AIL	42	29	29		31	31		30	30		30	30		30	30	
Core Crown taxation	**56,932**	**61,715**	**61,282**	**433**	**65,475**	**65,174**	**301**	**69,598**	**69,571**	**27**	**73,204**	**73,167**	**37**	**76,734**	**76,385**	**349**
Core Crown tax (% of GDP)	26.8%	27.1%	26.9%	0.2%	27.4%	27.2%	0.2%	27.8%	27.8%	0.0%	28.1%	28.1%	0.0%	28.4%	28.3%	0.1%
less Total Crown tax eliminations																
Income tax from SOEs and CEs	374	499	499		509	509		567	567		607	607		632	632	
Other Crown GST	77	13	13		(21)	(21)		(14)	(14)		(14)	(14)		(1)	(1)	
ESCT from SOEs and CEs	15	7	7		7	7		7	7		7	7		7	7	
Lottery duty	53	57	57		58	58		62	62		64	64		67	67	
Total Crown taxation	**56,413**	**61,139**	**60,706**	**433**	**64,922**	**64,621**	**301**	**68,976**	**68,949**	**27**	**72,540**	**72,503**	**37**	**76,029**	**75,680**	**349**
Total Crown tax (% of GDP)	26.5%	26.8%	26.6%	0.2%	27.1%	27.0%	0.1%	27.5%	27.5%	0.0%	27.9%	27.8%	0.1%	28.1%	28.0%	0.1%

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.[1]

The Treasury calculates two summary fiscal indicators: the cyclically-adjusted balance (CAB) and the fiscal impulse indicator.

- The cyclically-adjusted balance adjusts the operating balance before gains and losses (OBEGAL) for the cyclical position of the economy. The CAB is subject to uncertainty because it uses estimated variables and is sensitive to new information, particularly regarding the output gap.
- The fiscal impulse indicator uses the change in a cash-based version of the fiscal balance (a cyclically-adjusted balance supplemented by capital expenditure).

Further information on the methodology behind the indicators can be found in Treasury Working Papers 02/30 and 10/08.[2]

Central estimate

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. Similarly for one measure of the fiscal impulse, some earthquake expenditures that are more of a financial nature are removed as the demand effects arising from such flows (eg, EQC payments to households) will show up in other parts of the economy.

Cyclically-adjusted balance

The operating balance (before gains and losses) and the cyclically-adjusted balance are shown in Figure 1. They are similar to those estimated in the *Budget Update*, although are marginally higher across much of the forecast period, reflecting a mixture of higher tax revenue and lower expenditure than previously forecast. The headline OBEGAL deficit is forecast to be 1.0% of GDP in the year ended June 2014 (*Budget Update:* 0.9% of GDP), while the cyclically-adjusted balance, excluding earthquake expenses, is estimated to be a deficit of 0.6% of GDP in the same year (*Budget Update*: 0.7% of GDP). The difference

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

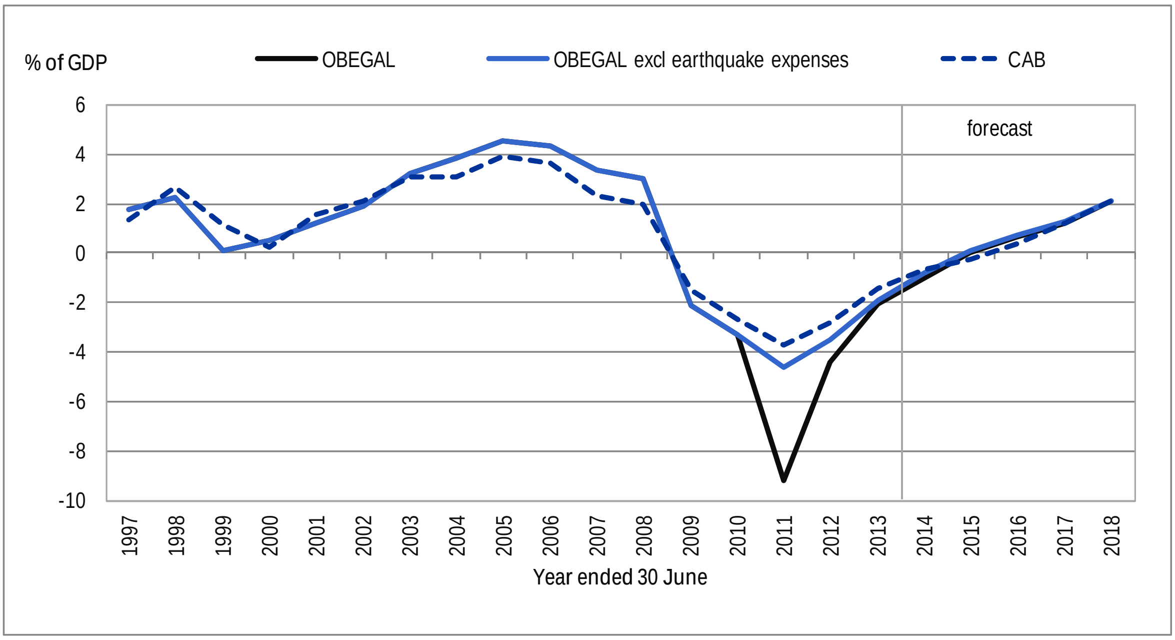
2 Renee Philip and John Janssen (2002) "Indicators of Fiscal Impulse for New Zealand" New Zealand Treasury Working Paper 02/30, December 2002 http://www.treasury.govt.nz/publications/research-policy/wp/2002/02-30/.

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/.

between the headline and cyclically-adjusted balance comprises the impact of the automatic stabilisers, of 0.2% of GDP, and the earthquake-adjustment of 0.2% of GDP.

The cyclically-adjusted balance is expected to move into surplus in the year ended June 2016. This is one year later than previously forecast due to upward revisions to the output gap across the middle years of the forecast period. The more positive output gap results in a larger component of tax revenue being attributed to a cyclical upturn, reducing the underlying cyclically-adjusted balance in these years. By the end of the forecast period in 2018, the cyclically-adjusted balance reaches a surplus of 2.1% of GDP.

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. Purchases and sales of investments are also excluded from the measure. As a result, any sale proceeds from the Government's share offer programme do not impact on the fiscal impulse indicator.

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 impacted by Budget decisions, whereas the core Crown plus Crown entity indicator provides a better indication of the total impact of central government activities (ie, excluding State-Owned Enterprises). A measure of the fiscal impulse that excludes Canterbury-related financial transactions is also shown, which adjusts for EQC and Southern Response payments. EQC and Southern Response payments account for much of the difference between the core Crown fiscal impulse and the indicator for the core Crown plus Crown entities.

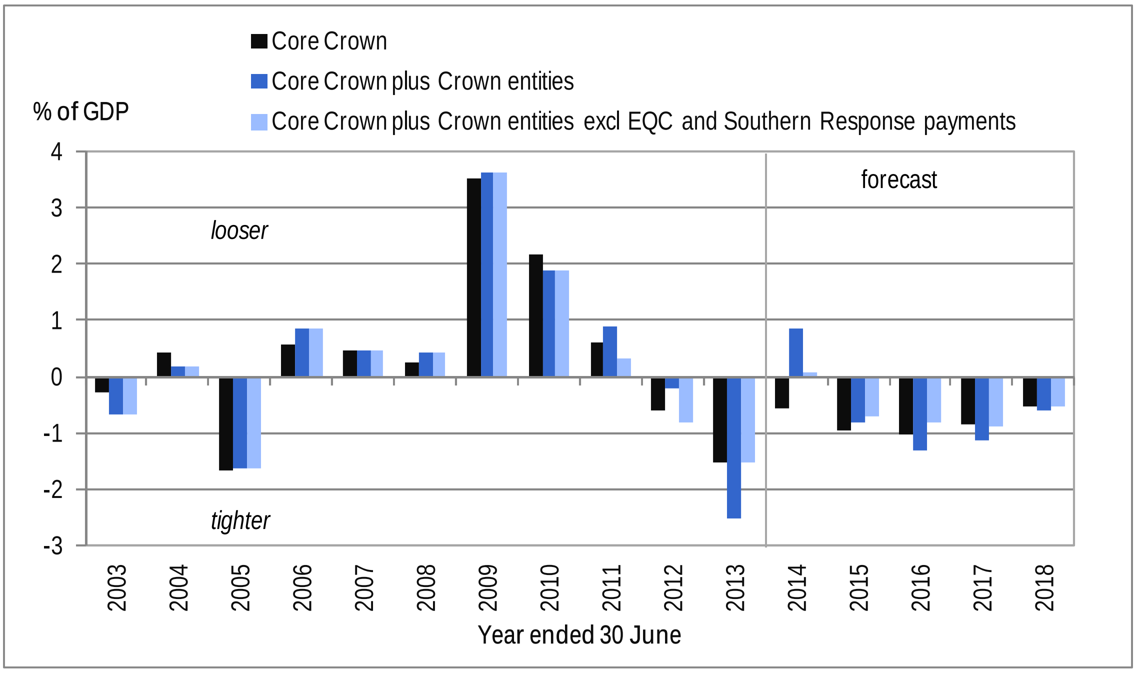
It is worth noting that summary indicators such as fiscal impulse do not take account of the composition of fiscal policy changes or how a change in fiscal policy will be transmitted through the economy. Treasury research using time series statistical analysis indicates that spending and taxes have different effects on New Zealand GDP.[3] Therefore the fiscal impulse indicator is only a very imprecise guide to the impact of fiscal policy on the economy.

The fiscal impulse shows that fiscal policy is expected to have a contractionary impact on demand in almost every year of the forecast horizon. The outturn for the 2013 June year was more contractionary than expected in the *Budget Update,* due to a combination of higher tax revenue, mainly from corporate taxation, and lower government spending (*Half Year Update*: -1.5% of GDP; *Budget Update*: -0.5% of GDP). Over the fiscal year to June 2014, the fiscal balance is expected to remain largely stable, as stronger tax revenue is partly offset by the assumption that some of the lower government spending in 2013 will be caught up. As the fiscal impulse is calculated as the change in the fiscal balance, this results in a broadly neutral impulse in 2014. It is also worth noting the difference in 2014 between the unadjusted and Canterbury-adjusted fiscal impulses. The significant one-off positive impulse in the unadjusted measure is due to reinsurance inflows being expected to peak in this year. This reduces the size of the unadjusted fiscal deficit and leads the following year's impulse to be more expansionary than the adjusted measure. As these reinsurance flows do not reflect the impact of discretionary fiscal policy on the domestic economy, the adjusted measure gives a better estimate of the impact of fiscal policy in these years.

Over the latter half of the forecast period, fiscal policy is expected to withdraw 0.7% of GDP from aggregate demand on average each year. This is marginally more than in the *Budget Update,* due mainly to higher tax revenue resulting from the stronger economic outlook.

[3] Parkyn and Vehbi (2013) "The Effects of Fiscal Policy in New Zealand: Evidence from a VAR Model with Debt Constraints" New Zealand Treasury Working Paper 13/02. 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

Figure 2 – Estimates of the fiscal impulse



Source: The Treasury

Sensitivity analysis

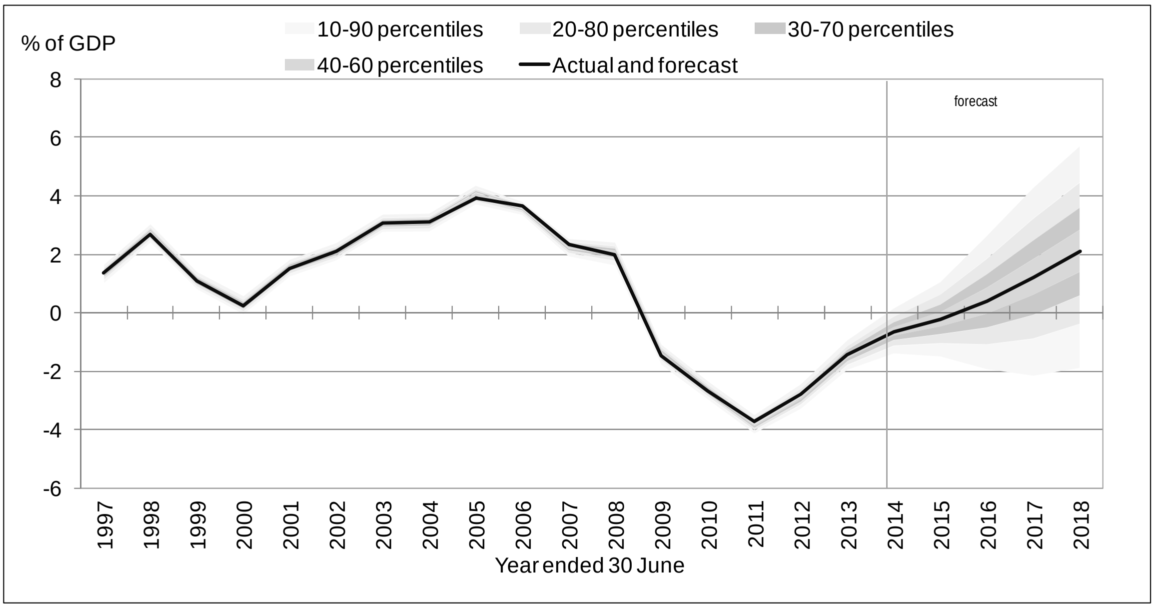
As noted above, there is much uncertainty about the summary indicator estimates. There are two broad sources of that uncertainty which can lead to revisions in the indicator estimates:

- 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.

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 15 and 16). Differences in the output gap estimates are mainly the result of differences in estimation technique, although it also reflects different institutions' judgements about the forecast outlook and the availability of data at the time of forecast finalisation. Accordingly, it provides an indication of uncertainty due to model specification but it does not capture total forecast uncertainty.

An alternative means of illustrating uncertainty is to show a probability distribution around the central forecast. A probability distribution requires making some assumptions about future forecast errors based on historical forecast errors of observable economic and fiscal variables and historical revisions to the Treasury's output gap estimates. In Figure 3, a fan chart of the cyclically-adjusted balance indicator is shown. The probability intervals calculated are conditional on current policy and reflect historical 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.[4] This analysis would suggest that there is a structural fiscal deficit in the year ended 2014 with a high degree of confidence, but uncertainty grows considerably beyond a three-year horizon. By the end of 2015, the modelling shows roughly evenly weighted probabilities of the cyclically-adjusted balance being in surplus or deficit.

Figure 3 – Fan chart for cyclically-adjusted balance

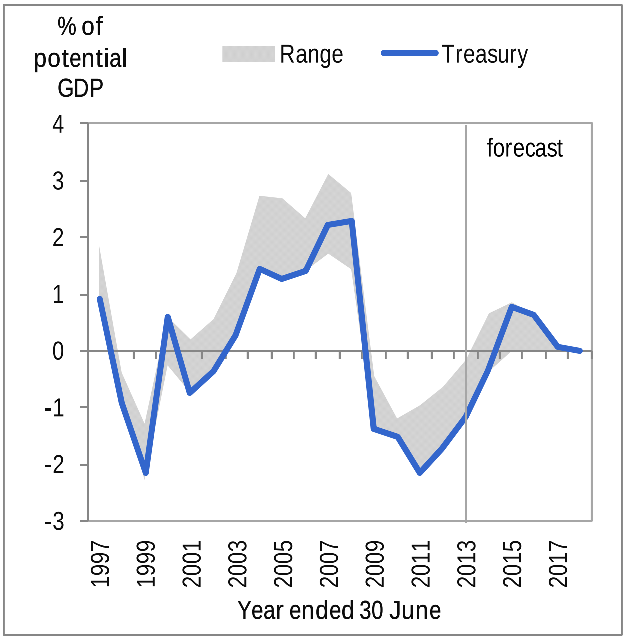


Source: The Treasury

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

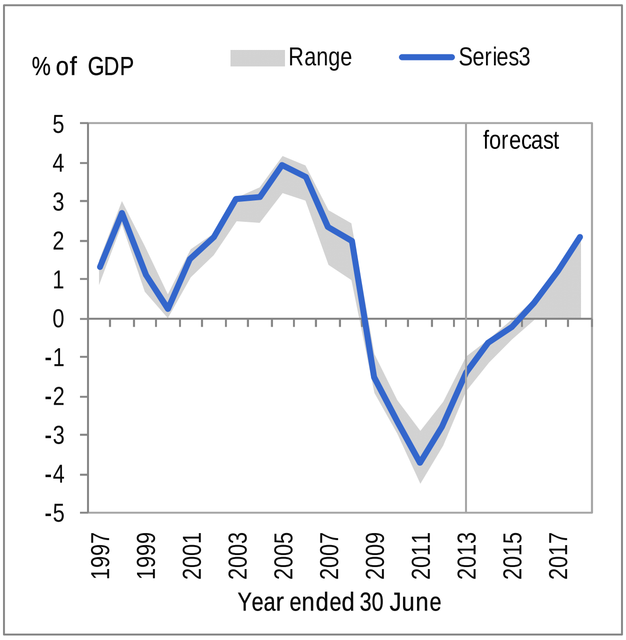
4 Oscar Parkyn (2010) "Estimating New Zealand's Structural Budget Balance." New Zealand Treasury Working Paper 10/08 http://www.treasury.govt.nz/publications/research-policy/wp/2010/10-08/.

Figure 4 – Output gap range



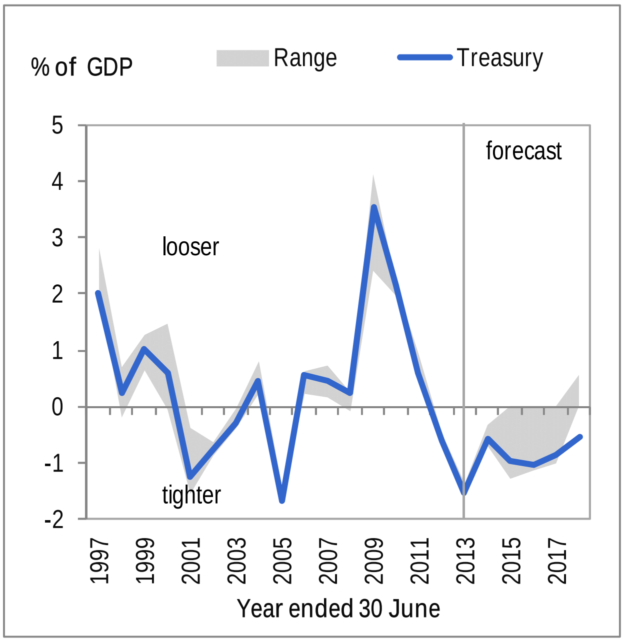
Source: The Treasury

Figure 5 – Cyclically-adjusted balance range



Source: The Treasury

Figure 6 – Core Crown fiscal impulse range



Source: The Treasury

Terms-of-trade adjustment

The Treasury has recently started to produce regular estimates of the terms-of-trade effect on the budget balance. This follows the methodology outlined in Treasury Working Paper 10/08.[5]

Estimating the terms-of-trade effect means calculating the approximate amount of tax revenue that is due to deviations in the terms of trade from some specified structural, or long-run, level. The central 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 is made to understand what the underlying fiscal position may be under different assumptions (ie, scenarios) about the long-run level of the terms of trade. The purpose is to produce information that helps to make judgements about the fiscal position from a medium-term perspective, without compromising the forecasts' role of presenting 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.[6] The historical average and trend estimates are used as estimates of the structural level of the terms of trade. 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.

A terms-of-trade adjustment, for each alternate assumption, is reported in Table 17. 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 about 2.3% of GDP from structural tax revenues in the year ended June 2014. This implies a larger structural budget deficit than without the terms-of-trade adjustment. Alternately, using the statistical filter, which smoothes out fluctuations around a time-varying trend, a terms-of-trade adjustment would subtract only 0.3% of GDP from the structural budget balance in the 2014 June year.

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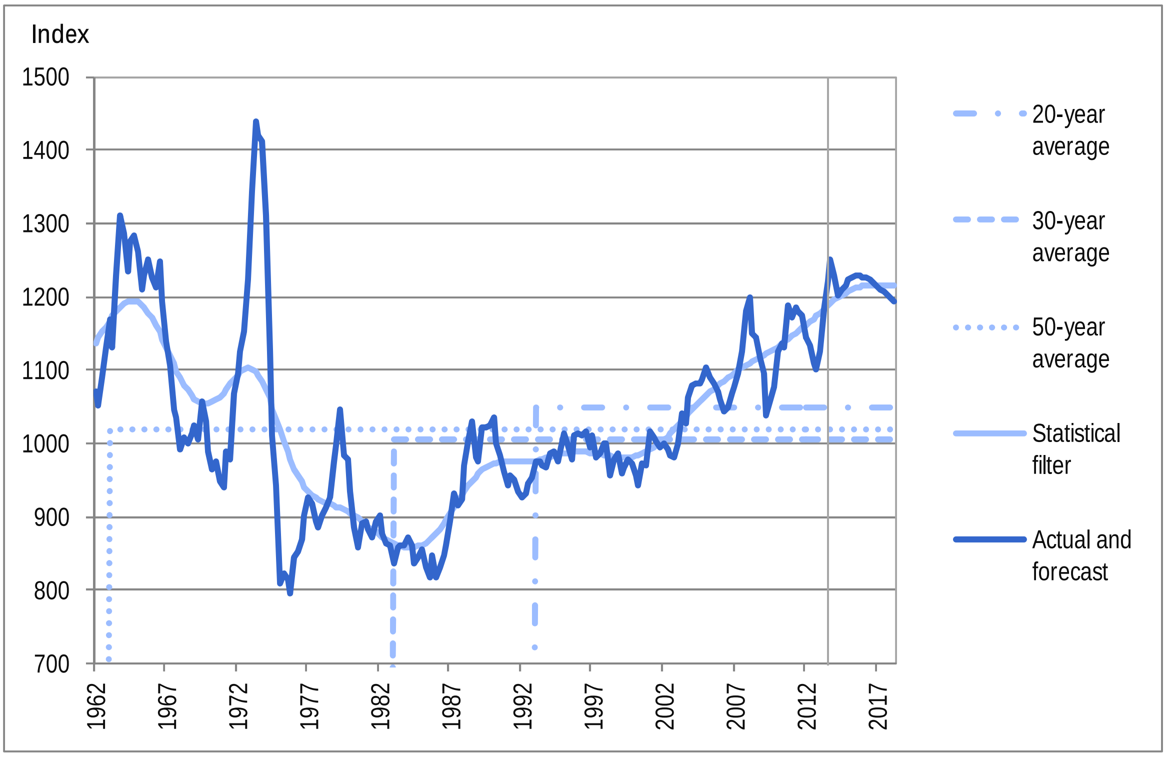
5 Oscar Parkyn (2010) "Estimating New Zealand's Structural Budget Balance." New Zealand Treasury Working Paper 10/08 http://www.treasury.govt.nz/publications/research-policy/wp/2010/10-08/.

6 A Hodrick-Prescott filter is used on quarterly data with a smoothing parameter of 1600.

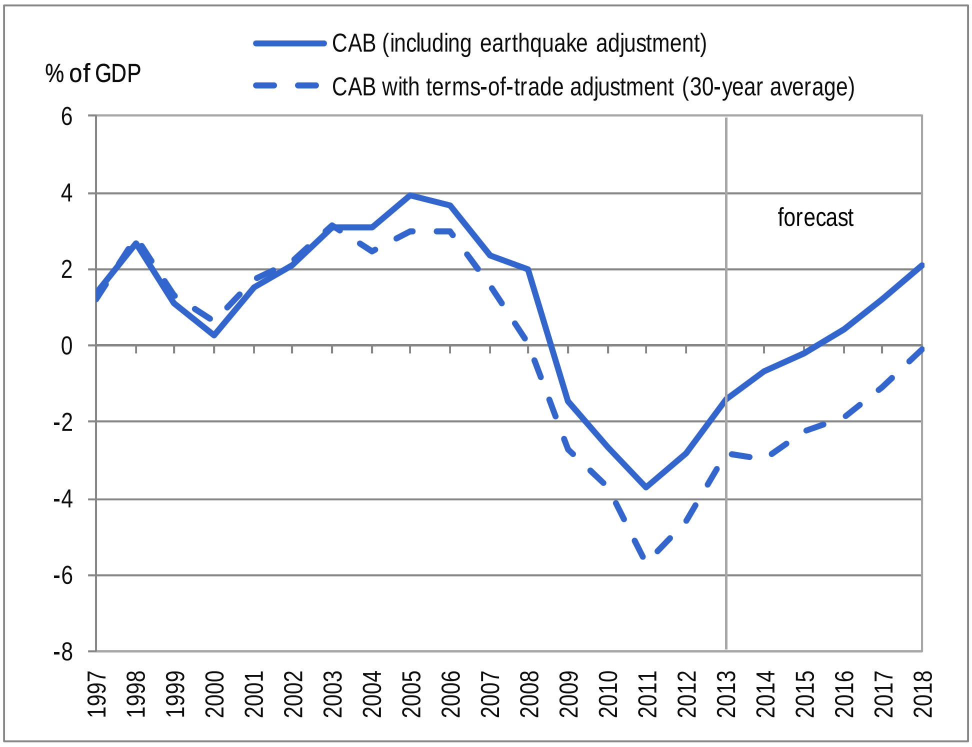
Figure 7 – Terms of trade with historical average and time-varying trend



Sources: Statistics New Zealand, the Treasury

Note: Due to data availability, this uses the goods and services terms of trade spliced with the goods terms of trade for the period prior to 1987.

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



Source: The Treasury

Data tables for summary fiscal indicators

Table 10 – 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 & Southern Response payouts
1999	-2.1	0.1		1.1	1.0		
2000	0.6	0.5		0.2	0.6		
2001	-0.7	1.2		1.5	-1.3		
2002	-0.3	1.9		2.1	-0.8		
2003	0.3	3.2		3.1	-0.3	-0.7	-0.7
2004	1.5	3.8		3.1	0.4	0.2	0.2
2005	1.3	4.6		3.9	-1.7	-1.6	-1.6
2006	1.4	4.3		3.7	0.6	0.9	0.9
2007	2.2	3.4		2.3	0.5	0.5	0.5
2008	2.3	3.0		2.0	0.2	0.4	0.4
2009	-1.4	-2.1		-1.5	3.5	3.6	3.6
2010	-1.5	-3.3		-2.7	2.2	1.9	1.9
2011	-2.1	-9.2	-4.6	-3.7	0.6	0.9	0.3
2012	-1.7	-4.4	-3.5	-2.8	-0.6	-0.2	-0.8
2013	-1.2	-2.0	-1.9	-1.4	-1.5	-2.5	-1.5
2014	-0.4	-1.0	-0.8	-0.6	-0.6	0.9	0.1
2015	0.8	0.0	0.1	-0.2	-1.0	-0.8	-0.7
2016	0.6	0.7	0.7	0.4	-1.0	-1.3	-0.8
2017	0.1	1.2	1.2	1.2	-0.9	-1.1	-0.9
2018	0.0	2.1	2.1	2.1	-0.5	-0.6	-0.5

Source: The Treasury

Table 11 – Sources for alternative output gaps

Institution	Source	Publication date
The Treasury	*Half-Year Economic and Fiscal Update*	December 2013
RBNZ	*Monetary Policy Statement*	September 2013
IMF	*World Economic Outlook*	October 2013
OECD	*Economic Outlook*	November 2013

Table 12 – 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 13 – Output gap estimates used in sensitivity analysis (% of potential GDP)

June year	The Treasury	RBNZ	IMF	OECD
1999	-2.1	-2.3	-1.4	-1.3
2000	0.6	0.4	-0.3	-0.2
2001	-0.7	-0.7	0.2	-0.1
2002	-0.3	0.0	0.6	0.1
2003	0.3	1.3	1.4	1.1
2004	1.5	2.7	2.0	2.2
2005	1.3	2.5	2.5	2.7
2006	1.4	2.3	1.7	2.2
2007	2.2	3.1	1.7	2.3
2008	2.3	2.8	1.6	1.4
2009	-1.4	-1.1	-0.6	-0.4
2010	-1.5	-1.2	-1.3	-1.2
2011	-2.1	-1.7	-1.0	-1.6
2012	-1.7	-0.8	-0.6	-1.2
2013	-1.2	-0.2	-0.2	-0.5
2014	-0.4	0.7	0.1	-0.1
2015	0.8	0.9		0.4
2016	0.6	0.4		
2017	0.1			
2018	0.0			

Sources: The Treasury, RBNZ, IMF, OECD

Table 14 – 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
1999	0.1	1.1	1.2	0.8	0.7	0.7	1.9
2000	0.5	0.2	0.3	0.6	0.6	0.4	0.0
2001	1.2	1.5	1.5	1.1	1.2	1.4	1.8
2002	1.9	2.1	1.9	1.7	1.9	2.0	2.2
2003	3.2	3.1	2.6	2.5	2.7	3.1	3.0
2004	3.8	3.1	2.5	2.8	2.7	3.4	2.5
2005	4.6	3.9	3.3	3.4	3.2	4.2	3.4
2006	4.3	3.7	3.2	3.5	3.3	4.0	3.1
2007	3.4	2.3	1.9	2.6	2.3	2.8	1.4
2008	3.0	2.0	1.7	2.3	2.4	2.5	1.0
2009	-2.1	-1.5	-1.6	-1.8	-1.9	-1.8	-0.9
2010	-3.3	-2.7	-2.8	-2.7	-2.8	-2.9	-2.1
2011	-9.2	-3.7	-3.9	-4.2	-3.9	-4.1	-2.9
2012	-4.4	-2.8	-3.2	-3.3	-3.0	-3.1	-2.1
2013	-2.0	-1.4	-1.8	-1.9	-1.7	-1.7	-1.0
2014	-1.0	-0.6	-1.1	-0.9	-0.8	-0.7	-0.5
2015	0.0	-0.2	-0.3		0.0	-0.1	-0.5
2016	0.7	0.4	0.5			0.5	0.2
2017	1.2	1.2				1.2	1.2
2018	2.1	2.1				2.1	2.1

Source: The Treasury

Table 15 – 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
1999	1.0	0.7	1.1	1.3	1.2	0.6
2000	0.6	0.6	-0.1	-0.1	0.2	1.5
2001	-1.3	-1.1	-0.4	-0.5	-0.9	-1.6
2002	-0.8	-0.6	-0.8	-0.9	-0.8	-0.7
2003	-0.3	0.0	-0.2	-0.2	-0.4	-0.1
2004	0.4	0.5	0.2	0.4	0.3	0.8
2005	-1.7	-1.7	-1.4	-1.4	-1.7	-1.7
2006	0.6	0.4	0.2	0.3	0.5	0.6
2007	0.5	0.4	0.2	0.2	0.3	0.7
2008	0.2	0.1	0.2	-0.1	0.2	0.2
2009	3.5	3.4	4.0	4.1	4.1	2.4
2010	2.2	2.2	2.0	2.0	2.2	2.1
2011	0.6	0.6	0.9	0.7	0.7	0.4
2012	-0.6	-0.5	-0.6	-0.6	-0.7	-0.5
2013	-1.5	-1.5	-1.5	-1.5	-1.6	-1.4
2014	-0.6	-0.5	-0.7	-0.7	-0.7	-0.3
2015	-1.0	-1.3		-1.2	-1.1	-0.6
2016	-1.0	-1.1			-1.0	-1.1
2017	-0.9				-0.8	-1.0
2018	-0.5				-0.5	-0.6

Source: The Treasury

Table 16 – 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
1999	1.1	0.4	0.2	0.7	0.0	1.5	1.3	1.8	1.1
2000	0.2	0.5	0.4	0.8	0.1	0.8	0.6	1.1	0.4
2001	1.5	0.4	0.2	0.7	0.0	1.9	1.7	2.2	1.5
2002	2.1	0.3	0.1	0.6	0.1	2.4	2.2	2.7	2.2
2003	3.1	0.2	0.1	0.6	0.3	3.3	3.1	3.7	3.3
2004	3.1	-0.5	-0.7	-0.2	-0.2	2.6	2.5	2.9	2.9
2005	3.9	-0.8	-1.0	-0.5	-0.3	3.1	3.0	3.5	3.6
2006	3.7	-0.5	-0.7	-0.2	0.2	3.2	3.0	3.5	3.8
2007	2.3	-0.6	-0.8	-0.3	0.2	1.8	1.6	2.1	2.6
2008	2.0	-1.7	-1.9	-1.4	-0.6	0.3	0.1	0.6	1.4
2009	-1.5	-1.0	-1.2	-0.7	0.2	-2.5	-2.7	-2.1	-1.3
2010	-2.7	-0.9	-1.0	-0.5	0.3	-3.5	-3.7	-3.2	-2.4
2011	-3.7	-1.8	-2.0	-1.4	-0.3	-5.5	-5.7	-5.1	-4.0
2012	-2.8	-1.6	-1.8	-1.3	0.0	-4.4	-4.6	-4.1	-2.8
2013	-1.4	-1.2	-1.4	-0.9	0.5	-2.6	-2.8	-2.3	-1.0
2014	-0.6	-2.1	-2.3	-1.8	-0.3	-2.8	-3.0	-2.4	-0.9
2015	-0.2	-1.9	-2.0	-1.5	0.0	-2.1	-2.2	-1.7	-0.2
2016	0.4	-2.1	-2.3	-1.8	-0.1	-1.7	-1.9	-1.4	0.3
2017	1.2	-2.1	-2.3	-1.8	0.0	-0.9	-1.1	-0.6	1.2
2018	2.1	-2.0	-2.2	-1.6	0.3	0.1	-0.1	0.5	2.4

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 (eg, 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 underlying differences between countries in measurement and recognition. These differences mean that it can be difficult to make meaningful cross-country comparisons.

Further information on GFS can be found on the IMF's website[7].

New Zealand's GFS accounts

The following section provides fiscal forecasts for central Government on a GFS basis. These are prepared by applying top-down adjustments to the Forecast Financial Statements presented in the *Half Year Update*, which were prepared on a Generally Accepted Accounting Practice (GAAP) basis. The major differences between the forecasts are:

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 *Half Year 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 provisional. Statistics New Zealand is working towards an official GFS series, which will also include local government. Table 17 outlines some of the key indicators for the central government under a GFS presentation.

7 http://www.imf.org/external/pubs/ft/gfs/manual/index.htm

Table 17 – Summary indicators for central government

	2013 Actual	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast
$million						
Net operating balance	(1,054)	657	2,685	4,186	5,541	8,070
Fiscal Balance (Net lending/borrowing)	(1,491)	(1,842)	390	1,594	3,265	6,190
Cash surplus/(deficit)	(4,146)	(5,981)	(3,366)	485	2,962	4,957
Net worth	65,647	67,286	70,366	75,140	81,470	90,420
Net financial worth	21,249	22,109	21,324	19,142	15,088	8,018
Borrowing	68,398	71,514	69,786	73,869	78,895	72,851
%GDP						
Net operating balance	(0.5)	0.3	1.1	1.7	2.1	3.0
Fiscal Balance (Net lending/borrowing)	(0.7)	(0.8)	0.2	0.6	1.3	2.3
Cash surplus/(deficit)	(1.9)	(2.6)	(1.4)	0.2	1.1	1.8
Net worth	30.9	29.5	29.4	30.0	31.3	33.5
Net financial worth	10.0	9.7	8.9	7.6	5.8	3.0
Borrowing	32.2	31.4	29.2	29.5	30.3	27.0

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

Table	**Name of the statement**	**What the statement shows**
18	Statement of operations	A summary of the results of all transactions during an accounting period.
19	Statement of other economic flows	Changes to stocks of assets, liabilities and net worth that come about from sources other than transactions.
20	Balance sheet	Stocks of assets and liabilities and the corresponding net worth.
21	Statement of sources and uses of cash	A summary of all cash flows presented using classifications similar to the Statement of operations.
22	Statement of stocks and flows	How the operating balance is applied to capital investment and debt repayment at a component level.
23	Reconciliation between GAAP and GFS operating balance	The adjustments between the GAAP and GFS operating balance.
24	Reconciliation between GAAP residual cash and GFS cash surplus/(deficit)	The adjustments between the GAAP and GFS cash indicators.

The GFS manual (on the IMF's website) includes additional explanations on definitions for some of the terminology used in this section.

Table 18 – Statement of operations

	2013 Actual $m	2014 Forecast $m	2015 Forecast $m	2016 Forecast $m	2017 Forecast $m	2018 Forecast $m
Revenue						
Taxation revenue	62,548	66,371	69,870	73,830	77,353	81,101
Interest revenue and dividends	3,015	3,451	3,147	3,352	3,752	4,076
Grants	-	-	-	-	-	-
Sale of goods and services and other revenue	9,514	9,571	9,710	9,822	9,945	9,969
Total revenue	75,077	79,393	82,727	87,004	91,050	95,146
Expenses						
Compensation of employees	19,590	19,949	20,021	20,310	20,568	20,810
Consumption of capital	3,140	3,243	3,335	3,402	3,443	3,463
Social benefits	22,271	22,798	23,264	24,019	24,921	25,849
Grants and subsidies	4,892	5,476	5,262	5,369	5,532	5,024
Finance costs	3,195	3,239	3,352	3,520	3,769	3,768
Other expenses	23,043	25,186	24,202	24,394	24,409	24,347
Forecast for new operating spending and top-down adjustment	-	(1,155)	606	1,804	2,867	3,815
Total expenses	76,131	78,736	80,042	82,818	85,509	87,076
Net operating balance	(1,054)	657	2,685	4,186	5,541	8,070
Net acquisition of non-financial assets						
Acquisition of non-financial assets	3,923	6,245	5,690	6,001	5,447	5,378
Disposal of non-financial assets	(310)	(255)	(452)	(659)	(549)	(803)
Consumption of fixed assets	(3,140)	(3,243)	(3,335)	(3,402)	(3,443)	(3,463)
Change in inventories	(36)	(4)	-	11	(4)	(7)
Forecast for new capital spending and top-down adjustment	-	(244)	392	641	825	775
Fiscal Balance (Net lending/borrowing)	(1,491)	(1,842)	390	1,594	3,265	6,190
Net acquisition of financial assets						
Receivables	394	411	390	1,624	1,811	1,880
Advances	919	1,177	1,180	992	971	905
Other financial assets	(5,927)	(1,157)	(5,384)	3,779	7,216	(1,946)
Other assets	(977)	(2,859)	86	(29)	(151)	(130)
	(5,591)	(2,428)	(3,728)	6,366	9,847	709
Net incurrence of liabilities						
Borrowings	(1,990)	3,498	(1,573)	4,175	5,066	(6,056)
Accounts payable	(179)	344	(99)	1,056	569	(806)
Other liabilities	(1,931)	(4,428)	(2,446)	(459)	947	1,381
	(4,100)	(586)	(4,118)	4,772	6,582	(5,481)
Difference between net lending/borrowing and financing	-	-	-	-	-	-

Table 19 – Statement of other economic flows

	2013 Actual $m	2014 Forecast $m	2015 Forecast $m	2016 Forecast $m	2017 Forecast $m	2018 Forecast $m
Other Economic Flows						
Impairments and write-offs of financial assets	(2,433)	(2,471)	(2,433)	(2,346)	(2,380)	(2,449)
GSF valuations changes	1,251	539	-	-	-	-
Other gains/(losses) on non financial instruments	2,302	863	446	421	398	316
Derivatives gains	3,414	1,301	814	876	948	1,022
Derivatives losses	70	194	105	72	49	31
Gains/(losses) on financial assets	2,986	426	1,140	1,335	1,525	1,718
Gains/(losses) on financial liabilities	168	188	50	20	(9)	(43)
Reserve Bank equity accounted	308	72	183	199	236	287
SOEs equity accounted	(82)	(31)	82	113	142	153
Other items	(5)	(99)	8	(102)	(120)	(155)
Total other economic flows	7,979	982	395	588	789	880

Table 20 – Balance sheet

	2013 Actual $m	2014 Forecast $m	2015 Forecast $m	2016 Forecast $m	2017 Forecast $m	2018 Forecast $m
Assets						
Cash and cash equivalents	14,993	9,767	8,995	8,631	8,500	8,423
Receivables	18,390	17,241	16,102	16,302	16,675	17,050
Marketable securities, deposits and derivatives in gain	24,156	25,880	21,351	25,911	33,881	32,818
Share investments	17,149	21,102	22,879	24,582	26,345	28,198
Advances	11,888	12,273	12,643	12,804	12,920	12,962
Inventory	549	545	545	556	552	545
Other assets	1,622	1,677	1,753	1,779	1,758	1,750
Property, plant & equipment	86,347	89,094	90,997	92,937	94,392	95,504
Equity accounted investments	24,829	21,742	22,019	22,197	22,363	22,551
Intangible assets and goodwill	1,611	1,726	1,732	1,709	1,671	1,646
Forecast for new capital spending and top-down adjustment	-	(244)	148	789	1,614	2,389
Total assets	201,534	200,803	199,164	208,197	220,671	223,836
Liabilities						
Payables	10,129	10,501	10,432	11,516	12,114	11,307
Deferred revenue	1,334	1,306	1,276	1,248	1,219	1,220
Borrowings	68,398	71,514	69,786	73,869	78,895	72,851
Insurance liabilities	37,705	33,424	31,134	30,841	31,731	33,129
Retirement plan liabilities	11,916	10,893	10,514	10,205	9,937	9,682
Provisions	6,405	5,879	5,656	5,378	5,305	5,227
Total liabilities	135,887	133,517	128,798	133,057	139,201	133,416
Net Worth	65,647	67,286	70,366	75,140	81,470	90,420

Table 21 – Statement of sources and uses of cash

	2013 Actual $m	2014 Forecast $m	2015 Forecast $m	2016 Forecast $m	2017 Forecast $m	2018 Forecast $m
Cash receipts from operating activities						
Total tax receipt	60,851	65,582	69,092	72,733	76,394	79,993
Interest and dividends	2,601	2,969	2,870	3,101	3,574	3,955
Sale of goods and services and other receipts	11,238	11,931	9,769	9,490	9,349	9,317
Total receipts	74,690	80,482	81,731	85,324	89,317	93,265
Cash payments from operating activities						
Compensation of employees and other payments	(42,261)	(47,991)	(44,709)	(42,678)	(42,327)	(42,025)
Social benefits	(22,780)	(23,787)	(23,947)	(24,557)	(25,445)	(26,362)
Grants and subsidies	(6,551)	(6,999)	(6,882)	(6,805)	(7,053)	(7,890)
Finance costs	(3,345)	(3,288)	(3,372)	(3,260)	(3,521)	(3,472)
Forecast for new operating spending and top-down adjustment	-	1,155	(606)	(1,804)	(2,867)	(3,815)
Total payments	(74,937)	(80,910)	(79,516)	(79,104)	(81,213)	(83,564)
Net cash inflow/(outflow) from operating activities	(247)	(428)	2,215	6,220	8,104	9,701
Net cash outflow from investments in non-financial assets						
Acquisition of non-financial assets	(4,209)	(6,052)	(5,641)	(5,753)	(4,866)	(4,772)
Disposal of non-financial assets	310	255	452	659	549	803
Forecast for new capital spending and top-down adjustment	-	244	(392)	(641)	(825)	(775)
Cash surplus/(deficit)	(4,146)	(5,981)	(3,366)	485	2,962	4,957
Net acquisition of financial assets						
Advances	(130)	(792)	(539)	(348)	(322)	(312)
Share investments	3,400	(6,000)	2,947	(5,220)	(8,326)	830
Net purchase of investments	(570)	2,427	579	(14)	71	65
Capital contributions	18	19	-	-	-	-
Net incurrence of liabilities						
New Zealand dollar borrowings	(3,235)	273	1,193	738	31	658
Foreign currency borrowings	(2,152)	(254)	(714)	(921)	(398)	-
Government stock	5,273	5,082	(872)	4,916	5,851	(6,275)
Net cash inflows from financing activities	2,604	755	2,594	(849)	(3,093)	(5,034)
Net change in the stock of cash	(1,542)	(5,226)	(772)	(364)	(131)	(77)

Table 22 – Statement of stocks and flows

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	56,954	Operating balance	(1,054)	Holding gains	9,747	Closing net worth	65,647
Equals		*Equals*					
Non-financial assets	84,691	Transactions	437	Valuation changes	1,768	Non-financial assets	86,896
plus		*plus*		*plus*		*plus*	
Net financial worth	(27,737)	Net lending	(1,491)	Change in net financial worth	11,515	Net financial worth	(17,713)
Equals		*Equals*					
Financial assets	116,041	Transactions in financial assets	(5,591)	Changes in financial assets	4,188	Closing financial assets	114,638
less		*less*		*less*		*less*	
Opening liabilities	143,778	Transactions in liabilities	(4,100)	Changes in liabilities	(3,791)	Closing liabilities	135,887

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	65,647	Operating balance	657	Holding gains	982	Closing net worth	67,286
Equals		*Equals*					
Non-financial assets	86,896	Transactions	2,499	Valuation changes	-	Non-financial assets	89,395
plus		*plus*		*plus*		*plus*	
Net financial worth	(21,249)	Net lending	(1,842)	Change in net financial worth	982	Net financial worth	(22,109)
Equals		*Equals*					
Financial assets	114,638	Transactions in financial assets	(2,428)	Changes in financial assets	(802)	Closing financial assets	111,408
less		*less*		*less*		*less*	
Opening liabilities	135,887	Transactions in liabilities	(586)	Changes in liabilities	(1,784)	Closing liabilities	133,517

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	67,286	Operating balance	2,685	Holding gains	395	Closing net worth	70,366
Equals		*Equals*					
Non-financial assets	89,395	Transactions	2,295	Valuation changes	-	Non-financial assets	91,690
plus		*plus*		*plus*		*plus*	
Net financial worth	(22,109)	Net lending	390	Change in net financial worth	395	Net financial worth	(21,324)
Equals		*Equals*					
Financial assets	111,408	Transactions in financial assets	(3,728)	Changes in financial assets	(206)	Closing financial assets	107,474
less		*less*		*less*		*less*	
Opening liabilities	133,517	Transactions in liabilities	(4,118)	Changes in liabilities	(601)	Closing liabilities	128,798

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	70,366	Operating balance	4,186	Holding gains	588	Closing net worth	75,140
Equals		*Equals*					
Non-financial assets	91,690	Transactions	2,592	Valuation changes	-	Non-financial assets	94,282
plus		*plus*		*plus*		*plus*	
Net financial worth	(21,324)	Net lending	1,594	Change in net financial worth	588	Net financial worth	(19,142)
Equals		*Equals*					
Financial assets	107,474	Transactions in financial assets	6,366	Changes in financial assets	75	Closing financial assets	113,915
less		*less*		*less*		*less*	
Opening liabilities	128,798	Transactions in liabilities	4,772	Changes in liabilities	(513)	Closing liabilities	133,057

for the year ended 30 June 2017

Opening balance statement	$million	Statement of operations	$million	Other economic flows		Closing balance sheet	$million
Opening net worth	75,140	Operating balance	5,541	Holding gains	789	Closing net worth	81,470
Equals		*Equals*					
Non-financial assets	94,282	Transactions	2,276	Valuation changes	-	Non-financial assets	96,558
plus		*plus*		*plus*		*plus*	
Net financial worth	(19,142)	Net lending	3,265	Change in net financial worth	789	Net financial worth	(15,088)
Equals		*Equals*					
Financial assets	113,915	Transactions in financial assets	9,847	Changes in financial assets	351	Closing financial assets	124,113
less		*less*		*less*		*less*	
Opening liabilities	133,057	Transactions in liabilities	6,582	Changes in liabilities	(438)	Closing liabilities	139,201

for the year ended 30 June 2018

Opening balance statement	$million	Statement of operations	$million	Other economic flows		Closing balance sheet	$million
Opening net worth	81,470	Operating balance	8,070	Holding gains	880	Closing net worth	90,420
Equals		*Equals*					
Non-financial assets	96,558	Transactions	1,880	Valuation changes	-	Non-financial assets	98,438
plus		*plus*		*plus*		*plus*	
Net financial worth	(15,088)	Net lending	6,190	Change in net financial worth	880	Net financial worth	(8,018)
Equals		*Equals*					
Financial assets	124,113	Transactions in financial assets	709	Changes in financial assets	576	Closing financial assets	125,398
less		*less*		*less*		*less*	
Opening liabilities	139,201	Transactions in liabilities	(5,481)	Changes in liabilities	(304)	Closing liabilities	133,416

Table 23 – Reconciliation between GAAP and GFS operating balance

	2013 Actual $m	2014 Forecast $m	2015 Forecast $m	2016 Forecast $m	2017 Forecast $m	2018 Forecast $m
Operating balance per GAAP	6,925	1,639	3,080	4,774	6,330	8,950
Remove gains/losses and net surpluses from associates and joint ventures	(11,339)	(3,959)	(2,994)	(3,100)	(3,226)	(3,327)
Operating balance before gains and losses (OBEGAL)	(4,414)	(2,320)	86	1,674	3,104	5,623
Remove SOE portion of OBEGAL (incl. eliminations)	588	24	(73)	(114)	(136)	(132)
Remove ETS expenses	55	83	87	76	77	78
Remove impairments and write-offs on financial assets	2,433	2,471	2,433	2,346	2,380	2,449
Remove expenses relating to earthquake provisions	-	-	-	-	-	-
Tertiary institutions included on a line-by-line basis	169	169	169	169	169	169
Reserve Bank (equity accounted)	127	225	(16)	31	(60)	(120)
Other adjustments	(12)	5	(1)	4	7	3
Net operating balance per GFS	(1,054)	657	2,685	4,186	5,541	8,070

Table 24 – Reconciliation between GAAP residual cash and GFS cash surplus/(deficit)

	2013 Actual $m	2014 Forecast $m	2015 Forecast $m	2016 Forecast $m	2017 Forecast $m	2018 Forecast $m
Residual cash per GAAP	(5,742)	(4,076)	(3,472)	(1,176)	1,218	3,131
Back out advances	342	842	941	841	209	227
Back out investments	1,308	1,021	1,325	1,518	1,530	1,335
Add in cash flows from Crown entities	1,890	(1,372)	(1,599)	(871)	(175)	72
Remove cash flows from the Reserve Bank	(71)	(23)	(110)	63	(62)	(44)
Back out proceeds from government share offer	(1,663)	(2,490)	(620)	-	-	-
Add in NZSF cash flows	(326)	175	228	232	235	236
Other adjustments	116	(58)	(59)	(122)	7	-
Cash surplus/(deficit)	(4,146)	(5,981)	(3,366)	485	2,962	4,957

Accounting Policies

The forecast financial statements contained in the published *Half Year Economic and Fiscal Update 2013* 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 forecast financial statements were the same as those applied in the audited, actual financial statements of the Government for the year ended 30 June 2013.

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.

The description "consolidated financial statements for the Government reporting entity" and the description "financial statements for the Government of New Zealand" have the same meaning and can be used interchangeably.

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, and 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 separately identified.

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 estimation of the claims and provisions arising from the Canterbury earthquakes.

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.

Where these judgements significantly affect the amounts recognised in the forecast financial statements they are described below.

Early adoption of standards and interpretations

From 1 July 2011 no NZ IFRS or amendments to existing NZ IFRS applicable to public benefit entities have been issued as a consequence of recent decisions on the new Accounting Standard Framework. The Government has adopted all NZ IFRSs and Interpretations applicable to public benefit entities issued prior to that date, with the exception of *NZ IFRS 9: Financial* Instruments, approved in 2010.

NZ IFRS 9 becomes effective for annual reporting periods commencing on or after 1 January 2015. Under the proposed new accounting framework for public sector entities, the proposed accounting standard for recognition and measurement of financial instruments will be based on *IPSAS 29: Financial Instruments: Recognition and Disclosure*. The Crown has not early adopted *NZ IFRS 9* to reduce the risk of unnecessary accounting changes through this period.

The New Zealand Accounting Standards Board has issued a new suite of accounting standards (called Public Sector PBE Accounting Standards) that will apply to the Financial Statements of Government for the financial year beginning 1 July 2014. These forecasts do not incorporate any changes as a consequence of the new suite of standards. The impact of moving from NZ IFRS to PBE Standards is not expected to be significant as there is a strong degree of convergence between IFRS and IPSAS, and therefore between the current NZ IFRS and the proposed Public Sector PBE Accounting Standards.

Reporting and forecast period

The reporting period for these Forecast Financial Statements is the year ended 30 June 2014 to 30 June 2018.

The “2013 Actual” figures reported in the statements are the audited results reported in the Financial Statements of Government for the year ended 30 June 2013. The “2014 Previous Budget” figures are the original forecasts to 30 June 2014 as presented in the 2013 Budget. The “2014 Forecast” figures incorporate actual financial results up to 30 September 2013, and a forecast for the remainder of the financial year.

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
- Organisations listed in Schedule 4 and 4A of the Public Finance Act 1989
- Organisations listed in Schedule 5 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 2013. 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 *Half Year 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.

Tax revenue is recognised when a taxable event has occurred and the tax revenue can be reliably measured. The taxable event is defined as follows:

Revenue type	Revenue recognition point
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 assessed income is earned during the taxation period
Terminal tax	Assessment filed date
Goods and services tax (GST)	When the purchase or sale of taxable goods and services occurs during the taxation period
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

The New Zealand tax system is predicated on self-assessment where taxpayers are expected to understand the tax laws and comply with them. Inland Revenue has implemented systems and controls (eg, performing audits of taxpayer records) in order to detect and correct situations where taxpayers are not complying with the various acts it administers.

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.

Major financial asset type	Designation
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
Long-term deposits	Generally designated as loans and receivables

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

Major financial liability type	**Designation**
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 at amortised cost
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 are 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 September 2013 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 September 2013 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 (PPE) 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 PPE. 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 PPE 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 PPE are accounted for as set out below.

Class of PPE	Accounting policy
Land and buildings	Land and buildings are recorded at fair value less impairment losses and, for buildings, less depreciation accumulated since the assets were last revalued. Land associated with the rail network and state highways is valued using and opportunity cost based on adjacent use, as an approximation to fair value. Valuations undertaken in accordance with standards issued by the New Zealand Property Institute are used where available. 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. 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.
Specialist military equipment	Specialist military equipment is recorded on a depreciated replacement cost basis less depreciation and impairment losses accumulated since the assets were last revalued. Valuations are obtained through specialist assessment by New Zealand Defence Force advisers, and the basis for the valuation is confirmed as appropriate by an independent valuer.
State highways	State highways are recorded on a depreciated replacement cost basis less depreciation and impairment losses accumulated since the assets were last revalued.
Rail network	Rail infrastructure used for freight services (freight only and dual use lines required for freight operations) are recorded at fair value less depreciation and impairment losses accumulated since the assets were last revalued.Rail infrastructure not required for freight operations and used for metro services are recorded on a depreciated replacement cost basis less depreciation and impairment losses accumulated since the assets were last revalued.
Aircraft	Aircraft (excluding specialised military equipment) are recorded at fair value less depreciation and impairment losses accumulated since the assets were last revalued.
Electricity distribution	Electricity distribution network assets are recorded at cost, less depreciation and impairment losses accumulated since the assets were purchased.
Electricity generation	Electricity generation assets are recorded at fair value less depreciation and impairment losses accumulated since the assets were last revalued.
Specified cultural and heritage assets	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. Of these, non-land 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 where no market exists to provide a valuation.
Other plant and equipment	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.

Classes of PPE that are revalued are revalued at least every five years or whenever the carrying amount differs materially to fair value.

Items of PPE 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 PPE is recorded at its optimised depreciated replacement cost, this cost is based on the estimated present cost of constructing the existing item of PPE by the most appropriate method of construction, less allowances for physical deterioration and optimisation for obsolescence and relevant surplus capacity. Where an item of PPE 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 PPE 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 PPE 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. The major exception relates to service concession assets resulting from public private partnership arrangements where the liability incurred, and therefore the associated interest costs, are directly attributable to the service concession asset.

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 PPE, less any estimated residual value, over its remaining useful life.

Typically, the estimated useful lives of different classes of PPE are as follows:

Class of PPE	**Estimated useful lives**
Buildings	25 to 60 years
Specialist military equipment (SME)	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 SME)	10 to 20 years
Electricity distribution network	2 to 80 years
Electricity generation assets	25 to 100 years
Other plant and equipment	3 to 30 years

Specified heritage and cultural assets are generally not depreciated.

Forecasts of the value of PPE (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 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 held for sale, 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 PPE.

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 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. Premiums are measured 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 one 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.

Commitments are classified as:

- capital commitments: aggregate amount of capital expenditure contracted for but not recognised as paid or provided for at balance date, and
- lease commitments: non-cancellable operating leases with a lease term exceeding one year.

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).

Interest commitments on debts, commitments for funding, and commitments relating to employment contracts are not disclosed.

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 *2013 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, Mighty River Power and Meridian, 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 governance 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).