
2011 Budget Update Additional Information

The following information forms part of the *Budget Economic and Fiscal Update 2011* (“*Budget Update*”), released by the Treasury on 19 May 2011. This information provides further details on the *Budget Update* and should be read in conjunction with the published document. The additional information includes:

- Detailed economic forecast information – these tables provide detailed breakdowns of the economic forecasts
- Tax tables – 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 for central government – fiscal tables presented under a GFS presentation framework to help with cross-country comparisons
- Accounting policies – outline of the specific Crown accounting policies. The published forecast financial statements only provide a summary.

Detailed Economic Forecast Information

The following tables provide additional detail on the economic forecasts presented in the *2011 Budget Update*.

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

Chain-volume series expressed in 1995/96 prices

	Actual			Seasonally Adjusted	
	\$ million	Annual % change	Annual Average % change	\$million	Quarterly % change
2008Q1	34,018	2.2	3.0	34,324	-0.2
2008Q2	33,425	0.7	2.5	34,080	-0.7
2008Q3	33,477	-0.8	1.5	33,874	-0.6
2008Q4	34,792	-2.7	-0.2	33,450	-1.3
2009Q1	32,799	-3.6	-1.6	33,099	-1.0
2009Q2	32,480	-2.8	-2.5	33,120	0.1
2009Q3	32,789	-2.1	-2.8	33,191	0.2
2009Q4	34,846	0.2	-2.1	33,481	0.9
2010Q1	33,395	1.8	-0.7	33,708	0.7
2010Q2	33,102	1.9	0.4	33,756	0.1
2010Q3	33,274	1.5	1.3	33,687	-0.2
2010Q4	35,144	0.9	1.5	33,757	0.2
2011Q1	33,343	-0.2	1.0	33,656	-0.3
2011Q2	33,268	0.5	0.7	33,925	0.8
2011Q3	33,754	1.4	0.7	34,173	0.7
2011Q4	35,835	2.0	1.0	34,421	0.7
2012Q1	34,391	3.1	1.8	34,714	0.8
2012Q2	34,482	3.7	2.5	35,164	1.3
2012Q3	35,108	4.0	3.2	35,544	1.1
2012Q4	37,336	4.2	3.8	35,862	0.9
2013Q1	35,814	4.1	4.0	36,150	0.8
2013Q2	35,686	3.5	4.0	36,391	0.7
2013Q3	36,165	3.0	3.7	36,614	0.6
2013Q4	38,355	2.7	3.3	36,842	0.6
2014Q1	36,751	2.6	3.0	37,095	0.7
2014Q2	36,629	2.6	2.7	37,352	0.7
2014Q3	37,150	2.7	2.7	37,611	0.7
2014Q4	39,426	2.8	2.7	37,870	0.7
2015Q1	37,777	2.8	2.7	38,132	0.7
2015Q2	37,652	2.8	2.8	38,396	0.7

Sources: 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
2008Q1	1044	0.7	3.4	71.9	0.79
2008Q2	1061	1.6	4.0	69.2	0.78
2008Q3	1077	1.5	5.1	65.5	0.71
2008Q4	1072	-0.5	3.4	57.8	0.58
2009Q1	1075	0.3	3.0	53.7	0.53
2009Q2	1081	0.6	1.9	58.4	0.60
2009Q3	1095	1.3	1.7	62.6	0.67
2009Q4	1093	-0.2	2.0	65.5	0.73
2010Q1	1097	0.4	2.0	65.3	0.71
2010Q2	1099	0.2	1.7	66.7	0.70
2010Q3	1111	1.1	1.5	66.9	0.72
2010Q4	1137	2.3	4.0	67.8	0.76
2011Q1	1146	0.8	4.5	67.2	0.76
2011Q2	1157	1.0	5.3	66.9	0.78
2011Q3	1164	0.6	4.8	67.0	0.78
2011Q4	1172	0.6	3.1	67.3	0.78
2012Q1	1182	0.9	3.1	66.7	0.77
2012Q2	1189	0.6	2.7	66.2	0.76
2012Q3	1195	0.5	2.6	65.8	0.76
2012Q4	1201	0.5	2.5	65.2	0.74
2013Q1	1211	0.8	2.4	64.5	0.73
2013Q2	1219	0.7	2.5	63.6	0.71
2013Q3	1226	0.6	2.6	62.6	0.70
2013Q4	1234	0.6	2.7	61.5	0.68
2014Q1	1241	0.6	2.5	60.3	0.66
2014Q2	1248	0.6	2.4	59.2	0.64
2014Q3	1256	0.6	2.4	58.1	0.62
2014Q4	1264	0.6	2.5	57.0	0.60
2015Q1	1273	0.6	2.6	56.0	0.58
2015Q2	1281	0.6	2.6	55.1	0.57

Sources: Statistics New Zealand, The Treasury

Table 3 - Gross Domestic Expenditure and Income

March Year	2010		2011		2012		2013		2014		2015	
	Actual	Estimate	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
	\$ mill	%pr	%vol	%pr	%vol	%pr	%vol	%pr	%vol	%pr	%vol	%pr
Consumption:												
- Private	110,838	2.0	1.5	2.0	1.4	3.4	2.6	2.4	2.1	3.4	2.9	1.9
- Public	38,212	1.9	2.4	1.9	1.0	2.9	-0.8	2.7	2.6	-0.4	0.6	2.3
Gross Fixed Capital Formation:												
- Residential	8,208	0.2	0.9	0.2	0.8	2.8	53.5	4.1	6.1	17.4	2.7	6.3
- Market *	25,605	-1.0	7.5	-1.0	4.3	2.2	13.0	2.6	1.9	9.8	2.5	1.7
- Non-market **	3,036	4.0	-5.2	4.0	10.0	3.2	-6.7	2.4	2.4	-3.1	4.7	2.4
- Total all sectors	36,845	-0.6	5.3	-0.6	5.6	0.8	18.8	3.9	3.2	11.0	3.0	2.8
Change in Stocks	-1,444			1,293		1,431					261	218
Gross National Expenditure	184,451	0.9	4.5	0.9	1.7	3.3	5.3	2.3	2.1	4.5	2.5	2.2
Exports	52,424	7.1	1.9	7.1	3.0	5.3	2.9	2.1	5.8	2.2	2.1	8.8
Imports	49,690	-0.9	10.5	-0.9	2.5	6.9	6.9	2.6	5.3	6.8	1.7	8.6
Expenditure on GDP	187,185	3.2	2.1	3.2	1.6	3.1	4.0	2.3	2.4	3.0	2.7	2.1
Statistical Discrepancy	617			623		629				637		652
Gross Domestic Product	187,802			197,815		207,144				220,303		243,604
Compensation of employees	84,486	3.3		87,245		91,133		6.5	5.9	97,074		108,307
Operating Surplus, net:												
- Agriculture	6,036	19.7		7,222		7,739		0.1	3.1	7,744		8,628
- Other	45,768	5.2		48,157		48,755		7.1	4.2	52,233		56,183
- Total all sectors	51,804	6.9		55,379		56,494		6.2	4.0	59,977		64,811
Consumption of fixed capital	28,391	6.0		30,094		31,750		5.5	5.5	33,496		37,282
Indirect Taxes	23,775	8.3		25,751		28,422		7.0	6.2	30,410		33,858
Less subsidies	654	0.0		654		654		0.0	0.0	654		654
Gross Domestic Product	187,802	5.3		197,815		207,144		6.4	5.4	220,303		243,604

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

Source: Statistics New Zealand, The Treasury

Tables 4 & 5 - Labour Market Indicators

Annual Average Percentage Change						
March Year	2010	2011	2012	2013	2014	2015
	Actual	Estimate	Forecast	Forecast	Forecast	Forecast
Real GDP (production basis)	-0.7	1.0	1.8	4.0	3.0	2.7
Working Age Population	1.4	1.3	1.0	1.0	1.1	1.1
Labour Force	0.7	1.3	0.6	1.2	1.5	1.2
Employment - Total	-1.3	0.9	1.1	2.5	1.8	1.3
Labour Productivity *	2.0	-1.2	1.3	1.5	1.2	1.5
CPI (annual percentage change)	2.0	4.5	3.1	2.4	2.5	2.6
Average Ordinary Time Hourly Wages	3.1	1.7	3.6	4.1	4.1	4.1
Average Weekly Earnings	3.4	2.8	3.4	4.0	4.0	4.0
Real Wages	1.2	-1.2	-0.5	1.5	1.5	1.6
Compensation of Employees	1.1	3.4	4.5	6.5	5.9	5.3
Unit Labour Costs (Hours worked basis)	1.1	2.9	2.3	2.5	2.9	2.5
Real Unit Labour Costs	-0.7	0.0	-1.8	-0.1	0.3	0.0

* Hours worked basis

Number (000's)						
As at March Quarter	2010	2011	2012	2013	2014	2015
	Actual	Estimate	Forecast	Forecast	Forecast	Forecast
Total Population	4,362	4,396	4,431	4,470	4,515	4,556
Natural Increase	35	28	34	31	29	30
Net Migration	21	6	0	8	15	11
Annual Change	56	34	35	40	44	41
Working Age Population	3,412	3,452	3,484	3,519	3,558	3,596
Annual Change	51	40	32	36	39	37
Not in the labour force (s.a.)	1,087	1,092	1,115	1,114	1,121	1,132
Annual Change	27	5	22	0	6	11
Labour Force (s.a.)	2,316	2,349	2,360	2,398	2,431	2,458
Annual Change	20	33	12	38	33	27
Total Employment (s.a.)	2,176	2,190	2,225	2,282	2,315	2,345
Annual Change	-2	14	36	57	33	30
Unemployment (s.a.)	140	159	135	116	116	113
Annual Change	23	19	-24	-19	0	-3
Participation Rate (% s.a)	68.1	68.0	67.8	68.1	68.3	68.4
Unemployment Rate (% s.a)	6.0	6.8	5.7	4.8	4.8	4.6

Sources: Statistics New Zealand, The Treasury

Table 6 - Current Account

\$NZ Million						
Year ended March	2010	2011	2012	2013	2014	2015
	Actual	Estimate	Forecast	Forecast	Forecast	Forecast
Exports Goods	40,092	45,046	48,939	51,501	56,016	62,820
<i>annual % change</i>	-9.4	12.4	8.6	5.2	8.8	12.1
Imports Goods	37,452	41,554	45,891	50,676	57,364	63,337
<i>annual % change</i>	-18.2	11.0	10.4	10.4	13.2	10.4
Balance on Goods	2,641	3,493	3,048	825	-1,347	-518
<i>% of Nominal GDP</i>	1.4	1.8	1.5	0.4	-0.6	-0.2
Exports Services	12,332	12,057	13,026	13,647	14,428	15,452
<i>annual % change</i>	-4.8	-2.2	8.0	4.8	5.7	7.1
Imports Services	12,239	12,931	13,841	14,830	16,305	17,963
<i>annual % change</i>	-11.5	5.7	7.0	7.1	9.9	10.2
Balance on services	92	-874	-816	-1,183	-1,877	-2,511
<i>% of Nominal GDP</i>	0.0	-0.4	-0.4	-0.5	-0.8	-1.0
Balance on goods & services	2,733	2,618	2,232	-358	-3,224	-3,028
<i>% of Nominal GDP</i>	1.5	1.3	1.1	-0.2	-1.4	-1.2
Income and current transfers balance	-7,192	-1,626	-10,612	-11,107	-12,410	-13,778
<i>% of Nominal GDP</i>	-3.8	-0.8	-5.1	-5.1	-5.4	-5.7
Current account balance	-4,458	992	-8,379	-11,464	-15,634	-16,806
<i>% of Nominal GDP</i>	-2.4	0.5	-4.1	-5.2	-6.8	-6.9

Source: Statistics New Zealand, The Treasury

Table 7 - Exports – SNA basis

Breakdown of Exports											
March Years	Dairy Products			Meat and Meat Products			Non-Commodity*			\$ mn	
	%v	%p	\$ mn	%v	%p	\$ mn	%v	%p	\$ mn		
2007	22.3	2.1	7,455	6.7	2.5	5,037	0.6	12.2	11,668		
2008	-0.9	25.7	9,434	-2.9	-5.1	4,656	0.7	6.3	12,456		
2009	-15.1	27.9	10,101	1.5	23.2	5,796	1.6	16.8	14,804		
2010	30.8	-31.9	9,078	-1.1	-7.5	5,332	-5.6	-6.7	13,052		
2011	-1.2	30.8	11,609	-2.3	5.8	5,520	7.8	-1.1	13,918		
2012	-0.6	9.3	12,703	-8.4	13.2	5,688	8.6	1.4	15,323		
2013	3.5	-3.3	12,714	2.4	-0.4	5,807	3.7	6.4	16,898		
2014	3.2	0.5	13,222	3.2	6.1	6,355	1.9	10.3	18,977		
2015	3.2	6.8	14,577	2.8	7.7	7,038	2.2	12.5	21,807		

March Years	Total Goods**			Services			Total Exports			\$ mn
	%v	%p	\$ mn	%v	%p	\$ mn	%v	%p	\$ mn	
2007	4.9	7.5	35,633	-2.1	4.6	12,639	2.9	6.8	48,272	
2008	4.5	3.9	38,718	-0.4	2.3	12,889	3.2	3.3	51,606	
2009	-2.6	17.6	44,248	-6.0	6.9	12,949	-3.5	15.2	57,196	
2010	6.8	-15.4	40,092	-2.9	-1.7	12,332	4.6	-12.5	52,424	
2011	2.7	9.5	45,046	-1.5	-0.8	12,057	1.9	7.1	57,154	
2012	2.4	6.1	48,939	8.0	0.1	13,026	3.0	5.3	61,977	
2013	2.8	2.4	51,501	3.3	1.4	13,647	2.9	2.1	65,177	
2014	2.3	6.4	56,016	2.0	3.6	14,428	2.2	5.8	70,501	
2015	2.1	9.8	62,820	2.2	4.8	15,452	2.1	8.8	78,331	

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

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

Table 8 - Imports – SNA basis

Breakdown of Imports												
March Years	Capital Goods (VFD)			Mineral Fuel* (VFD)			Intermediate Goods** (VFD)			Consumption Goods (VFD)		
	%v	%p	\$ mn	%v	%p	\$ mn	%v	%p	\$ mn	%v	%p	\$ mn
2007	-3.0	2.3	7,249	-8.0	21.4	5,865	-2.8	12.4	15,717	5.8	3.4	9,525
2008	10.2	-9.7	7,213	15.8	2.7	6,982	9.9	-6.5	16,144	6.9	-2.7	9,908
2009	3.5	13.2	8,292	-6.3	26.3	8,186	-5.9	22.0	18,454	-2.7	12.4	10,788
2010	-28.2	2.1	6,202	1.5	-27.4	6,059	-11.2	-9.9	14,799	-4.1	-1.0	10,256
2011	22.5	-5.5	7,186	-1.4	14.1	6,840	14.3	-1.1	16,763	7.3	-4.3	10,544
2012	5.1	-10.2	6,795	0.6	25.6	8,656	4.1	11.0	19,436	2.9	0.4	10,893
2013	14.9	-7.2	7,233	5.3	5.4	9,595	5.3	5.1	21,458	7.5	4.7	12,269
2014	15.4	9.6	9,151	3.3	3.6	10,272	3.4	7.2	23,779	5.4	8.6	14,042
2015	1.9	4.3	9,734	1.1	6.9	11,104	1.0	9.5	26,286	3.5	10.8	16,093

March Years	Total Goods (VFD)			Services			Total		
	%v	%p	\$ mn	%v	%p	\$ mn	%v	%p	\$ mn
2007	-0.9	8.7	38,464	-3.7	7.0	12,186	-1.6	8.3	50,649
2008	10.0	-4.3	40,515	10.1	-5.8	12,631	10.1	-4.7	53,146
2009	-4.1	17.9	45,770	-5.3	16.6	13,827	-4.4	17.6	59,597
2010	-10.5	-8.5	37,452	-5.9	-6.5	12,239	-9.4	-8.0	49,690
2011	11.8	-0.9	41,554	6.9	-1.4	12,931	10.5	-0.9	54,485
2012	2.1	8.0	45,891	4.7	2.3	13,841	2.5	6.9	59,732
2013	8.3	2.0	50,676	2.0	5.1	14,830	6.9	2.6	65,506
2014	7.9	4.9	57,364	2.6	7.2	16,305	6.8	5.3	73,669
2015	1.9	8.4	63,337	0.7	9.4	17,963	1.7	8.6	81,300

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

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

Tax Tables

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

The Treasury's total tax forecasts are higher than Inland Revenue's in every year from 2010/11 through to 2014/15. By 2014/15, the difference between the forecasts has reached \$1.5 billion, a much larger difference than has usually been the case in past forecast updates. The bulk of the difference occurs in estimates for corporate tax. The Treasury forecasts corporate tax growth to remain subdued through the early part of the recovery as tax loss usage increases and growth will accelerate through 2013 to 2015 as tax loss usage abates. Inland Revenue has not forecast such a rapid acceleration in corporate tax, as it has made no explicit assumption regarding the utilisation of tax losses.

Table 9 - Treasury and Inland Revenue forecasts of tax revenue (accrual)

	2009/10 Actual		2010/11 Forecast		2011/12 Forecast		2012/13 Forecast		2013/14 Forecast		2014/15 Forecast	
	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference	Treasury	IRD Difference
Direct tax												
Individuals												
Source deductions	22,135	21,083	21,636	21,398	23,614	23,305	309	25,212	25,019	193	26,833	26,706
Other persons tax	3,987	3,670	4,342	4,106	4,672	4,296	376	4,654	4,615	39	4,748	4,856
Refunds	(1,831)	(1,681)	(1,656)	(1,650)	(1,701)	(1,530)	(171)	(1,574)	(1,390)	(184)	(1,435)	(1,330)
Fringe benefit tax	461	461	430	462	457	481	(24)	481	497	(16)	505	529
Subtotal: Individuals	24,752	23,548	24,752	24,316	27,042	26,552	490	28,773	28,741	32	30,651	30,761
Company tax (net)	6,631	8,120	8,423	8,473	8,829	8,511	318	9,586	8,853	733	10,089	9,097
Withholding taxes on:												
Resident interest income	1,804	1,695	1,665	1,654	1,986	1,910	76	2,527	2,274	253	3,084	2,703
Non-resident income	884	498	508	495	573	560	13	643	630	13	688	660
Foreign-source dividends	(3)	1	1	1	1	1	..	1	1	..	1	1
Resident dividend income	130	203	209	211	292	286	6	470	461	9	489	466
Subtotal: Withholding tax	2,815	2,342	2,383	2,361	2,852	2,757	95	3,641	3,366	275	4,262	3,830
Total income tax	34,198	34,012	35,558	35,150	38,723	37,820	903	42,000	40,960	1,040	45,002	43,688
Other: Estate and gift duties	2	2	..	..	..	..	..	..	..	..	..	..
Total direct tax	34,200	34,012	35,558	35,150	38,723	37,820	903	42,000	40,960	1,040	45,002	43,688
Indirect tax												
GST (net)	16,729	19,118	21,283	21,548	22,555	22,450	105	23,723	23,666	57	24,840	24,754
Excise duties on:												
Alcoholic drinks	600	639	665	659	700	695	5	732	732	..	765	771
Tobacco products	217	225	241	241	259	251	8	257	254	3	259	259
Petroleum fuels	805	829	886	896	903	904	(1)	940	943	(3)	975	971
Subtotal: excise duties	1,622	1,693	1,802	1,796	1,862	1,850	12	1,929	1,929	..	1,999	2,001
Other indirect tax												
Customs duty	1,873	1,978	2,053	2,060	2,089	2,089	..	2,107	2,089	18	2,136	2,089
Road user charges	910	995	1,010	1,050	1,134	1,125	9	1,214	1,190	24	1,289	1,255
Gaming duties	265	263	268	262	272	267	5	276	271	5	279	275
Motor vehicle fees	171	169	170	175	171	185	(14)	174	190	(16)	177	195
Exhaustible resource levy	39	36	37	35	36	35	1	36	37	(1)	36	40
Approved issuer levy, cheque duty & other	88	98	88	88	88	83	5	88	83	5	88	83
Subtotal: Other indirect tax	3,348	3,554	3,664	3,671	3,790	3,784	6	3,895	3,860	35	4,005	3,937
Total indirect tax	21,699	24,365	26,749	27,015	28,207	28,084	123	29,547	29,455	92	30,844	30,692
Total tax	55,899	58,377	62,307	62,165	66,930	65,904	1,026	71,547	70,415	1,132	75,846	74,380
Total tax (% of GDP)	29.6%	29.2%	29.8%	29.7%	30.0%	29.6%	0.5%	30.5%	30.1%	0.5%	30.8%	30.2%
less Core Crown tax eliminations												
Core Crown income tax	(27)	795	367	367	404	404	..	443	443	..	485	485
GST on Crown expenses and departmental outputs	4,812	5,949	6,241	6,241	6,129	6,129	..	6,168	6,168	..	6,372	6,372
Crown ESCT	349	482	462	462	476	476	..	480	480	..	484	484
Crown AIL	21	15	15	15	15	15	..	15	15	..	15	15
Core Crown taxation	50,744	51,189	55,222	55,080	59,906	58,880	1,026	64,441	63,309	1,132	68,490	67,024
Core Crown tax (% of GDP)	26.8%	25.6%	26.4%	26.3%	26.9%	26.4%	0.5%	27.5%	27.0%	0.5%	27.8%	27.2%
less Total Crown tax eliminations												
Income tax from SOEs and CEs	339	495	478	478	578	578	..	629	629	..	683	683
Other Crown GST	..	..	..	..	..	..	..	..	..	..	..	..
ESCT from SOEs and CEs	12	9	9	9	9	9	..	10	10	..	10	10
Lottery duty	46	45	45	45	49	49	..	50	50	..	51	51
Total Crown taxation	50,347	50,640	54,690	54,548	59,279	58,244	1,026	63,752	62,620	1,132	67,746	66,280
Total Crown tax (% of GDP)	26.6%	25.3%	26.1%	26.1%	26.6%	26.1%	0.5%	27.2%	26.7%	0.5%	27.5%	26.9%
Nominal GDP	189,122	199,819	209,178	209,178	222,916	222,916	..	234,237	234,237	..	246,098	246,098

Table 10 – Treasury and Inland Revenue forecasts of tax receipts (cash)

	2009/10 Actual		2010/11 Forecast		2011/12 Forecast		2012/13 Forecast		2013/14 Forecast		2014/15 Forecast	
	Treasury	IRD	Treasury	IRD	Treasury	IRD	Treasury	IRD	Treasury	IRD	Treasury	IRD
Direct tax												
Individuals												
Source deductions	22,097	20,988	21,536	21,313	223	23,510	23,216	294	25,104	24,926	178	26,609
Other persons tax	4,630	4,320	4,765	4,620	145	5,057	4,830	227	5,090	5,130	(40)	5,330
Refunds	(2,793)	(2,445)	(2,390)	(2,470)	76	(2,390)	(2,350)	(40)	(2,254)	(2,210)	(44)	(2,150)
Fringe benefit tax	469	456	424	454	(30)	450	473	(23)	473	490	(17)	506
Subtotal: Individuals	24,403	23,297	24,331	23,917	414	26,627	26,169	458	28,413	28,336	77	30,249
Company tax (net)	7,471	7,890	8,631	8,340	291	8,703	8,330	373	9,449	8,895	754	8,890
Withholding taxes on:												
Resident interest income	1,833	1,714	1,664	1,653	11	1,985	1,909	76	2,526	2,273	253	3,083
Non-resident income	889	494	508	495	13	573	560	13	643	630	13	688
Foreign-source dividends	6	1	1	1	..	1	1	..	1	1	..	1
Resident dividend income	114	202	200	210	(2)	291	285	6	469	460	9	488
Subtotal: Withholding tax	2,842	2,411	2,381	2,359	22	2,850	2,755	95	3,639	3,364	275	4,260
Total income tax	34,716	33,587	33,461	34,616	727	38,180	37,254	926	41,501	40,395	1,106	44,426
Other: Estate and gift duties	2	2	..	..	..	..	..	..	..	..	..	..
Total direct tax	34,718	33,589	33,463	34,616	727	38,180	37,254	926	41,501	40,395	1,106	44,426
Indirect tax												
GST (net)	16,150	18,668	18,621	20,987	(279)	22,243	22,153	90	23,392	23,350	42	24,494
Excise duties on:												
Alcoholic drinks	622	639	(14)	665	6	700	695	5	732	732	..	765
Tobacco products	214	238	225	241	10	259	251	8	257	254	3	259
Petroleum fuels	805	822	829	896	(10)	903	904	(1)	940	943	(3)	975
Subtotal: Excise duties	1,641	1,725	1,693	1,802	6	1,862	1,850	12	1,929	1,929	..	1,999
Other indirect tax												
Customs duty	1,805	1,991	1,978	2,060	(7)	2,089	2,089	..	2,107	2,089	18	2,136
Road user charges	908	995	1,010	1,049	(1)	1,134	1,125	9	1,214	1,190	24	1,289
Gaming duties	264	265	261	268	6	272	267	5	276	271	5	279
Motor vehicle fees	195	169	150	175	(7)	171	185	(14)	177	190	(16)	177
Exhaustible resource levy	37	36	37	36	2	36	35	(1)	36	37	(1)	36
Approved issuer levy, cheque duty & other	82	90	98	88	..	88	83	5	88	83	5	88
Subtotal: Other indirect tax	3,291	3,546	3,534	3,671	(7)	3,790	3,784	6	3,895	3,860	35	4,005
Total indirect tax	21,082	23,939	23,848	26,733	(280)	27,895	27,787	108	29,216	29,139	77	30,498
Total tax	55,800	57,528	57,311	61,349	447	66,075	65,041	1,034	70,717	69,534	1,183	74,924
Total tax (% of GDP)	29.5%	28.8%	28.7%	29.5%	0.2%	29.6%	29.2%	0.5%	30.2%	29.7%	0.5%	30.4%
less Core Crown tax eliminations												
Core Crown income tax	111	444	444	580		419	419		456	456		496
GST on Crown expenses and departmental outputs	4,809	5,951	5,951	6,232		6,116	6,116		6,161	6,161		6,365
Crown ESCR	341	486	486	465		473	473		478	478		482
Crown AIL	23	15	15	15		15	15		15	15		15
Core Crown taxation	50,516	50,632	50,415	54,057	447	59,052	58,018	1,034	63,607	62,424	1,183	67,566
Core Crown tax (% of GDP)	26.7%	25.3%	25.2%	26.1%	0.2%	26.5%	26.0%	0.5%	27.2%	26.7%	0.5%	27.5%
less Total Crown tax eliminations												
Income tax from SOEs and CEs	354	434	434	481		539	539		569	569		616
Other Crown GST	..	54	54	14		16	16		(30)	(30)		6
ESCR from SOEs and CEs	12	5	5	5		6	6		5	5		5
Lottery duty	46	45	45	45		49	49		50	50		51
Total Crown taxation	50,104	50,094	49,877	53,512	447	58,442	57,408	1,034	63,013	61,830	1,183	66,888
Total Crown tax (% of GDP)	26.5%	25.1%	25.0%	25.8%	0.2%	26.2%	25.8%	0.5%	26.9%	26.4%	0.5%	27.2%

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 Budget 2010 *Economic and Fiscal Update* Additional Information.¹

The Treasury estimates two summary fiscal indicators: the cyclically-adjusted balance (CAB) and the fiscal impulse indicator. The fiscal impulse indicator uses the change in a cash-based version of the cyclically-adjusted balance. The cyclically-adjusted balance indicator is subject to uncertainty because it uses estimated variables and is sensitive to new information, particularly regarding the output gap. Further information on the methodology behind the indicators can be found in Treasury Working Papers 02/30 and 10/08.² At this *Economic and Fiscal Update*, there are some key changes to the information provided:

1. The significant "one-off" impact on expenses of the Canterbury earthquake is removed from estimates of the cyclically-adjusted balance. This is to give a better indication of the underlying fiscal position. Earthquake expenditure is not removed when calculating the fiscal impulse indicator, since it is expected to add to demand pressure along with other government expenditure.
2. The fiscal impulse is shown for both the core Crown and combined core Crown and Crown entity segments. Previously, only estimates for the core Crown were published. The core Crown indicator mostly reflects changes in receipts and expenditure which are impacted by Budget decisions, whereas the core Crown plus Crown entity indicator provides a better indication of the total impact of central government activities.
3. To quantify uncertainty, sensitivity analysis is performed for both the cyclically-adjusted balance and fiscal impulse indicators. A confidence interval for the cyclically-adjusted balance estimate is also reported.
4. The effect of the terms of trade on the underlying fiscal position is estimated.

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/>>.

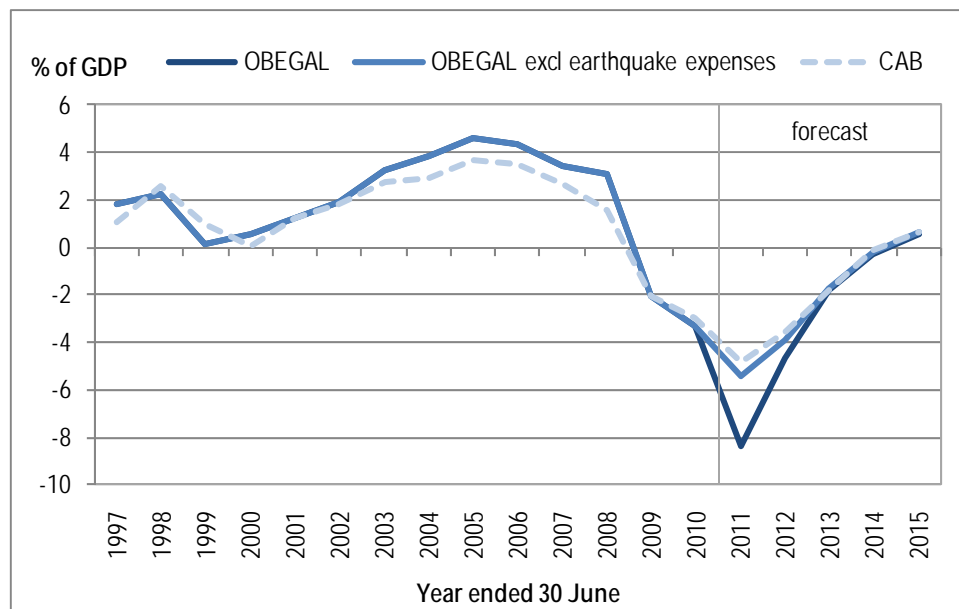
Main indicators

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

Cyclically-adjusted balance

The operating balance (before gains and losses) and the cyclically-adjusted balance are shown in Figure 1. The headline deficit is forecast to be 8.4% of GDP in 2010/11. The cyclically-adjusted balance, adjusting for the one-off earthquake expenses, is estimated to be a deficit of 4.8% of GDP. The difference comprises the impact of the automatic stabilisers which are relatively small (0.7% of GDP) and the earthquake-expense adjustment of 2.9% of GDP. As consolidation measures take hold, the cyclically-adjusted deficit is projected to unwind over the forecast horizon. A surplus is projected on both a cyclically-adjusted and headline basis for 2014/15.

Figure 1 – Cyclically-adjusted balance



Source: The Treasury

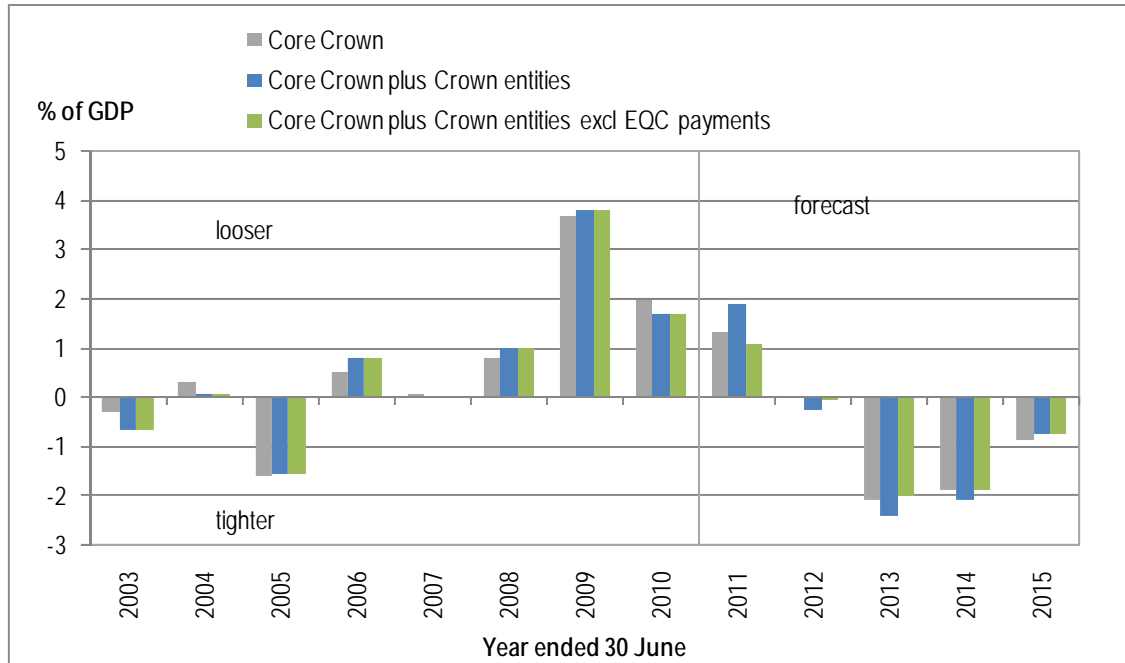
Fiscal impulse

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

The fiscal impulse indicator suggests that core Crown discretionary fiscal policy will add net stimulus of 1.3% of GDP in 2010/11, before becoming neutral in 2011/12 and tightening by around 2% of GDP in 2012/13 and 2013/14. The core Crown plus Crown entity indicator shows similar results, although with greater stimulus in 2010/11 (1.9% of GDP). The Crown entity sector includes the Earthquake Commission (EQC) which is liable for insurance payouts for damage caused by the Canterbury earthquakes. This accounts for much of the impulse of the Crown entity sector, as indicated by the measure excluding EQC payments.

The estimated profile of fiscal impulses is much changed from the 2010 *Half Year Update* due to the expenditure on recovery and reconstruction following the February earthquake. Specifically, 2011/12 is now expected to be broadly neutral, rather than contractionary, with the start of tightening delayed by one year. While this reflects the aggregate stance of fiscal policy, the policy impact will be unevenly distributed geographically and over time because of the key role of the Canterbury reconstruction.

Figure 2 – Fiscal impulse estimates



Source: The Treasury

Uncertainty

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

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

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

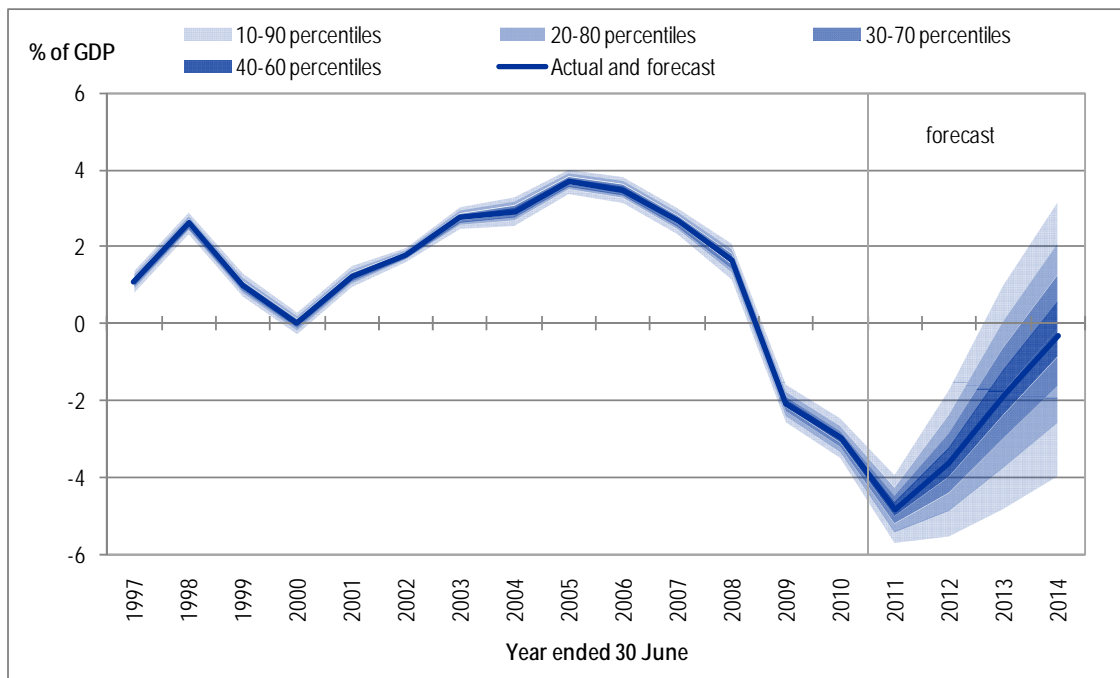
Sensitivity analysis is performed by calculating the indicators using alternative output gaps (from the RBNZ, IMF and OECD) and values for the elasticity of tax revenues with respect to the output gap which are half and twice the magnitude of the baseline estimate. The

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

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 the result of differences in estimation technique, other adjustments based on expert judgment, differences about the underlying forecast outlook and the availability of data at the time of forecast finalisation.

An alternative means of showing uncertainty is to compute confidence intervals based on historical forecast errors of observable economic and fiscal variables and historical revisions to the Treasury's output gap estimates. This is shown for the cyclically-adjusted balance indicator in Figure 3. The confidence interval calculated is conditional on current policy and reflects only observed revisions to the Treasury's official output gap estimate, rather than the full uncertainty implied by different estimation techniques. Details of the methodology and parameter values for the confidence intervals are reported in Treasury Working Paper 10/08.⁴ This analysis would suggest that there is a structural fiscal deficit with a high degree of confidence.

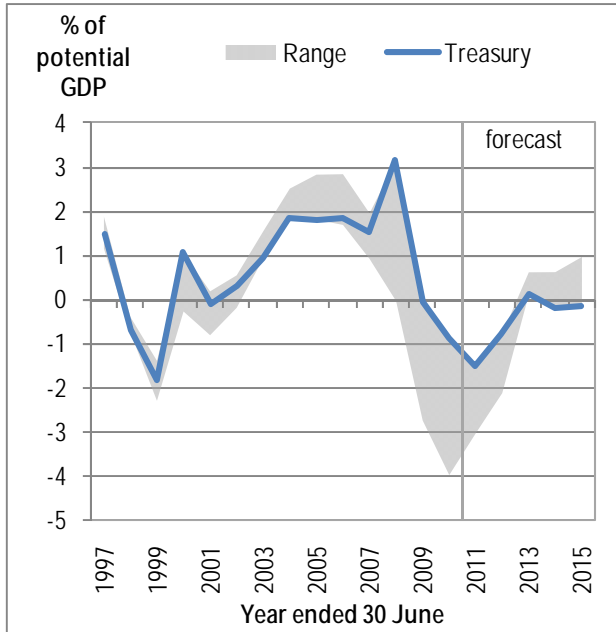
Figure 3 – Fan chart for cyclically-adjusted balance



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

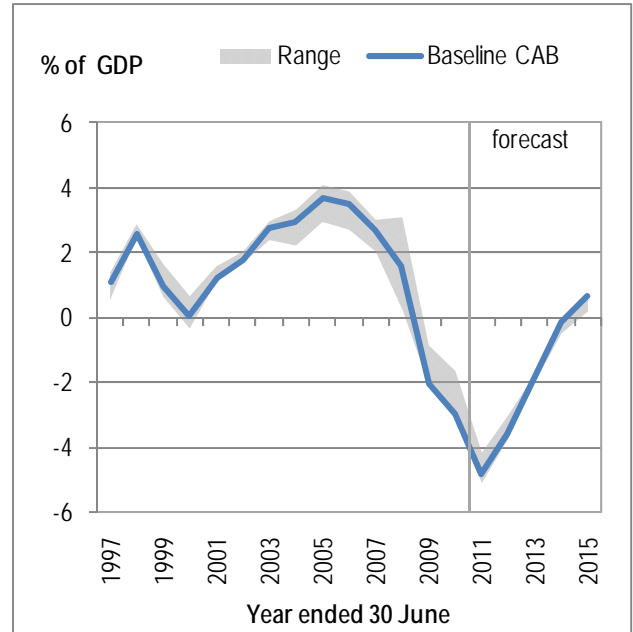
⁴ Available at <http://www.treasury.govt.nz/publications/research-policy/wp/2010/10-08/>.

Figure 4 – Output gap range



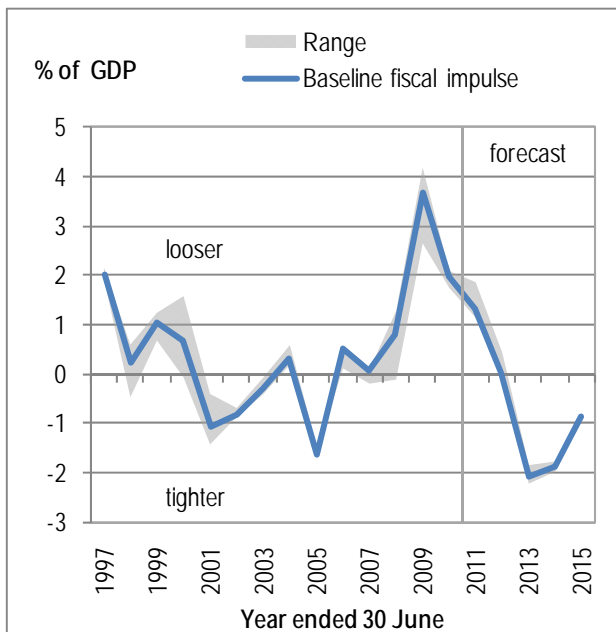
Source: The Treasury

Figure 5 – Cyclically-adjusted balance range



Source: The Treasury

Figure 6 – Core Crown fiscal impulse range



Source: The Treasury

Terms-of-trade adjustment

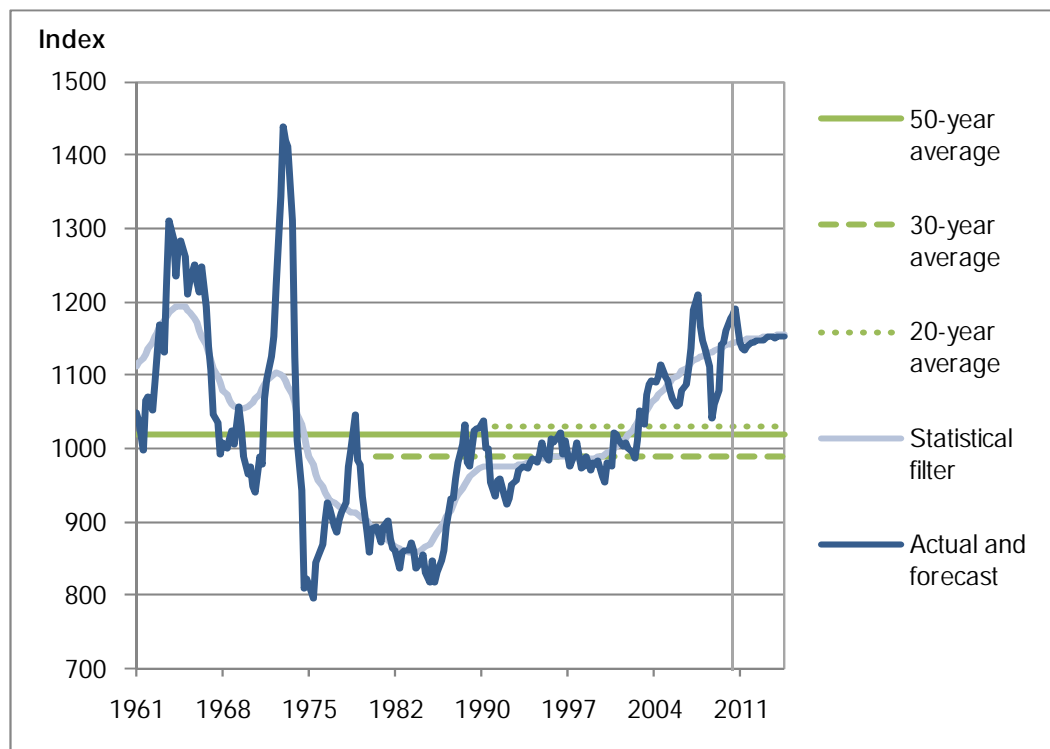
Following the review of the structural budget balance methodology in Treasury Working Paper 10/08, the Treasury has decided to publish an estimate of the terms-of-trade effect on the budget balance.

Estimating the terms-of-trade effect means calculating the approximate amount of tax revenue which is due to deviations in the terms of trade from some specified structural, or long-run, level. The main Budget forecast has the terms of trade remaining at a relatively elevated level throughout the forecast horizon. A terms-of-trade adjustment to the fiscal balance should be seen as an exercise in seeing what the fiscal position would be under a

different assumption (ie, a scenario), rather than being a central view. The purpose is to produce information which helps to make judgements about the fiscal position from a medium-term perspective, without compromising the forecasts' role of estimating the most likely near-term outcome.

Figure 7 shows New Zealand's terms of trade and historical average levels (50-, 30- and 20-year averages) and a time-varying trend using a statistical filter.⁵ The historical average and trend estimates are used as estimates of the structural level of the terms of trade. A terms-of-trade adjustment, for each alternate assumption, is reported in Table 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 between 1.7 to 2.2% of GDP from structural tax revenues in 2010/11 resulting in a significantly larger structural budget deficit than without the terms-of-trade adjustment. Alternately, a time-varying trend, which smoothes out volatility in the data, would suggest a terms-of-trade adjustment which subtracts only 0.4% of GDP from the structural budget balance in 2010/11, and fully unwinds in the forecast horizon. Using the statistical filter runs the risk of interpreting long cycles as structural shifts in real time, whereas using an historical average suffers from the opposite risk.

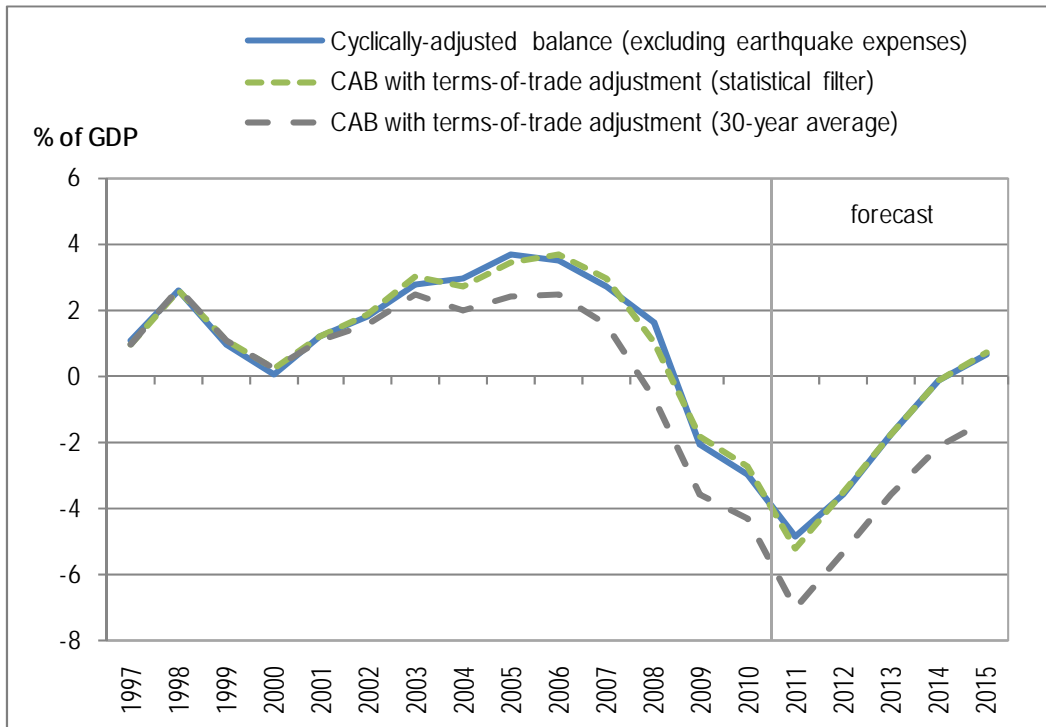
Figure 7 – Terms-of-trade with historical average and time-varying trend



Sources: Statistics New Zealand, The Treasury

⁵ A Hodrick-Prescott filter is used on quarterly data with a smoothing parameter of 1600.

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



Source: The Treasury

Data tables for summary fiscal indicators

Table 11 – Central estimates of output gap, cyclically-adjusted balance and fiscal impulse (% of GDP)

June year	Output gap	OBEGAL	OBEGAL excl earthquake expenses	CAB	Fiscal impulse (core Crown)	Fiscal impulse (core Crown plus Crown entity)	Fiscal impulse (core Crown plus CE) excluding EQC payouts
1997	1.5	1.8	1.8	1.1	2.0		
1998	-0.7	2.3	2.3	2.6	0.3		
1999	-1.8	0.1	0.1	1.0	1.0		
2000	1.1	0.5	0.5	0.0	0.7		
2001	-0.1	1.2	1.2	1.2	-1.1		
2002	0.3	1.9	1.9	1.8	-0.8		
2003	0.9	3.2	3.2	2.8	-0.3	-0.7	-0.7
2004	1.8	3.8	3.8	2.9	0.3	0.1	0.1
2005	1.8	4.6	4.6	3.7	-1.6	-1.6	-1.6
2006	1.8	4.4	4.4	3.5	0.5	0.8	0.8
2007	1.5	3.4	3.4	2.7	0.1	0.0	0.0
2008	3.1	3.1	3.1	1.6	0.8	1.0	1.0
2009	-0.1	-2.1	-2.1	-2.1	3.7	3.8	3.8
2010	-0.9	-3.3	-3.3	-3.0	2.0	1.7	1.7
2011	-1.5	-8.4	-5.5	-4.8	1.3	1.9	1.1
2012	-0.8	-4.7	-3.9	-3.6	0.0	-0.3	0.0
2013	0.1	-1.8	-1.7	-1.8	-2.1	-2.4	-2.0
2014	-0.2	-0.3	-0.2	-0.1	-1.9	-2.1	-1.9
2015	-0.2	0.5	0.6	0.7	-0.9	-0.7	-0.7

Source: The Treasury

Table 12 – Sources for alternative output gaps

Institution	Source	Publication date
The Treasury	<i>Budget Economic and Fiscal Update</i>	May 2011
RBNZ	<i>Monetary Policy Statement</i>	March 2011
IMF	<i>World Economic Outlook</i>	April 2011
OECD	<i>Economic Outlook</i>	December 2010

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

June year	Treasury	RBNZ	IMF	OECD
1997	1.5	1.9	1.6	1.2
1998	-0.7	-0.4	-0.4	-0.7
1999	-1.8	-2.3	-1.4	-1.4
2000	1.1	0.4	-0.3	-0.3
2001	-0.1	-0.8	0.2	-0.1
2002	0.3	-0.2	0.6	0.5
2003	0.9	1.0	1.4	1.6
2004	1.8	2.5	2.0	2.2
2005	1.8	2.8	2.5	2.7
2006	1.8	2.8	1.8	1.7
2007	1.5	2.0	1.3	0.9
2008	3.1	2.7	0.7	0.0
2009	-0.1	-1.0	-1.7	-2.7
2010	-0.9	-1.9	-3.2	-4.0
2011	-1.5	-2.9	-3.0	-3.0
2012	-0.8	-0.9	-2.0	-2.1
2013	0.1	0.6		
2014	-0.2	0.6		
2015	-0.2	1.0		

Sources: The Treasury, RBNZ, IMF, OECD

Table 14 – Elasticity values used in sensitivity analysis

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

Source: The Treasury

Table 15 – Cyclically-adjusted balance with alternative output gap and elasticity values (% of GDP)

June year	OBEGAL	Baseline CAB	CAB using alternative output gaps			CAB using alternative elasticities	
			RBNZ	IMF	OECD	Low	High
1997	1.8	1.1	0.9	1.0	1.2	1.4	0.5
1998	2.3	2.6	2.5	2.5	2.6	2.5	2.9
1999	0.1	1.0	1.2	0.8	0.8	0.6	1.6
2000	0.5	0.0	0.3	0.6	0.6	0.2	-0.4
2001	1.2	1.2	1.6	1.1	1.2	1.2	1.3
2002	1.9	1.8	2.0	1.7	1.7	1.8	1.7
2003	3.2	2.8	2.7	2.5	2.5	3.0	2.4
2004	3.8	2.9	2.6	2.8	2.7	3.3	2.2
2005	4.6	3.7	3.2	3.4	3.3	4.1	2.9
2006	4.4	3.5	3.0	3.5	3.5	3.9	2.7
2007	3.4	2.7	2.5	2.8	3.0	3.0	2.0
2008	3.1	1.6	1.8	2.8	3.1	2.3	0.2
2009	-2.1	-2.1	-1.6	-1.3	-0.9	-2.1	-2.0
2010	-3.3	-3.0	-2.6	-2.0	-1.7	-3.1	-2.6
2011	-8.4	-4.8	-4.2	-4.2	-4.2	-5.1	-4.2
2012	-4.7	-3.6	-3.6	-3.1	-3.0	-3.7	-3.3
2013	-1.8	-1.8	-2.0			-1.8	-1.8
2014	-0.3	-0.1	-0.5			-0.2	-0.1
2015	0.5	0.7	0.2			0.6	0.7

Source: The Treasury

Table 16 – Core Crown fiscal impulse with alternative output gap and elasticity values (% of GDP)

June year	Fiscal impulse	Fiscal impulse using alternative output gaps			Fiscal impulse using alternative elasticities	
		RBNZ	IMF	OECD	Low	High
1997	2.0	2.2	2.0	2.0	2.1	1.9
1998	0.3	0.2	0.3	0.4	0.6	-0.5
1999	1.0	0.7	1.1	1.3	1.2	0.7
2000	0.7	0.6	-0.1	-0.1	0.2	1.6
2001	-1.1	-1.1	-0.4	-0.5	-0.9	-1.4
2002	-0.8	-0.7	-0.8	-0.7	-0.9	-0.7
2003	-0.3	-0.1	-0.2	-0.1	-0.4	-0.1
2004	0.3	0.6	0.2	0.2	0.2	0.6
2005	-1.6	-1.5	-1.4	-1.4	-1.6	-1.6
2006	0.5	0.5	0.2	0.1	0.5	0.5
2007	0.1	-0.2	0.0	-0.1	0.1	0.0
2008	0.8	0.5	0.0	-0.1	0.5	1.3
2009	3.7	3.5	4.0	4.0	4.2	2.7
2010	2.0	2.0	1.8	1.8	2.1	1.8
2011	1.3	1.2	1.6	1.9	1.4	1.2
2012	0.0	0.4	0.1	0.1	-0.1	0.2
2013	-2.1	-1.9			-2.2	-1.8
2014	-1.9	-1.8			-1.8	-2.0
2015	-0.9	-0.8			-0.9	-0.9

Source: The Treasury

Table 17 – Terms-of-trade adjustment to the structural budget balance (% of GDP)

June year	Baseline CAB	Terms-of-trade adjustment (impact on CAB)				CAB with terms-of-trade adjustment			
		50-year average	30-year average	20-year average	Statistical filter	50-year average	30-year average	20-year average	Statistical filter
1997	1.1	0.2	-0.1	0.3	-0.1	1.3	1.0	1.4	1.0
1998	2.6	0.3	0.0	0.4	0.0	2.9	2.6	3.1	2.6
1999	1.0	0.4	0.1	0.5	0.1	1.4	1.1	1.5	1.1
2000	0.0	0.5	0.2	0.6	0.2	0.5	0.2	0.7	0.2
2001	1.2	0.2	-0.1	0.4	0.0	1.4	1.1	1.6	1.2
2002	1.8	0.1	-0.2	0.3	0.1	1.9	1.6	2.1	1.9
2003	2.8	0.1	-0.3	0.2	0.3	2.8	2.5	3.0	3.0
2004	2.9	-0.6	-1.0	-0.5	-0.2	2.3	2.0	2.5	2.7
2005	3.7	-0.9	-1.3	-0.8	-0.3	2.7	2.4	2.9	3.4
2006	3.5	-0.7	-1.0	-0.5	0.2	2.8	2.5	3.0	3.7
2007	2.7	-0.8	-1.1	-0.6	0.2	1.9	1.6	2.1	2.9
2008	1.6	-1.9	-2.3	-1.7	-0.6	-0.3	-0.7	-0.1	1.0
2009	-2.1	-1.1	-1.5	-1.0	0.2	-3.2	-3.6	-3.0	-1.8
2010	-3.0	-1.0	-1.3	-0.8	0.2	-4.0	-4.3	-3.8	-2.7
2011	-4.8	-1.8	-2.2	-1.7	-0.4	-6.6	-7.0	-6.5	-5.2
2012	-3.6	-1.4	-1.8	-1.2	0.1	-5.0	-5.3	-4.8	-3.5
2013	-1.8	-1.5	-1.8	-1.3	0.0	-3.2	-3.6	-3.1	-1.7
2014	-0.1	-1.6	-2.0	-1.4	0.0	-1.7	-2.1	-1.6	-0.1
2015	0.7	-1.6	-2.0	-1.5	0.0	-1.0	-1.4	-0.8	0.7

Source: The Treasury

Government Finance Statistics for Central Government

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

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

Coverage	The Central Government entity is defined here as the consolidation of core Crown (excluding Reserve Bank) and Crown entities, as opposed to the emphasis on the total Crown in the Budget 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 (e.g. some levies move to taxation revenue).

The GFS data presented in this section is experimental. Statistics New Zealand is working towards an official GFS series, which will also include local government. Table 18 outlines some of the key indicators for the central government under a GFS presentation.

Table 18 – Summary indicators for central government

	2010	2011	2012	2013	2014	2015
	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
\$million						
Net operating balance	(3,461)	(10,061)	(5,405)	(1,304)	2,105	4,035
Fiscal Balance (Net lending/borrowing)	(5,367)	(12,265)	(7,092)	(2,672)	560	2,726
Cash surplus/(deficit)	(5,362)	(12,465)	(11,321)	(5,858)	(1,674)	(72)
Net worth	93,955	84,518	77,225	75,875	78,167	82,754
Net financial worth	(11,005)	636	9,616	12,334	11,587	8,309
Borrowing	43,998	63,640	69,928	70,286	79,275	75,923
%GDP						
Net operating balance	(1.8)	(5.0)	(2.6)	(0.6)	0.9	1.6
Fiscal Balance (Net lending/borrowing)	(2.8)	(6.1)	(3.4)	(1.2)	0.2	1.1
Cash surplus/(deficit)	(2.8)	(6.2)	(5.4)	(2.6)	(0.7)	(0.0)
Net worth	49.7	42.3	36.9	34.0	33.4	33.6
Net financial worth	(5.8)	0.3	4.6	5.5	4.9	3.4
Borrowing	23.3	31.8	33.4	31.5	33.8	30.9

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

- Table 19 – Statement of Operations
 - records the results of all transactions during an accounting period.
- Table 20 – Statement of Other Economic Flows
 - records changes to stocks of assets, liabilities and net worth that come about from sources other than transactions.
- Table 21 – Statement of Sources and Uses of Cash
 - records cash inflow and outflows using classifications similar to the Statement of Operations.
- Table 22 – Balance Sheet
 - records the stocks of assets, liabilities and net worth.
- Table 23 – Statement of Stocks and Flows
 - shows how the operating balance is applied to capital investment and debt repayment at a component level.
- Table 24 – Reconciliation between GAAP and GFS operating balance
 - records the adjustments between the GAAP and GFS operating balance.
- Table 25 – Reconciliation between GAAP residual cash and GFS cash surplus/(deficit)
 - records the adjustments between the GAAP and GFS cash indicators.

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

Table 19 – Statement of Operations

for the years ended 30 June

	2010 Actual \$m	2011 Forecast \$m	2012 Forecast \$m	2013 Forecast \$m	2014 Forecast \$m	2015 Forecast \$m
Revenue						
Taxation revenue	54,289	55,507	59,736	64,726	69,552	74,123
Interest revenue and dividends	3,054	3,068	2,355	2,633	2,791	3,171
Sale of goods and services and other revenue	8,291	11,577	8,534	8,669	8,917	9,124
Total revenue	65,634	70,152	70,625	76,028	81,260	86,418
Expenses						
Compensation of employees	18,373	18,561	18,775	18,953	18,967	19,191
Consumption of capital	3,045	3,048	3,166	3,227	3,282	3,292
Social benefits	20,778	21,846	22,401	23,033	23,615	24,556
Grants and subsidies	3,924	5,436	4,866	4,735	4,846	4,913
Finance costs	2,016	2,604	3,338	3,861	4,110	4,564
Other expenses	20,959	28,968	23,331	22,533	22,570	22,910
Forecast for new operating spending and top-down adjustment	-	(250)	153	990	1,765	2,957
Total expenses	69,095	80,213	76,030	77,332	79,155	82,383
Net operating balance	(3,461)	(10,061)	(5,405)	(1,304)	2,105	4,035
Net acquisition of non-financial assets						
Acquisition of non-financial assets	5,094	5,425	5,012	4,720	5,023	4,779
Disposal of non-financial assets	(163)	(122)	(162)	(137)	(200)	(205)
Consumption of fixed assets	(3,045)	(3,048)	(3,166)	(3,227)	(3,282)	(3,292)
Change in inventories	20	49	31	8	3	27
Forecast for new capital spending and top-down adjustment	-	(100)	(28)	4	1	-
Fiscal Balance (Net lending/borrowing)	(5,367)	(12,265)	(7,092)	(2,672)	560	2,726
Net acquisition of financial assets						
Receivables	359	4,613	505	109	1,471	2,341
Advances	3,353	1,594	1,531	1,644	1,434	1,129
Other financial assets	1,298	5,808	(6,324)	(6,748)	6,091	(4,681)
Other assets	(183)	297	353	(85)	(131)	(63)
	4,827	12,312	(3,935)	(5,080)	8,865	(1,274)
Net incurrence of liabilities						
Borrowings	8,912	20,315	6,452	435	9,008	(3,387)
Accounts payable	385	(324)	258	(13)	152	137
Other liabilities	897	4,586	(3,553)	(2,830)	(855)	(750)
	10,194	24,577	3,157	(2,408)	8,305	(4,000)
Difference between net lending/borrowing and financing	-	-	-	-	-	-

Table 20 – Statement of Other Economic Flows

for the years ended 30 June

	2010 Actual \$m	2011 Forecast \$m	2012 Forecast \$m	2013 Forecast \$m	2014 Forecast \$m	2015 Forecast \$m
Other Economic Flows						
Impairments and write-offs of financial assets	(2,104)	(2,288)	(2,575)	(2,622)	(2,790)	(2,833)
ACC/GSF valuations changes	(1,231)	287	-	-	-	-
Other gains/(losses) on non financial instruments	193	(2,522)	(2,073)	(624)	(603)	(607)
Derivatives gains	961	1,788	396	407	461	540
Derivatives losses	1,265	521	132	87	54	12
Gains/(losses) on financial assets	643	2,656	1,565	1,974	2,359	2,666
Gains/(losses) on financial liabilities	75	152	32	(10)	(35)	(47)
Reserve bank equity accounted	(740)	(17)	37	32	26	20
SOEs equity accounted	(164)	5	522	634	641	730
Other items	54	42	76	76	74	71
Total other economic flows	(1,048)	624	(1,888)	(46)	187	552

Table 21 – Statement of Sources and Uses of Cash

for the years ended 30 June

	2010 Actual \$m	2011 Forecast \$m	2012 Forecast \$m	2013 Forecast \$m	2014 Forecast \$m	2015 Forecast \$m
Cash receipts from operating activities						
Total tax receipt	54,112	54,550	58,566	63,238	67,851	71,703
Interest and dividends	2,800	2,776	2,198	2,555	2,740	3,126
Sale of goods and services and other receipts	7,985	8,045	9,429	9,808	8,861	8,395
Total receipts	64,897	65,371	70,193	75,601	79,452	83,224
Cash payments from operating activities						
Compensation of employees and other payments	(36,980)	(42,464)	(43,418)	(41,881)	(39,727)	(39,396)
Social benefits	(21,335)	(22,425)	(23,435)	(23,669)	(24,280)	(25,257)
Grants and subsidies	(5,769)	(5,848)	(6,583)	(6,758)	(6,666)	(6,623)
Finance costs	(1,703)	(2,321)	(3,375)	(3,955)	(4,022)	(4,610)
Forecast for new operating spending and top-down adjustment	-	250	(153)	(990)	(1,765)	(2,957)
Total payments	(65,787)	(72,808)	(76,964)	(77,253)	(76,460)	(78,843)
Net cash inflow/(outflow) from operating activities	(890)	(7,437)	(6,771)	(1,652)	2,992	4,381
Net cash outflow from investments in non-financial assets						
Acquisition of non-financial assets	(4,635)	(5,250)	(4,740)	(4,339)	(4,865)	(4,658)
Disposal of non-financial assets	163	122	162	137	200	205
Forecast for new capital spending and top-down adjustment	-	100	28	(4)	(1)	-
Cash surplus/(deficit)	(5,362)	(12,465)	(11,321)	(5,858)	(1,674)	(72)
Net acquisition of financial assets						
Advances	(1,194)	(1,057)	(923)	(1,072)	(796)	(463)
Share investments	(2,212)	(4,656)	6,288	6,849	(5,984)	5,133
Net purchase of investments	87	40	(135)	(165)	(185)	(679)
Capital contributions	20	(232)	(250)	-	-	-
Net incurrence of liabilities						
Issues of circulating currency	-	-	-	-	-	-
New Zealand dollar borrowings	(1,837)	1,936	8,433	723	1,297	2,018
Foreign currency borrowings	3,477	(1,905)	(6,529)	(202)	(711)	(818)
Government stock	6,494	20,281	4,152	(265)	8,083	(4,875)
Net cash inflows from financing activities	4,835	14,407	11,036	5,868	1,704	316
Net change in the stock of cash	(527)	1,942	(285)	10	30	244

Table 22 – Balance Sheet

as at 30 June

	2010	2011	2012	2013	2014	2015
	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
	\$m	\$m	\$m	\$m	\$m	\$m
Assets						
Cash and cash equivalents	12,698	14,640	14,355	14,365	14,395	14,639
Receivables	12,588	15,837	14,825	13,330	13,053	13,608
Marketable securities, deposits and derivatives in gain	20,157	26,207	20,000	12,979	18,676	14,201
Share investments	12,170	14,277	16,165	18,610	21,578	24,114
Advances	10,469	11,292	12,006	12,831	13,439	13,741
Inventory	604	653	684	692	695	722
Other assets	1,139	1,152	1,156	1,151	1,144	1,137
Property, plant & equipment	82,346	84,601	86,285	87,641	89,182	90,464
Equity accounted investments	35,614	35,400	36,454	37,091	37,722	38,526
Intangible assets and goodwill	1,536	2,064	1,994	2,019	2,005	1,966
Forecast for new capital spending and top-down adjustment	-	(100)	(128)	(124)	(123)	(123)
Total assets	189,321	206,023	203,796	200,585	211,766	212,995
Liabilities						
Payables	7,558	7,347	7,675	7,693	7,869	8,009
Deferred revenue	1,365	1,252	1,182	1,151	1,127	1,124
Borrowings	43,998	63,640	69,928	70,286	79,275	75,923
Insurance liabilities	27,122	31,793	30,524	29,671	30,534	32,261
Retirement plan liabilities	9,939	9,269	8,893	8,579	8,314	8,083
Provisions	5,384	8,204	8,369	7,330	6,480	4,841
Total liabilities	95,366	121,505	126,571	124,710	133,599	130,241
Net Worth	93,955	84,518	77,225	75,875	78,167	82,754

Table 23 – Statement of Stocks and Flows

for the year ended 30 June 2011

Opening balance statement	\$million	Statement of operations	\$million	Other economic flows	\$million	Closing balance sheet	\$million
Opening net worth	93,955	Operating balance	(10,061)	Holding gains	624	Closing net worth	84,518
<i>Equals</i>		<i>Equals</i>					
Non-financial assets	82,950	Transactions	2,204	Valuation changes	-	Non-financial assets	85,154
<i>plus</i>		<i>plus</i>		<i>plus</i>		<i>plus</i>	
Net financial worth	11,005	Net lending	(12,265)	Change in net financial worth	624	Net financial worth	(636)
<i>Equals</i>		<i>Equals</i>					
Financial assets	106,371	Transactions in financial assets	12,312	Changes in financial assets	2,186	Closing financial assets	120,869
<i>less</i>		<i>less</i>		<i>less</i>		<i>less</i>	
Opening liabilities	95,366	Transactions in liabilities	24,577	Changes in liabilities	1,562	Closing liabilities	121,505

for the year ended 30 June 2012

Opening balance statement	\$million	Statement of operations	\$million	Other economic flows	\$million	Closing balance sheet	\$million
Opening net worth	84,518	Operating balance	(5,405)	Holding gains	(1,888)	Closing net worth	77,225
<i>Equals</i>		<i>Equals</i>					
Non-financial assets	85,154	Transactions	1,687	Valuation changes	-	Non-financial assets	86,841
<i>plus</i>		<i>plus</i>		<i>plus</i>		<i>plus</i>	
Net financial worth	(636)	Net lending	(7,092)	Change in net financial worth	(1,888)	Net financial worth	(9,616)
<i>Equals</i>		<i>Equals</i>					
Financial assets	120,869	Transactions in financial assets	(3,935)	Changes in financial assets	21	Closing financial assets	116,955
<i>less</i>		<i>less</i>		<i>less</i>		<i>less</i>	
Opening liabilities	121,505	Transactions in liabilities	3,157	Changes in liabilities	1,909	Closing liabilities	126,571

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	77,225	Operating balance	(1,304)	Holding gains	(46)	Closing net worth	75,875
<i>Equals</i>		<i>Equals</i>					
Non-financial assets	86,841	Transactions	1,368	Valuation changes	-	Non-financial assets	88,209
<i>plus</i>		<i>plus</i>		<i>plus</i>		<i>plus</i>	
Net financial worth	(9,616)	Net lending	(2,672)	Change in net financial worth	(46)	Net financial worth	(12,334)
<i>Equals</i>		<i>Equals</i>					
Financial assets	116,955	Transactions in financial assets	(5,080)	Changes in financial assets	501	Closing financial assets	112,376
<i>less</i>		<i>less</i>		<i>less</i>		<i>less</i>	
Opening liabilities	126,571	Transactions in liabilities	(2,408)	Changes in liabilities	547	Closing liabilities	124,710

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	75,875	Operating balance	2,105	Holding gains	187	Closing net worth	78,167
<i>Equals</i>		<i>Equals</i>					
Non-financial assets	88,209	Transactions	1,545	Valuation changes	-	Non-financial assets	89,754
<i>plus</i>		<i>plus</i>		<i>plus</i>		<i>plus</i>	
Net financial worth	(12,334)	Net lending	560	Change in net financial worth	187	Net financial worth	(11,587)
<i>Equals</i>		<i>Equals</i>					
Financial assets	112,376	Transactions in financial assets	8,865	Changes in financial assets	771	Closing financial assets	122,012
<i>less</i>		<i>less</i>		<i>less</i>		<i>less</i>	
Opening liabilities	124,710	Transactions in liabilities	8,305	Changes in liabilities	584	Closing liabilities	133,599

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	78,167	Operating balance	4,035	Holding gains	552	Closing net worth	82,754
<i>Equals</i>		<i>Equals</i>					
Non-financial assets	89,754	Transactions	1,309	Valuation changes	-	Non-financial assets	91,063
<i>plus</i>		<i>plus</i>		<i>plus</i>		<i>plus</i>	
Net financial worth	(11,587)	Net lending	2,726	Change in net financial worth	552	Net financial worth	(8,309)
<i>Equals</i>		<i>Equals</i>					
Financial assets	122,012	Transactions in financial assets	(1,274)	Changes in financial assets	1,194	Closing financial assets	121,932
<i>less</i>		<i>less</i>		<i>less</i>		<i>less</i>	
Opening liabilities	133,599	Transactions in liabilities	(4,000)	Changes in liabilities	642	Closing liabilities	130,241

Table 24 – Reconciliation between GAAP and GFS operating balance

	2010 Actual \$m	2011 Forecast \$m	2012 Forecast \$m	2013 Forecast \$m	2014 Forecast \$m	2015 Forecast \$m
Operating balance per GAAP	(4,509)	(9,437)	(7,293)	(1,350)	2,292	4,587
Remove gains/losses and net surpluses from associates and joint ventures	(1,806)	(7,291)	(2,448)	(2,747)	(3,011)	(3,290)
Operating balance before gains and losses (OBEGAL)	(6,315)	(16,728)	(9,741)	(4,097)	(719)	1,297
Remove SOE portion of OBEGAL (incl. eliminations)	(43)	(30)	(419)	(434)	(465)	(560)
Remove ETS expenses	80	1,232	692	400	415	422
Remove impairments and write-offs on financial assets	2,104	2,288	2,575	2,622	2,790	2,833
Remove recognition of large provisions	-	2,689	1,372	222	181	181
Tertiary institutions included on a line-by-line basis	208	209	206	205	205	205
Reserve Bank (equity accounted)	501	275	(94)	(220)	(298)	(340)
Other adjustments	4	4	4	(2)	(4)	(3)
Net operating balance per GFS	(3,461)	(10,061)	(5,405)	(1,304)	2,105	4,035

Table 25 – Reconciliation between GAAP residual cash and GFS cash surplus/(deficit)

	2010 Actual \$m	2011 Forecast \$m	2012 Forecast \$m	2013 Forecast \$m	2014 Forecast \$m	2015 Forecast \$m
Residual cash per GAAP	(9,000)	(14,951)	(13,482)	(8,951)	(5,393)	(4,051)
Back out advances	926	1,334	879	940	897	679
Back out investments	1,055	1,280	1,261	1,109	1,215	1,822
Back out NZS Fund contributions	250	-	-	-	-	-
Add in cash flows from Crown entities	1,086	(95)	258	1,108	1,691	1,575
Remove cash flows from the Reserve Bank	182	57	(70)	(65)	(53)	(47)
Other adjustments (mainly impact of NZS Fund)	139	(90)	(167)	1	(31)	(50)
Cash surplus/(deficit)	(5,362)	(12,465)	(11,321)	(5,858)	(1,674)	(72)

Accounting Policies

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

Statement of Compliance

These forecast financial statements have been prepared in accordance with the Public Finance Act 1989 and with New Zealand Generally Accepted Accounting Practice (NZ GAAP). The accounting policies applied in the statements are the same as those applied in the audited, actual financial statements of the Government for the year ended 30 June 2010.

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

Reporting Entity

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

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

Basis of Preparation

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

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

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

Judgements and Estimations

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

The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. For example, the risk free rate is derived from government bond rates for the periods covered by these bonds, and is extrapolated to converge towards the long-term average of 6% beyond that time. Actual results may differ from these estimates.

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

More details on these judgements and estimations are available in the Financial Statements of the Government of New Zealand for the year ended 30 June 2010.

Early Adoption of Standards and Interpretations

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

An initial assessment of standards approved since 30 June 2010 does not indicate any issues which would have a material impact on these forecast financial statements.

Reporting and Forecast Period

The reporting period for these forecast financial statements is the year ended 30 June 2011 to 30 June 2015.

The “2010 Actual” figures reported in the statements are the audited results reported in the Financial Statements of Government for the year ended 30 June 2010. The “2011 Previous Budget” figures are the original forecasts to 30 June 2011, as presented in the 2010 Budget. The “2011 Forecast” figures incorporate actual financial results up to either 28 February 2011 or 31 March 2011.

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

Basis of Combination

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

Core Entities

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

Other entities

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

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

Tertiary education institutions are equity-accounted for the reasons explained in the notes to the Government's financial statements for the period ended 30 June 2010. 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 *2011 Budget Update*.

Income

Taxation revenue levied through the Crown's sovereign power

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

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

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 taxable income is earned
Terminal tax	Assessment filed date
Goods and services tax (GST)	When the liability to the Crown is incurred
Customs and excise duty	When goods become subject to duty
Road user charges and motor vehicle fees	When payment of the fee or charge is made
Stamp, cheque and credit card duties	When the liability to the Crown is incurred
Exhaustible resources levy	When the resource is extracted
Other indirect taxes	When the debt to the Crown arises
Levies (eg, ACC levies)	When the obligation to pay the levy is incurred

Revenue earned through operations

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

Interest income

Interest income is accrued using the effective interest rate method.

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

Dividend income

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

Rental income

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

Donated or Subsidised Assets

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

Expenses*General*

Expenses are recognised in the period to which they relate.

Welfare benefits and entitlements

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

Grants and subsidies

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

Interest expense

Interest expense is accrued using the effective interest rate method.

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

Foreign currency

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

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

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

Sovereign receivables and taxes repayable

Receivables from taxes, levies and fines (and any penalties associated with these activities) as well as social benefit receivables do not arise out of a contract. These non-contract receivables 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

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 following notes. 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 as fair value through profit and loss
Issued currency	Not designated: Recognised at face value

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

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

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

Derivatives

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

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

Hedging

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

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

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

(a) Cash flow hedge

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

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

(b) Fair value hedge

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

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

Financial Instruments – forecasting policies

For forecasting purposes, financial instruments held after 30 June 2010 are assumed to be held until they mature. Additional gains and losses on financial assets measured at fair value are based on long-run rate of return assumptions appropriate to the forecast portfolio mix, after adjusting for interest revenue and dividend revenue which are reported separately. Gains and losses on financial liabilities measured at fair value are assumed to unwind over the period to maturity, as they are assumed to be redeemed at par value.

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

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

Derivatives held for trading are measured at fair value, which is nil when initially entered into. That is, fair value changes are only recognised after the derivative is created and as a result of changes in underlying variables such as exchange rates. Hence, forecasts for derivatives expected to be entered into over the forecast period are assumed to have a nil balance. Forward margins on forward-exchange contracts existing as at 30 June 2010 are amortised over the period of the contract on a straight line basis.

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

Inventories

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

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

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

Property, plant and equipment

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

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

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

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

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

Items of property are revalued to fair value for the highest and best use of the item on the basis of the market value of the item, or on the basis of market evidence, such as discounted cash flow calculations. If no market evidence of fair value exists, an optimised depreciated replacement cost approach is used as the best proxy for fair value.

Where an item of property is recorded at its optimised depreciated replacement cost, this cost is based on the estimated present cost of constructing the existing item of property by the most appropriate method of construction, less allowances for physical deterioration and optimisation for obsolescence and relevant surplus capacity. Where an item of property is recorded at its optimised depreciated replacement cost, the cost does not include any borrowing costs.

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

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

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

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

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

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

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

Specified heritage and cultural assets are generally not depreciated.

Property, plant and equipment

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

Equity accounted investments

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

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

Biological assets

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

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

Intangible assets

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

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

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

Intangible assets with indefinite useful lives are not amortised, but are tested 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 annually to determine if there is any indication of impairment. Where an intangible asset’s recoverable amount is less than its carrying amount, it is reported at its recoverable amount and an impairment loss is recognised. Losses resulting from impairment are reported in the statement of financial performance.

Goodwill is tested for impairment annually.

Non-current assets held for sale and discontinued operations

Non-current assets or disposal groups are separately classified where their carrying amount will be recovered through a sale transaction rather than continuing use; that is, where such assets are available for immediate sale and where sale is highly probable. Non-current assets or disposal groups are recorded at the lower of their carrying amount and fair value less costs to sell.

Investment Property

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

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

Employee benefits***Pension liabilities***

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

Other employee entitlements

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

Termination benefits

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

Insurance contracts

The future cost of ACC claims liabilities is revalued annually based on the latest actuarial information. Movements of the liability are reflected in the statement of financial performance. Financial assets backing the liability are designated at fair value through profit and loss.

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 assets and contingent liabilities

Contingent liabilities and contingent assets are reported at the point at which the contingency is evident. Contingent liabilities are disclosed if the possibility that they will crystallise is not remote. Contingent assets are disclosed if it is probable that the benefits will be realised.

Commitments

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

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

Commitments are classified as:

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

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

Comparatives

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

Comparatives referred to as Previous Budget were forecasts published in the *2010 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, and (for the purposes of these statements) also includes Air New Zealand represents entities that undertake commercial activity.
- **Crown entities:** This group includes entities governed by the Crown Entities Act 2004. These entities have separate legal form and specified government frameworks (including the degree to which each Crown entity is required to give effect to, or be independent of, government policy).

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