2009 Half Year Update
Additional Information

The following information forms part of the *Half Year Economic and Fiscal Update 2009* (*"Half Year Update"*), released by the Treasury on 15 December 2009. This information provides further details on the Half Year Update and should be read in conjunction with the published document. The additional information includes:

- Detailed economic forecast information – 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.
- Accounting policies and forecast assumptions – outline of the specific Crown accounting policies and forecast assumptions. 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 Half Year Update.

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
2007Q1	33,061	2.4	1.8	33,322	1.3
2007Q2	32,924	3.3	2.3	33,605	0.8
2007Q3	33,423	3.4	2.8	33,822	0.6
2007Q4	35,458	3.7	3.2	34,102	0.8
2008Q1	33,737	2.0	3.1	34,005	-0.3
2008Q2	33,182	0.8	2.5	33,858	-0.4
2008Q3	33,294	-0.4	1.5	33,696	-0.5
2008Q4	34,697	-2.1	0.0	33,369	-1.0
2009Q1	32,855	-2.6	-1.1	33,116	-0.8
2009Q2	32,480	-2.1	-1.8	33,143	0.1
2009Q3	32,879	-1.2	-2.0	33,276	0.4
2009Q4	34,807	0.3	-1.4	33,475	0.6
2010Q1	33,377	1.6	-0.4	33,642	0.5
2010Q2	33,155	2.1	0.7	33,832	0.6
2010Q3	33,627	2.3	1.5	34,033	0.6
2010Q4	35,641	2.4	2.1	34,277	0.7
2011Q1	34,272	2.7	2.4	34,545	0.8
2011Q2	34,110	2.9	2.6	34,806	0.8
2011Q3	34,706	3.2	2.8	35,125	0.9
2011Q4	36,892	3.5	3.1	35,480	1.0
2012Q1	35,414	3.3	3.2	35,695	0.6
2012Q2	35,232	3.3	3.3	35,951	0.7
2012Q3	35,787	3.1	3.3	36,220	0.7
2012Q4	37,939	2.8	3.1	36,487	0.7
2013Q1	36,457	2.9	3.0	36,747	0.7
2013Q2	36,263	2.9	3.0	37,003	0.7
2013Q3	36,809	2.9	2.9	37,254	0.7
2013Q4	38,996	2.8	2.9	37,503	0.7
2014Q1	37,450	2.7	2.8	37,748	0.7
2014Q2	37,225	2.7	2.8	37,985	0.6

Source: Statistics New Zealand, The Treasury

Table 2: Consumer Price Index and Exchange Rates

	Consumers Price Index			Exchange rates	
	Index	Quarterly % change	Annual % change	TWI	USD
2007Q1	1010	0.5	2.5	68.8	0.70
2007Q2	1020	1.0	2.0	72.0	0.74
2007Q3	1025	0.5	1.8	71.3	0.74
2007Q4	1037	1.2	3.2	71.0	0.76
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	1099	0.3	2.5	66.5	0.74
2010Q1	1102	0.3	2.5	66.5	0.74
2010Q2	1106	0.4	2.3	66.5	0.74
2010Q3	1114	0.7	1.7	65.7	0.73
2010Q4	1121	0.7	2.0	64.7	0.71
2011Q1	1127	0.5	2.3	63.5	0.69
2011Q2	1133	0.5	2.4	62.0	0.66
2011Q3	1139	0.5	2.3	60.5	0.63
2011Q4	1145	0.5	2.2	59.2	0.61
2012Q1	1151	0.6	2.2	58.1	0.59
2012Q2	1158	0.5	2.2	57.2	0.57
2012Q3	1164	0.5	2.2	56.4	0.56
2012Q4	1169	0.5	2.1	55.7	0.55
2013Q1	1178	0.7	2.3	55.1	0.54
2013Q2	1185	0.6	2.3	54.5	0.53
2013Q3	1190	0.5	2.3	54.0	0.52
2013Q4	1196	0.5	2.3	53.6	0.51
2014Q1	1202	0.5	2.0	53.2	0.51
2014Q2	1208	0.5	1.9	52.9	0.50

Source: Statistics New Zealand, The Treasury

Table 3: Gross Domestic Expenditure and Income

March Year	2009 Actual $ mill	%vol	%pr	2010 Estimate $ mill	%vol	%pr	2011 Forecast $ mill	%vol	%pr	2012 Forecast $ mill	%vol	%pr	2013 Forecast $ mill	%vol	%pr	2014 Forecast $ mill
Consumption:																
- Private	106,501	-0.2	2.4	108,877	2.3	1.8	113,367	2.5	1.8	118,199	1.7	1.7	122,297	1.5	1.8	126,391
- Public	35,789	1.1	2.9	37,223	2.0	2.7	38,976	2.0	2.1	40,628	1.2	2.5	42,150	0.7	2.7	43,586
Gross Fixed Capital Formation:																
- Residential	9,309	-7.3	0.6	8,688	24.5	2.2	11,060	16.1	4.9	13,476	6.6	4.8	15,050	1.9	4.6	16,048
*- Market **	25,899	-11.1	1.5	23,389	8.8	0.0	25,473	7.3	2.8	28,093	4.8	1.8	29,980	6.2	1.7	32,370
*- Non-market ***	3,797	5.1	2.2	4,080	-3.1	1.6	4,011	-3.6	1.5	3,927	3.8	1.4	4,136	4.6	1.4	4,386
- Total all sectors	38,956	-8.5	1.4	36,150	11.8	0.3	40,544	9.3	2.6	45,497	5.6	2.4	49,166	5.4	1.9	52,804
Change in Stocks	1,022			-1,322			73			34			68			529
Gross National Expenditure	182,271	-3.2	2.5	180,927	4.9	1.7	192,960	3.9	1.9	204,357	2.6	1.9	213,680	2.6	1.9	223,311
Exports	56,916	0.4	-12.7	49,962	-0.2	3.7	51,687	5.4	10.8	60,324	5.1	8.4	68,760	4.4	5.8	75,981
Imports	59,366	-13.3	-6.6	48,182	9.7	0.6	53,226	7.7	10.6	63,401	3.7	8.6	71,405	3.7	5.3	77,940
Expenditure on GDP	179,822	0.8	0.9	182,794	2.5	2.3	191,506	3.1	2.1	201,386	3.0	1.8	211,155	2.8	2.1	221,496
Statistical Discrepancy	-466			-464			-458			-451			-445			-438
Gross Domestic Product	179,356			182,330			191,048			200,935			210,710			221,058
Compensation of employees	82,809		1.8	84,309		1.0	85,189		4.3	88,874		5.4	93,713		5.5	98,898
Operating Surplus, net:																
- Agriculture	5,690		-10.3	5,102		4.6	5,335		6.0	5,656		5.5	5,967		5.6	6,303
- Other	41,385		-0.1	41,357		11.1	45,935		5.9	48,644		3.3	50,254		3.6	52,056
- Total all sectors	47,075		-1.3	46,459		10.4	51,270		5.9	54,300		3.5	56,221		3.8	58,359
Consumption of fixed capital	26,587		6.0	28,182		6.0	29,873		6.0	31,665		6.0	33,565		6.0	35,579
Indirect Taxes	23,498		2.1	23,992		5.6	25,328		5.4	26,707		4.2	27,822		3.6	28,834
Less subsidies	612		0.0	612		0.0	612		0.0	612		0.0	612		0.0	612
Gross Domestic Product	179,356		1.7	182,330		4.8	191,048		5.2	200,935		4.9	210,710		4.9	221,058

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

Source: Statistics New Zealand, The Treasury

Table 4 & 5: Labour Market Indicators

Annual Average Percentage Change

March Year	2009 Actual	2010 Estimate	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast
Real GDP (production basis)	-1.1	-0.4	2.4	3.2	3.0	2.8
Working Age Population	1.1	1.4	1.5	1.2	1.1	1.0
Labour Force	1.8	0.5	-0.6	0.3	1.6	2.0
Employment - Full Time Equivalents*	0.8	-2.0	-0.9	1.0	2.5	2.6
Labour Productivity*	-1.9	1.7	3.3	2.3	0.5	0.2
Labour Productivity **	-1.5	3.1	3.8	2.0	0.3	0.2
CPI (annual percentage change)	3.0	2.5	2.3	2.2	2.3	2.0
Average Ordinary Time Hourly Wages	5.3	4.0	2.7	3.0	2.6	2.8
Average Weekly Earnings	4.9	4.6	2.8	3.0	2.6	2.8
Real Wages	1.4	1.8	0.6	0.8	0.4	0.5
Compensation of Employees	5.8	1.8	1.0	4.3	5.4	5.5
Unit Labour Costs (Hours worked basis)	6.8	1.0	-1.1	1.0	2.3	2.6
Real Unit Labour Costs	2.8	-1.1	-3.1	-1.2	0.1	0.4

* Full time equivalent basis
** Hours worked basis

Number (000's)

As at March Quarter	2009 Actual	2010 Estimate	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast
Total Population	4,306	4,359	4,408	4,452	4,493	4,533
Natural Increase	35	28	31	33	31	30
Net Migration	7	24	19	10	10	10
Annual Change	42	53	50	43	41	40
Working Age Population	3,361	3,412	3,459	3,498	3,535	3,570
Annual Change	38	51	46	39	37	36
Not in the labour force	1,059	1,095	1,154	1,175	1,170	1,161
Annual Change	-11	36	59	21	-5	-9
Labour Force	2,302	2,317	2,305	2,323	2,365	2,410
Annual Change	49	16	-12	18	42	45
Total Employment	2,173	2,136	2,128	2,167	2,225	2,280
Annual Change	16	-37	-7	39	58	54
Unemployment	129	181	176	156	139	130
Annual Change	33	53	-5	-21	-16	-9
Participation Rate (%sa)	68.3	67.5	66.2	66.1	66.6	67.3
Unemployment Rate (%sa)	5.0	7.0	6.9	6.0	5.3	4.8

Source: Statistics New Zealand, The Treasury

Table 6: Current Account

$NZ Million							**Percent of Nominal GDP**					
Year ended March	**2009** Actual	**2010** Estimate	**2011** Forecast	**2012** Forecast	**2013** Forecast	**2014** Forecast	**2009** Actual	**2010** Estimate	**2011** Forecast	**2012** Forecast	**2013** Forecast	**2014** Forecast
Exports Goods	44,259	38,222	39,867	46,669	52,888	58,004						
annual % Change	*14.3*	*-13.6*	*4.3*	*17.1*	*13.3*	*9.7*						
Imports Goods	45,591	35,982	39,985	47,691	53,661	58,771						
annual % Change	*12.5*	*-21.1*	*11.1*	*19.3*	*12.5*	*9.5*						
Balance on Goods	-1,337	2,237	-118	-1,022	-773	-767	-0.7	1.2	-0.1	-0.5	-0.4	-0.3
Exports Services	12,658	11,790	11,805	13,696	15,914	18,018						
annual % change	*-1.2*	*-6.9*	*0.1*	*16.0*	*16.2*	*13.2*						
Imports Services	13,776	12,200	13,241	15,710	17,744	19,169						
annual % change	*9.0*	*-11.4*	*8.5*	*18.6*	*12.9*	*8.0*						
Balance on services	-1,119	-410	-1,437	-2,015	-1,830	-1,152	-0.6	-0.2	-0.8	-1.0	-0.9	-0.5
Balance on goods & services	-2,456	1,828	-1,555	-3,036	-2,603	-1,919	-1.4	1.0	-0.8	-1.5	-1.2	-0.9
Int'l investment income and transfers balance	-12,116	-7,053	-8,739	-10,570	-12,338	-13,735	-6.7	-3.9	-4.6	-5.2	-5.8	-6.2
Current account balance	**-14,568**	**-5,225**	**-10,294**	**-13,606**	**-14,941**	**-15,654**	**-8.1**	**-2.9**	**-5.4**	**-6.8**	**-7.1**	**-7.1**

Source: Statistics New Zealand, The Treasury

Table 7: Exports - SNA basis

Breakdown of Exports

March	Dairy Products			Meat and Meat Products			Non-Commodity*		
Years	%v	%p	$ mn	%v	%p	$ mn	%v	%p	$ mn
2006	-2.4	6.1	5,993	-2.2	-3.0	4,611	-0.5	2.5	10,332
2007	22.3	2.1	7,455	6.7	2.5	5,037	0.6	10.7	11,681
2008	-0.9	25.7	9,434	-2.9	-5.1	4,656	0.7	8.8	12,468
2009	-15.1	27.8	10,101	1.5	23.2	5,797	1.8	15.8	14,827
2010	26.2	-34.5	8,374	-11.4	-5.0	4,910	-5.5	-13.0	12,283
2011	-5.5	6.3	8,448	-1.3	-0.7	4,802	4.5	4.6	13,351
2012	1.5	14.6	9,826	6.6	9.5	5,602	4.5	13.8	15,888
2013	1.9	9.8	10,973	3.8	7.7	6,264	4.1	11.1	18,386
2014	2.0	5.8	11,837	1.8	4.7	6,671	2.9	8.9	20,617

March	Total Goods**			Services			Total Exports		
Years	%v	%p	$ mn	%v	%p	$ mn	%v	%p	$ mn
2006	0.7	0.9	31,581	-2.2	1.9	12,350	-0.1	1.1	43,931
2007	4.9	7.5	35,636	-2.1	4.6	12,639	2.9	6.8	48,275
2008	4.5	3.9	38,720	-1.0	2.3	12,818	3.1	3.3	51,535
2009	-1.8	16.7	44,259	-7.7	7.0	12,658	-3.3	14.5	56,916
2010	1.9	-15.5	38,222	-7.7	1.0	11,790	0.4	-12.7	49,962
2011	0.1	4.4	39,867	-1.6	1.7	11,805	-0.2	3.7	51,687
2012	3.4	13.2	46,669	13.7	1.9	13,696	5.4	10.8	60,324
2013	3.2	9.8	52,888	12.2	3.6	15,914	5.1	8.4	68,760
2014	2.9	6.6	58,004	9.7	3.3	18,018	4.4	5.8	75,981

* 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 confidentaility 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	Capital Goods (VFD)			Mineral Fuel* (VFD)			Intermediate Goods** (VFD)			Consumption Goods (VFD)		
Years	%v	%p	$ mn	%v	%p	$ mn	%v	%p	$ mn	%v	%p	$ mn
2006	16.3	-5.1	7,301	0.3	37.3	5,250	-1.4	0.7	14,365	8.1	-1.0	8,703
2007	-3.2	2.3	7,223	-8.0	21.2	5,872	-2.8	12.5	15,717	5.8	3.7	9,544
2008	10.1	-9.7	7,183	15.8	3.1	7,014	9.9	-6.5	16,143	6.9	-2.9	9,908
2009	3.7	13.3	8,280	-6.3	25.9	8,196	-6.5	21.6	18,277	-3.0	12.7	10,788
2010	-26.5	-3.2	6,006	-8.3	-28.6	5,366	-16.4	-7.3	14,225	-1.8	-3.4	10,232
2011	21.1	-6.7	6,806	-1.8	18.7	6,306	6.7	4.6	15,890	7.9	-2.4	10,831
2012	10.2	4.5	7,816	8.6	12.9	7,731	8.6	12.0	19,330	4.4	11.5	12,608
2013	2.7	2.8	8,244	5.5	9.5	8,928	5.5	8.3	22,086	2.3	9.9	14,171
2014	7.0	4.0	9,184	3.1	6.4	9,798	3.1	5.4	24,014	2.6	7.1	15,567

March	Total Goods (VFD)			Services			Total		
Years	%v	%p	$ mn	%v	%p	$ mn	%v	%p	$ mn
2006	3.9	3.1	35,685	5.0	0.7	11,830	4.2	2.5	47,515
2007	-0.9	8.7	38,464	-3.7	7.0	12,206	-1.6	8.3	50,671
2008	10.0	-4.3	40,515	9.9	-5.8	12,633	10.0	-4.7	53,148
2009	-4.3	17.7	45,591	-5.7	16.7	13,776	-4.7	17.5	59,366
2010	-14.3	-8.0	35,982	-9.9	-2.6	12,200	-13.3	-6.6	48,182
2011	10.2	0.7	39,985	8.1	0.4	13,241	9.7	0.6	53,226
2012	7.7	10.8	47,691	7.6	10.3	15,710	7.7	10.6	63,401
2013	3.6	8.7	53,661	4.2	8.4	17,744	3.7	8.6	71,405
2014	4.1	5.2	58,771	2.1	5.8	19,169	3.7	5.3	77,940

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

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

Tax Tables

Table 9: Treasury and Inland Revenue forecasts of tax revenue

	2008/09	2009/10		2010/11		2011/12		2012/13		2013/14	
	Actual	Forecast		Forecast		Forecast		Forecast		Forecast	
$ million		**Treasury**	**IRD**	**Treasury**	**IRD**	**Treasury**	**IRD**	**Treasury**	**IRD**	**Treasury**	**IRD**
Direct tax											
Individuals											
Source deductions	22,966	22,734	22,460	23,172	22,956	24,399	24,224	25,773	25,740	27,465	27,484
Other persons tax	4,408	4,428	4,308	4,469	4,537	4,762	4,707	5,058	4,868	5,366	5,204
Refunds	(1,636)	(1,886)	(1,950)	(1,782)	(1,970)	(1,857)	(1,965)	(1,957)	(1,955)	(2,073)	(1,905)
Fringe benefit tax	500	501	508	505	515	535	538	562	565	580	593
Subtotal: Individuals	**26,238**	**25,777**	**25,326**	**26,364**	**26,038**	**27,839**	**27,504**	**29,436**	**29,218**	**31,338**	**31,376**
Company tax (net)	**8,294**	**6,417**	**6,980**	**8,111**	**8,372**	**8,481**	**8,607**	**9,073**	**9,025**	**9,562**	**9,296**
Withholding taxes on:											
Resident interest income	2,571	1,872	1,716	1,681	1,542	1,810	1,820	2,161	2,089	2,452	2,351
Non-resident income	1,451	1,060	1,059	1,086	1,129	1,154	1,208	1,201	1,257	1,250	1,294
Foreign-source dividends	10	3	9	13	9	13	9	13	9	13	9
Resident dividend income	65	146	114	293	246	304	249	312	249	320	246
Subtotal: Withholding tax	**4,097**	**3,081**	**2,898**	**3,073**	**2,926**	**3,281**	**3,286**	**3,687**	**3,604**	**4,035**	**3,900**
Total income tax	**38,629**	**35,275**	**35,204**	**37,548**	**37,336**	**39,601**	**39,397**	**42,196**	**41,847**	**44,935**	**44,572**
Other: Estate and gift duties	1	1	2	1	1	1	1	1	1	1	1
Total direct tax	**38,630**	**35,276**	**35,206**	**37,549**	**37,337**	**39,602**	**39,398**	**42,197**	**41,848**	**44,936**	**44,573**
Indirect tax											
GST											
GST (Customs)	6,056	5,503	5,457	5,746	5,649	6,802	6,771	7,615	7,697	8,264	8,435
GST (IRD)	10,052	10,683	10,717	11,429	11,375	11,115	10,965	10,940	10,675	10,959	10,543
Subtotal: GST	**16,108**	**16,186**	**16,174**	**17,175**	**17,024**	**17,917**	**17,736**	**18,555**	**18,372**	**19,223**	**18,978**
Excise duties on:											
Alcoholic drinks	616	640	640	663	667	684	693	706	720	730	745
Tobacco products	172	185	172	186	173	188	174	190	175	193	175
Petroleum fuels	781	856	840	929	906	984	965	1,017	1,003	1,053	1,042
Subtotal: excise duties	**1,569**	**1,681**	**1,652**	**1,778**	**1,746**	**1,856**	**1,832**	**1,913**	**1,898**	**1,976**	**1,962**
Other indirect tax											
Customs duty	1,880	1,905	1,757	1,942	1,949	1,973	1,979	1,993	2,005	2,019	2,020
Road user charges	868	900	900	916	955	959	1,000	1,010	1,050	1,059	1,105
Gaming duties	264	279	280	286	283	292	286	297	290	303	294
Motor vehicle fees	171	166	170	167	175	165	180	163	185	162	190
Exhaustible resource levy	39	38	35	38	33	38	32	36	32	36	33
Approved issuer levy, cheque duty & other	98	103	97	103	94	103	89	102	84	102	79
Subtotal: Other indirect tax	**3,320**	**3,391**	**3,239**	**3,452**	**3,489**	**3,530**	**3,566**	**3,601**	**3,646**	**3,681**	**3,721**
Total indirect tax	**20,997**	**21,258**	**21,065**	**22,405**	**22,259**	**23,303**	**23,134**	**24,069**	**23,916**	**24,880**	**24,661**
Total tax	**59,627**	**56,534**	**56,271**	**59,954**	**59,596**	**62,905**	**62,532**	**66,266**	**65,764**	**69,816**	**69,234**
Total tax (% of GDP)	33.1%	30.6%	30.5%	30.9%	30.7%	30.9%	30.7%	31.0%	30.8%	31.2%	30.9%
***less* Core Crown tax eliminations**											
Core Crown income tax	4	117	117	274	274	289	289	299	299	316	316
GST on Crown expenses and departmental outputs	4,557	4,779	4,779	4,934	4,934	5,043	5,043	5,151	5,151	5,306	5,306
Crown ESCT	368	374	374	402	402	408	408	411	411	412	412
Crown AIL	18	15	15	15	15	15	15	15	15	15	15
Core Crown taxation	**54,680**	**51,249**	**50,986**	**54,329**	**53,971**	**57,150**	**56,777**	**60,390**	**59,888**	**63,767**	**63,185**
Core Crown tax (% of GDP)	30.3%	27.8%	27.6%	28.0%	27.8%	28.0%	27.8%	28.3%	28.0%	28.5%	28.2%
***less* Total Crown tax eliminations**											
Income tax from SOEs and CEs	475	359	359	380	380	440	440	510	510	597	597
Other Crown GST	..	..	..	..	..	..	..	..	..	..	..
ESCT from SOEs and CEs	11	7	7	7	7	8	8	8	8	8	8
Lottery duty	49	40	40	45	45	49	49	50	50	51	51
Total Crown taxation	**54,145**	**50,843**	**50,580**	**53,897**	**53,539**	**56,653**	**56,280**	**59,822**	**59,320**	**63,111**	**62,529**
Total Crown tax (% of GDP)	30.0%	27.6%	27.4%	27.8%	27.6%	27.8%	27.6%	28.0%	27.8%	28.2%	27.9%
Nominal GDP	180,210	184,466	184,466	193,966	193,966	203,873	203,873	213,738	213,738	223,980	223,980

Sources: Inland Revenue, The Treasury

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

	2008/09	2009/10		2010/11		2011/12		2012/13		2013/14	
	Actual	Forecast		Forecast		Forecast		Forecast		Forecast	
$ million		**Treasury**	**IRD**	**Treasury**	**IRD**	**Treasury**	**IRD**	**Treasury**	**IRD**	**Treasury**	**IRD**
Direct tax											
Individuals											
Source deductions	22,945	22,640	22,369	23,085	22,869	24,311	24,136	25,684	25,651	27,377	27,396
Other persons tax	4,988	4,939	4,980	4,888	5,030	5,153	5,190	5,437	5,350	5,703	5,720
Refunds	(2,488)	(2,537)	(2,800)	(2,435)	(2,700)	(2,492)	(2,695)	(2,580)	(2,685)	(2,638)	(2,645)
Fringe benefit tax	506	491	501	494	509	529	531	555	558	575	586
Subtotal: Individuals	**25,951**	**25,533**	**25,050**	**26,032**	**25,708**	**27,501**	**27,162**	**29,096**	**28,874**	**31,017**	**31,057**
Company tax (net)	**5,909**	**7,116**	**7,470**	**8,071**	**8,210**	**8,280**	**8,375**	**8,905**	**8,815**	**9,348**	**9,080**
Withholding taxes on:											
Resident interest income	2,593	1,838	1,716	1,679	1,542	1,808	1,820	2,159	2,089	2,450	2,351
Non-resident income	1,437	1,059	1,059	1,085	1,129	1,153	1,208	1,200	1,257	1,249	1,294
Foreign-source dividends	(2)	13	9	13	9	13	9	13	9	13	9
Resident dividend income	97	146	114	293	246	304	249	312	249	320	246
Subtotal: Withholding tax	**4,125**	**3,056**	**2,898**	**3,070**	**2,926**	**3,278**	**3,286**	**3,684**	**3,604**	**4,032**	**3,900**
Total income tax	**35,985**	**35,705**	**35,418**	**37,173**	**36,844**	**39,059**	**38,823**	**41,685**	**41,293**	**44,397**	**44,037**
Other: Estate and gift duties	2	2	2	1	1	1	1	1	1	1	1
Total direct tax	**35,987**	**35,707**	**35,420**	**37,174**	**36,845**	**39,060**	**38,824**	**41,686**	**41,294**	**44,398**	**44,038**
Indirect tax											
GST											
GST (Customs)	6,081	5,503	5,457	5,696	5,649	6,752	6,771	7,565	7,697	8,214	8,435
GST (IRD)	9,311	10,368	10,414	11,170	11,081	10,855	10,670	10,676	10,376	10,698	10,247
Subtotal: GST	**15,392**	**15,871**	**15,871**	**16,866**	**16,730**	**17,607**	**17,441**	**18,241**	**18,073**	**18,912**	**18,682**
Excise duties on:											
Alcoholic drinks	587	640	640	663	667	684	693	706	720	730	745
Tobacco products	170	185	172	186	173	188	174	190	175	193	175
Petroleum fuels	786	836	840	909	906	964	965	997	1,003	1,033	1,042
Subtotal: Excise duties	**1,543**	**1,661**	**1,652**	**1,758**	**1,746**	**1,836**	**1,832**	**1,893**	**1,898**	**1,956**	**1,962**
Other indirect tax											
Customs duty	1,957	1,905	1,757	1,942	1,949	1,973	1,979	1,993	2,005	2,019	2,020
Road user charges	864	900	900	916	955	959	1,000	1,010	1,050	1,059	1,105
Gaming duties	276	280	280	286	283	292	286	297	290	303	294
Motor vehicle fees	165	166	170	167	175	165	180	163	185	162	190
Exhaustible resource levy	36	44	35	38	33	38	32	36	32	36	33
Approved issuer levy, cheque duty & other	95	103	97	103	94	103	89	102	84	102	79
Subtotal: Other indirect tax	**3,393**	**3,398**	**3,239**	**3,452**	**3,489**	**3,530**	**3,566**	**3,601**	**3,646**	**3,681**	**3,721**
Total indirect tax	**20,328**	**20,930**	**20,762**	**22,076**	**21,965**	**22,973**	**22,839**	**23,735**	**23,617**	**24,549**	**24,365**
Total tax	**56,315**	**56,637**	**56,182**	**59,250**	**58,810**	**62,033**	**61,663**	**65,421**	**64,911**	**68,947**	**68,403**
Total tax (% of GDP)	31.2%	30.7%	30.5%	30.5%	30.3%	30.4%	30.2%	30.6%	30.4%	30.8%	30.5%
***less* Core Crown tax eliminations**											
Core Crown income tax	(152)	136	136	274	274	289	289	299	299	316	316
GST on Crown expenses and departmental outputs	4,567	4,783	4,783	4,931	4,931	5,042	5,042	5,139	5,139	5,299	5,299
Crown ESCT	367	332	332	359	359	366	366	370	370	370	370
Crown AIL	18	15	15	15	15	15	15	15	15	15	15
Core Crown taxation	**51,515**	**51,371**	**50,916**	**53,671**	**53,231**	**56,321**	**55,951**	**59,598**	**59,088**	**62,947**	**62,403**
Core Crown tax (% of GDP)	28.6%	27.8%	27.6%	27.7%	27.4%	27.6%	27.4%	27.9%	27.6%	28.1%	27.9%
***less* Total Crown tax eliminations**											
Income tax from SOEs and CEs	332	370	370	353	353	390	390	490	490	557	557
Other Crown GST	4	(9)	(9)	(4)	(4)	(3)	(3)	4	4	5	5
ESCT from SOEs and CEs	11	3	3	3	3	3	3	3	3	3	3
Lottery duty	49	40	40	45	45	49	49	50	50	51	51
Total Crown taxation	**51,119**	**50,967**	**50,512**	**53,274**	**52,834**	**55,882**	**55,512**	**59,051**	**58,541**	**62,331**	**61,787**
Total Crown tax (% of GDP)	28.4%	27.6%	27.4%	27.5%	27.2%	27.4%	27.2%	27.6%	27.4%	27.8%	27.6%

Sources: Inland Revenue, The Treasury

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 (see the 2008 *Budget Forecasts,* http://www.treasury.govt.nz/budget/forecasts/befu2008, pages 86 and 87). One approach to assessing these relationships uses summary fiscal indicators. The following sections explain Treasury's perspective on these indicators, the relationship between them, and how they are calculated.[1]

The nature of the current economic shock, and in particular the long-lasting changes to key economic variables mean that these summary fiscal indicators are subject to more-than-usual uncertainty. In particular, the fiscal impulse indicator is not a good guide to *discretionary* fiscal policy stimulus. For this, and other reasons described below, Treasury is reviewing both the fiscal impulse and the cyclically-adjusted balance indicators.

The cyclically-adjusted balance and fiscal impulse

The cyclically-adjusted balance (CAB) is a summary indicator of what the fiscal balance would be if the economy was operating at potential output. In this sense the CAB is concerned with the relationship between the economy and the fiscal position. The CAB can act as a guide in assessing the sustainability of fiscal policy. It does this by gauging the extent to which the fiscal balance reflects temporary cyclical factors rather than long-lasting factors. The fiscal balance can therefore be described as:

Fiscal balance = CAB + cyclical component

The cyclical component can be calculated by adjusting tax and spending flows by the output gap, the difference between actual output and potential output. Potential output, and so the output gap, is not directly observable and has to be estimated. Cyclical adjustment also takes into account the responsiveness of different tax types, and unemployment, to the output gap.[2] Since the approach removes an estimate of the cyclical component of taxes and unemployment spending from the fiscal balance, the CAB is a mix of discretionary fiscal policy, demand driven influences on spending (eg, population changes), and prices differing from trend. Because it includes estimated variables and is sensitive to new information, particularly regarding the output gap, the CAB is subject to uncertainty.

In addition to its role in assessing fiscal sustainability, it is common, especially in cross-country comparisons, to use the change in the CAB as an indicator of change in discretionary fiscal policy and the impact of fiscal policy on the economy. The Treasury's fiscal impulse indicator uses the change in a cash based version of the CAB for the core

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1 There is no unique terminology for these summary indicators. For example, the terms cyclically-adjusted balance (CAB) and structural budget balance (SBB) are often used interchangeably. The CAB removes cyclical factors. The SBB removes all temporary factors: cyclical; temporary fiscal policy measures; and one-offs. If these last two factors are not large then the two measures will be similar. The terms fiscal impulse, fiscal stance and fiscal stimulus are also used interchangeably.

2 Treasury's approach to estimating the cyclically-adjusted balance and fiscal impulse is set out in Treasury Working Papers 01/10 and 02/30.

Crown. The appropriateness of using the change in the CAB for these tasks is subject to some debate.[3]

Limitations of summary fiscal indicators

If potential output evolves smoothly through time and does not change between forecast rounds then changes in the path of output, and the associated output gap, tend to reflect cyclical developments from the demand side of the economy. In this case, the use of the output gap to adjust taxes and spending will mean that movements in the CAB will tend to reflect discretionary fiscal policy changes. However, when potential output is changing then movements in the CAB are less clearly related to discretionary fiscal policy changes.

The 2009 *Budget Forecasts* incorporated a downward revision to potential output relative to the 2008 *December Forecasts*. The combination of lower potential output and lower inflation mean that the level of nominal GDP, and hence taxes, displayed a level shift between the forecasts. If this change is permanent, then the change in tax revenue will be treated as a non-policy driven structural shift (although the ratio of tax to potential output will be less affected). On the spending side, lower inflation will reduce the rise in some government expenses (eg, benefits). Spending on unemployment benefits increases as the unemployment rate rises. However, the majority of government expenses are more structural in nature and do not respond immediately or directly to movements in nominal GDP (and so the ratio to potential will rise if potential output is falling).[4]

The effect of non-policy related structural shifts was noted as affecting the summary fiscal indicators in the 2008 *Pre-election Forecasts,* the 2008 *December Forecasts*, and the 2009 *Budget forecasts*. Although the level of potential output is somewhat higher in the HYEFU forecasts when compared to Budget 2009 (partly due to higher net migration), there has still been a substantial shift relative to Budget 2008.

In addition to the impact of non-policy related changes, 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.[5]

Treasury's fiscal impulse indicator

Consistent with the CAB, the fiscal impulse measure is now estimated using an output gap derived from a combination of a multivariate (MV) filter and New Zealand Treasury Model (NZTM) estimates. This means that HYEFU fiscal impulse figures are not exactly comparable to BEFU figures. However, comparisons can still be made due to the relatively similar results obtained when each output gap filter is used.

Based on the 2009 *HYEFU Forecasts,* the estimate of fiscal impulse for the 2010 fiscal year has decreased from an expansionary 3.3% of GDP at the 2009 Budget to 2.2% of

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3 These issues are covered in the Treasury Working Paper 02/30.

4 These effects can operate in reverse under upward revisions to potential output and/or higher inflation.

5 See Treasury Working Paper 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.

GDP. The change from 3.3% of GDP to 2.2% of GDP largely reflects the stronger economy as opposed to discretionary policy changes. This reinforces the level of uncertainty surrounding these indicators.

Treasury's cyclically-adjusted balance indicator

Using the CAB for the purpose of assessing the impact of the economy on the fiscal position is arguably less problematic than using it to assess discretionary policy changes and aggregate demand effects. Notwithstanding that the CAB is influenced by non-policy related structural effects, it does give a perspective on the sustainability of the fiscal position, particularly when supplemented with medium-term fiscal projections.

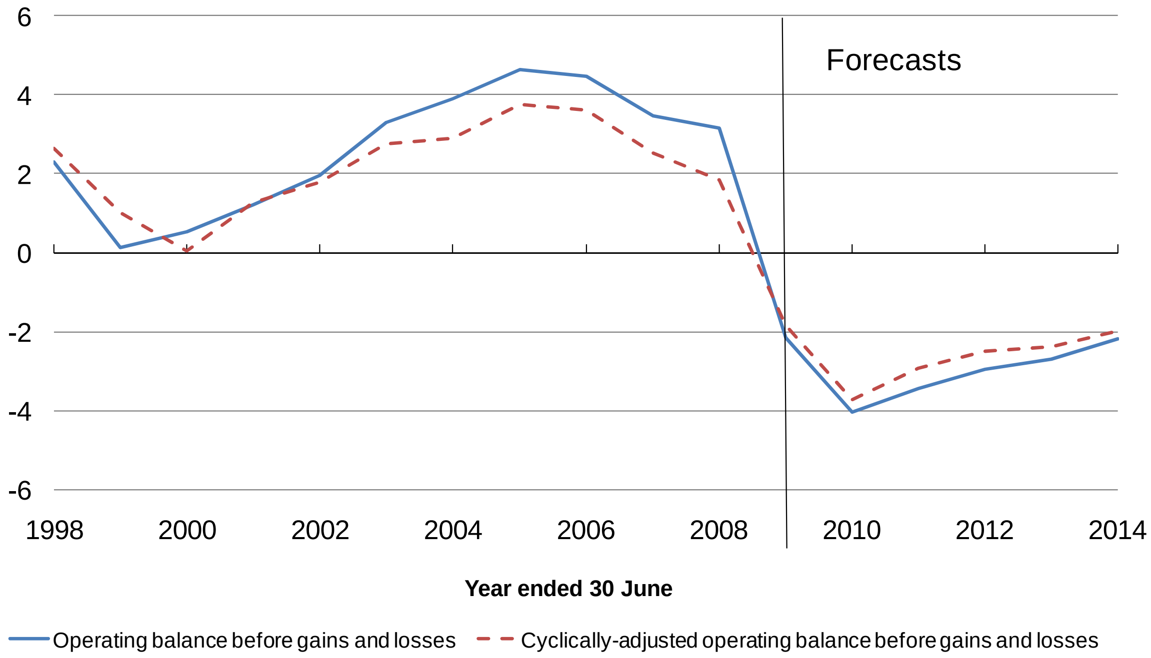
Because it provides a clearer view of underlying fiscal performance, the operating balance before gains and losses is used in the CAB indicator (see Figure 1 below).

Notwithstanding the changes to potential output, output in the 2009 Budget Forecasts was below potential across the forecast period, with the gap closing in 2014. Now the output gap troughs at -1.2% and the CAB indicates a structural deficit in 2013 of around 2.5% of GDP compared to around 4% at BEFU. There is now less difference between the operating balance and CAB.

OECD estimates of fiscal stimulus packages

In its March 2009 *Interim Economic Outlook*, the OECD, collated information on fiscal stimulus packages across member economies using a bottom-up approach. The OECD note that this approach involves judgement as to what counts as fiscal stimulus and when the counting starts. Using information available before the 2009 Budget, the OECD estimated New Zealand's fiscal stimulus package, across the calendar years 2008 to 2010, at 4.3% of 2008 GDP. It later revised this figure in its *June 2009 Economic Outlook* to 3.7% of GDP. In its most recent country survey of New Zealand, the OECD note that estimates of the fiscal stimulus package differ from the Treasury fiscal impulse indicator because of the ongoing impacts of past spending and tax measures and the non-policy related structural shifts discussed above.

Figure 1 – Operating balance before gains and losses and cyclically-adjusted indicator (% GDP)



Source: The Treasury

Table 11 – Additional fiscal indicators

Operating balance before gains and losses (Year ended June, % GDP)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
2.3	0.1	0.5	1.2	2.0	3.3	3.9	4.7	4.5	3.5	3.1	-2.2	-4.0	-3.4	-2.9	-2.7	-2.2

Cyclically-adjusted operating balance before gains and losses (Year ended June, % GDP)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
2.6	1.0	0.0	1.3	1.8	2.8	2.9	3.8	3.6	2.5	1.9	-1.8	-3.7	-2.9	-2.5	-2.4	-2.0

Output gap (Year ended June, % deviation)

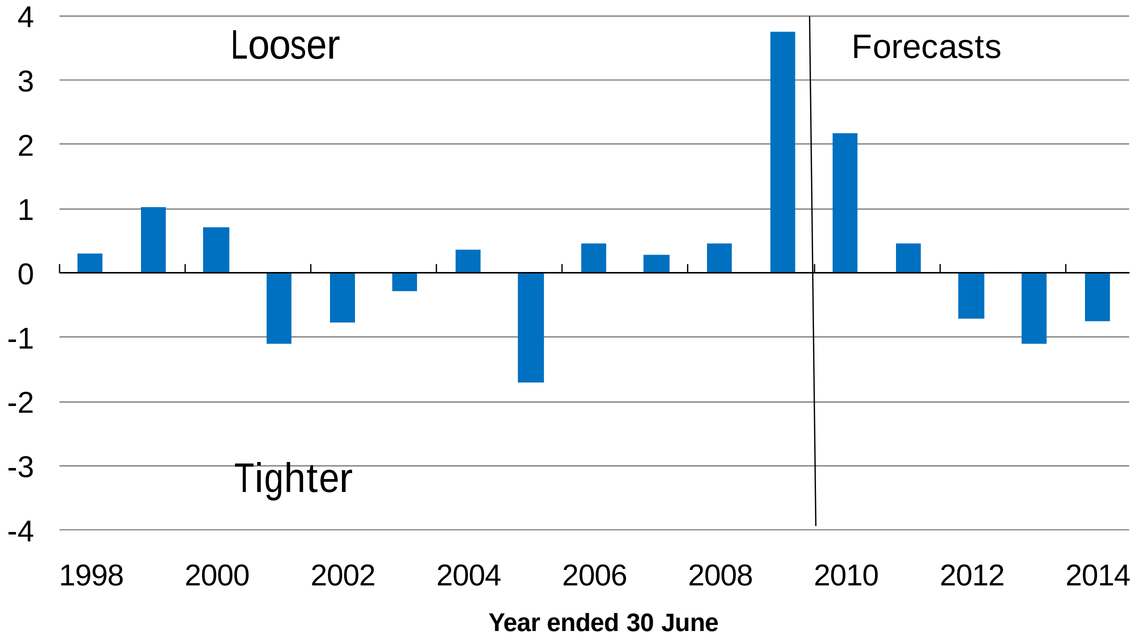
1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
-0.7	-1.8	1.0	-0.1	0.3	1.0	2.0	1.8	1.7	2.0	2.7	-0.7	-0.7	-1.2	-1.0	-0.7	-0.4

Fiscal impulse (Year ended June, % GDP)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
0.3	1.0	0.7	-1.1	-0.8	-0.3	0.4	-1.7	0.5	0.3	0.5	3.7	2.2	0.5	-0.7	-1.1	-0.8

Source: The Treasury

Figure 2 – Fiscal impulse (% GDP)



Source: The Treasury

Accounting Policies and Forecast Assumptions

The forecast financial statements contained in the published Half Year Update are based on the following accounting polices and forecast assumptions.

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 2009.

For the purposes of these forecast statements, the government reporting entity has been designated as a public benefit entity. The forecast statements comply with the New Zealand equivalents to International Financial Reporting Standards (NZ IFRS) as appropriate for public benefit entities.

Reporting Entity

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

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

The 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 the time value of money, the risk free rate and inflation assumptions. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

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 2009.

Standards and Interpretations Issued But Not Yet Effective

The Government 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 2009 that are not yet applicable, except:

- *NZ IFRS 7: Financial Instruments: Disclosures (revised)* approved by the Accounting Standards Review Board in March 2009. *NZ IFRS 7: Financial Instruments: Disclosures (revised)* becomes effective for periods commencing on or after 1 January 2009, and results in presentation changes only.

The early adoption of this standard and interpretation would not have a material impact on the forecast financial statements.

Reporting and Forecast Period

The reporting period for these forecast financial statements is the year ended 30 June 2010 to 30 June 2014.

The "2009 Actual" figures reported in the statements are the audited results reported in the Financial Statements of Government for the year ended 30 June 2009. The "2010 previous budget" figures are the original forecasts to 30 June 2010, as presented in the 2009 Budget.

Where necessary, the financial information of 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. This policy results in the recognition of their net assets, including asset revaluation movements and surpluses and deficits. The reason for adopting this different method of combination for tertiary education institutions is explained in the Financial Statements of the Government of New Zealand for the year ended 30 June 2009.

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

Forms of Joint Venture	Basis of Combination
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.
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 2009 Half Year Update.

Income

Taxation revenue levied through the Crown's sovereign power

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

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 deferred in net worth 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 directly to net worth.

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.

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 fair value through profit and loss
Other advances	Generally designated as loans and receivables
Reserve position at the IMF	Generally designated as available for sale
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 revenue policy). Loans and receivables issued with durations 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.

The student loans valuation model has been adapted to reflect current student loans policy. As such, the carrying value is sensitive to changes on a number of underlying assumptions, including future income levels, repayment behaviour and macro economic factors such as inflation and the discount rates used to determine the effective interest rate on new borrowers.

The data for valuation of student loans has been integrated from files provided by Inland Revenue Department, Ministry of Social Development and the Ministry of Education. The current data is up to 31 March 2008, and contains information on borrowings, repayments, income, educational factors, and socio-economic factors amongst others and has been analysed and incorporated into the valuation model. This integrated data has been supplemented by less detailed, but more recent data to value student loans at balance date. Given the lead time required to compile and analyse the detailed, integrated data, it is expected that there is a lag between the availability of this data set and balance date.

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 directly in net worth except 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 the 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 net worth include any related foreign exchange component. At derecognition, the cumulative fair value gain or loss previously recognised directly in net worth is recognised in the statement of financial performance.

Cash and cash equivalents include cash on hand, cash in transit, bank accounts and deposits with a maturity of no more than three months from date of acquisition.

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 as fair value through profit and loss
Government retail stock	Generally designated as fair value through profit and loss
Settlement deposits with Reserve Bank	Generally 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 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 part of any gain or loss on the derivative is recognised in net worth and the ineffective part 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 directly in net worth is included in the initial cost of the asset or liability. Otherwise, gains or losses recognised in net worth transfer to the statement of financial performance in the same periods as when the hedged item affects the statement of financial performance (eg, when the forecast sale occurs). Effective parts 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 net worth 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 2009 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 2009 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	Land and buildings are recorded at fair value less impairment losses and, for buildings, less depreciation accumulated since the assets were last revalued. Valuations undertaken in accordance with standards issued by the New Zealand Property Institute are used where available. Otherwise, valuations conducted in accordance with the Rating Valuation Act 1998, may be used if they have been confirmed as appropriate by an independent valuer. When revaluing buildings, there must be componentisation to the level required to ensure adequate representation of the material components of the buildings. At a minimum, this requires componentisation to three levels: structure, building services and fit-out.
Specialist Military Equipment	Specialist military equipment is recorded on a depreciated replacement cost basis less depreciation and impairment losses accumulated since the assets were last revalued. Valuations are obtained through specialist assessment by New Zealand Defence Force advisers, and the bases of these valuations are confirmed as appropriate by an independent valuer.
State Highways	State highways are recorded on a depreciated replacement cost basis less depreciation and impairment losses accumulated since the assets were last revalued. Land associated with the state highways is valued using an opportunity cost based on adjacent use, as an approximation to fair value.
Rail Network	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.
Aircraft	Aircraft (excluding Specialised Military Equipment) are recorded at fair value less depreciation and impairment losses accumulated since the assets were last revalued.
Electricity Distribution	Electricity distribution network assets are recorded at cost, less accumulated depreciation and accumulated impairment losses.
Electricity Generation	Electricity generation assets are recorded at fair value less depreciation and impairment losses accumulated since the assets were last revalued.
Specified Cultural and Heritage assets	Specified cultural and heritage assets comprise national parks, conservation areas and related recreational facilities, as well as National Archives holdings and the collections of the National Library, Parliamentary Library and Te Papa. 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.
Other Plant and Equipment	Other plant and equipment, which include motor vehicles and office equipment, are recorded at cost less accumulated depreciation and accumulated impairment losses.

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 based evidence, such as discounted cash flow calculations. If no market based evidence of fair value exists, an Optimised Depreciated Replacement (ODR) cost approach is used as the best proxy for fair value.

Where an item of property is recorded at its ODR cost, that 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. The ODR 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 (ex 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.

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, sheep) managed for harvesting into agricultural produce (eg, logs, wool) or for transforming into additional biological assets are measured at fair value less estimated point-of-sale costs, 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 still 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.

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. All intangible assets with an indefinite life are tested for impairment annually. 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 in Air New Zealand 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 period end
- 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 Original Budget were forecasts published in the *2009 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 including entities governed by the State–owned Enterprises Act, and (for the purposes of these statements) also including 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 produced by the International Monetary Fund.

Related parties

The Government comprises a large number of commonly controlled entities. These entities, and their key management personnel, transact among themselves and with the Government Reporting Entity on a regular basis, for example, for the purchase of postage stamps or the registration of vehicles. The Public Finance Act 1989 requires separate reporting by these individual entities and these entities will report transactions with the Crown and other related parties as appropriate in these individual financial statements.

With the exception of key management personnel, no other parties control the Government, are controlled by the Government without being consolidated, or are under common control of another entity with the Government. Tertiary education institutions, joint ventures and the Government Superannuation Fund are however considered related parties due to government influence and transactions between the rest of the Government Reporting Entity and these entities are separately disclosed where material.

Key management personnel, defined as Ministers of the Crown that are in Cabinet, are also considered to be related parties.