

ATTACHMENT B

CALCULATION OF RELATIVITIES — GST RELATIVITIES

1. This attachment shows the calculation of the per capita GST relativities required by the terms of reference.

2. The tables show the calculation of the per capita GST revenue and HCGs required by each State to achieve equalisation¹ (its standardised deficit per capita) for each year of the assessment period, 1999–2000 to 2003–04, by two methods. An integral part of the process is an equalisation budget identity which shows the derivation of the Australian average State budget result to which each State is equalised. This identity is shown in Table B–1.

Table B–1 EQUALISATION BUDGET IDENTITY, 1999–2000 TO 2003–04

	1999–2000	2000–01	2001–02	2002–03	2003–04
	\$pc	\$pc	\$pc	\$pc	\$pc
Australian average revenue	1 750.84	1 797.32	1 928.37	2 064.41	2 227.21
Australian average GST and HCGs	1 595.57	1 651.71	1 717.05	1 912.01	2 016.09
Australian average included SPPs	322.78	335.54	364.34	375.22	374.11
Total revenue	3 669.19	3 784.57	4 009.76	4 351.64	4 617.40
Less: Australian average expenses	4 065.54	4 296.08	4 557.15	4 749.74	4 876.36
Australian average budget result ^(a)	-396.35	-511.51	-547.39	-398.10	-258.96

(a) A negative sign indicates a deficit.

Source: Commission analysis of State budgets.

3. Tables B–2, B–4, B–6, B–8 and B–10 show the calculations on the basis of a standardised budget identity in which the per capita GST revenue and HCGs required by each State is calculated by:

¹ This is the amount of GST revenue and HCGs that would allow each State to achieve the Australian average State budget result if it provided an average standard of services, made the average effort to raise revenue, and operated at the average level of efficiency in providing services and collecting revenues.

- (i) deriving its per capita total requirement for financial assistance, which is:
 - the per capita expenses the State would incur if it provided the Australian average standard of services given its disabilities (its standardised expenses); plus
 - the per capita Australian average State budget result (the total revenues included in the Commission's assessments less the total expenses — hence a negative sign indicates a deficit); less
 - the per capita revenues it would raise if it applied the average revenue raising policies to its revenue bases (its standardised revenues); and
- (ii) subtracting from its per capita total requirement for financial assistance its per capita revenues from SPPs included in the Commission's assessments.

4. Tables B-3, B-5, B-7, B-9 and B-11 provide an alternative presentation in which the per capita level of GST revenue and HCGs required by each State is the Australian average per capita amount paid during each year plus the State's:

- (i) per capita expense needs (the State's standardised expenses per capita less the Australian average expenses per capita);
- (ii) per capita revenue needs (the Australian average per capita revenue less the State's standardised revenue per capita); and
- (iii) per capita SPP needs (the Australian average SPPs per capita less the State's actual SPPs per capita).

5. Under each presentation, a relativity is calculated for each State for each assessment year by expressing the State's assessed per capita requirement for GST revenue and HCGs as a ratio of the Australian average per capita amount of GST and HCGs distributed among all the States.

6. Table B-12 shows the five-year average per capita relativities, rounded to five decimal places.

7. A full description of the distribution model the Commission uses in deriving the relativities is in Attachment B of the supporting information volume that accompanies this report.

Table B-2 PER CAPITA GST RELATIVITIES, 1999-2000

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	\$	\$	\$	\$	\$	\$	\$	\$
Average State budget result	-396.35	-396.35	-396.35	-396.35	-396.35	-396.35	-396.35	-396.35
<i>plus</i> : Standardised expenses	3974.89	3741.08	4100.19	4463.84	4043.95	4471.63	4117.25	9601.75
	3578.54	3344.73	3703.84	4067.49	3647.60	4075.27	3720.89	9205.40
<i>less</i> : Standardised revenue	1890.30	1699.98	1670.79	2013.58	1422.10	1194.50	1490.26	1603.62
Total requirement for financial assistance	1688.24	1644.74	2033.05	2053.91	2225.50	2880.77	2230.63	7601.78
<i>less</i> : SPPs treated by inclusion	315.79	287.44	329.84	316.42	343.47	416.80	374.02	874.65
GST and HCGs requirement	1372.45	1357.30	1703.21	1737.49	1882.03	2463.97	1856.61	6727.13
Per capita relativity ^(a)	0.86016	0.85067	1.06746	1.08895	1.17953	1.54426	1.16360	4.21613

Table B-3 PER CAPITA GST RELATIVITIES, ALTERNATIVE PRESENTATION, 1999-2000

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	\$	\$	\$	\$	\$	\$	\$	\$
Average GST and HCGs	1595.57	1595.57	1595.57	1595.57	1595.57	1595.57	1595.57	1595.57
<i>plus</i> : Expense needs	-90.66	-324.46	34.65	398.30	-21.59	406.08	51.70	5536.21
<i>plus</i> : Revenue needs	-139.46	50.86	80.05	-262.73	328.74	556.34	260.58	147.22
<i>plus</i> : SPP needs	6.99	35.34	-7.06	6.36	-20.69	-94.02	-51.24	-551.87
GST and HCGs requirement	1372.45	1357.30	1703.21	1737.49	1882.03	2463.97	1856.61	6727.13
Per capita relativity ^(a)	0.86016	0.85067	1.06746	1.08895	1.17953	1.54426	1.16360	4.21613

(a) Per capita relativities are equal to each State's GST and HCG requirements divided by the Australian average of \$1595.57.

Table B-4 PER CAPITA GST RELATIVITIES, 2000-01

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	\$	\$	\$	\$	\$	\$	\$	\$
Average State budget result	-511.51	-511.51	-511.51	-511.51	-511.51	-511.51	-511.51	-511.51
<i>plus</i> : Standardised expenses	4229.87	3946.06	4326.35	4656.84	4286.10	4740.15	4247.90	10068.13
	3718.36	3434.55	3814.85	4145.33	3774.59	4228.64	3736.40	9556.63
<i>less</i> : Standardised revenue	1921.78	1725.36	1729.14	2163.57	1445.68	1193.41	1527.83	1719.75
Total requirement for financial assistance	1796.58	1709.20	2085.71	1981.77	2328.92	3035.23	2208.57	7836.88
<i>less</i> : SPPs treated by inclusion	330.74	291.10	358.55	327.65	358.95	440.25	339.97	791.47
GST and HCGs requirement	1465.84	1418.10	1727.15	1654.12	1969.96	2594.98	1868.59	7045.41
Per capita relativity ^(a)	0.88747	0.85857	1.04568	1.00146	1.19268	1.57108	1.13131	4.26552

Table B-5 PER CAPITA GST RELATIVITIES, ALTERNATIVE PRESENTATION, 2000-01

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	\$	\$	\$	\$	\$	\$	\$	\$
Average GST and HCGs	1651.71	1651.71	1651.71	1651.71	1651.71	1651.71	1651.71	1651.71
<i>plus</i> : Expense needs	-66.21	-350.02	30.28	360.76	-9.98	444.07	-48.17	5772.06
<i>plus</i> : Revenue needs	-124.46	71.96	68.18	-366.25	351.64	603.91	269.49	77.57
<i>plus</i> : SPP needs	4.80	44.44	-23.01	7.89	-23.41	-104.71	-4.43	-455.93
GST and HCGs requirement	1465.84	1418.10	1727.15	1654.12	1969.96	2594.98	1868.59	7045.41
Per capita relativity ^(a)	0.88747	0.85857	1.04568	1.00146	1.19268	1.57108	1.13131	4.26552

(a) Per capita relativities are equal to each State's GST and HCG requirements divided by the Australian average of \$1651.71.

Table B-6 PER CAPITA GST RELATIVITIES, 2001-02

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	\$	\$	\$	\$	\$	\$	\$	\$
Average State budget result	-547.39	-547.39	-547.39	-547.39	-547.39	-547.39	-547.39	-547.39
<i>plus</i> : Standardised expenses	4493.50	4200.56	4607.00	4895.96	4520.36	4918.78	4526.07	10650.69
	3946.11	3653.17	4059.62	4348.57	3972.97	4371.39	3978.68	10103.30
<i>less</i> : Standardised revenue	2115.39	1843.68	1840.16	2244.83	1493.62	1265.72	1613.92	1745.71
Total requirement for financial assistance	1830.72	1809.49	2219.46	2103.75	2479.35	3105.67	2364.77	8357.59
<i>less</i> : SPPs treated by inclusion	350.82	344.89	378.52	356.29	375.99	413.76	371.49	886.50
GST and HCGs requirement	1479.90	1464.60	1840.93	1747.46	2103.36	2691.91	1993.27	7471.09
Per capita relativity ^(a)	0.86189	0.85297	1.07215	1.01771	1.22499	1.56775	1.16087	4.35113

Table B-7 PER CAPITA GST RELATIVITIES, ALTERNATIVE PRESENTATION, 2001-02

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	\$	\$	\$	\$	\$	\$	\$	\$
Average GST and HCGs	1717.05	1717.05	1717.05	1717.05	1717.05	1717.05	1717.05	1717.05
<i>plus</i> : Expense needs	-63.65	-356.60	49.85	338.81	-36.79	361.63	-31.08	6093.54
<i>plus</i> : Revenue needs	-187.02	84.69	88.21	-316.46	434.75	662.65	314.45	182.66
<i>plus</i> : SPP needs	13.52	19.45	-14.18	8.06	-11.64	-49.42	-7.15	-522.15
GST and HCGs requirement	1479.90	1464.60	1840.93	1747.46	2103.36	2691.91	1993.27	7471.09
Per capita relativity ^(a)	0.86189	0.85297	1.07215	1.01771	1.22499	1.56775	1.16087	4.35113

(a) Per capita relativities are equal to each State's GST and HCG requirements divided by the Australian average of \$1717.05.

Table B-8 PER CAPITA GST RELATIVITIES, 2002-03

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	\$	\$	\$	\$	\$	\$	\$	\$
Average State budget result	-398.10	-398.10	-398.10	-398.10	-398.10	-398.10	-398.10	-398.10
<i>plus</i> : Standardised expenses	4681.07	4399.22	4782.61	5095.95	4690.39	5136.28	4715.81	11273.94
	4282.97	4001.12	4384.51	4697.85	4292.29	4738.18	4317.72	10875.84
<i>less</i> : Standardised revenue	2275.56	1902.54	2025.53	2436.96	1593.23	1349.54	1796.92	1824.33
Total requirement for financial assistance	2007.42	2098.58	2358.99	2260.89	2699.07	3388.64	2520.80	9051.51
<i>less</i> : SPPs treated by inclusion	365.89	347.54	385.31	367.24	400.72	432.23	348.23	969.05
GST and HCGs requirement	1641.53	1751.04	1973.68	1893.65	2298.35	2956.42	2172.57	8082.46
Per capita relativity ^(a)	0.85854	0.91581	1.03226	0.99040	1.20206	1.54624	1.13628	4.22722

Table B-9 PER CAPITA GST RELATIVITIES, ALTERNATIVE PRESENTATION, 2002-03

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	\$	\$	\$	\$	\$	\$	\$	\$
Average GST and HCGs	1912.01	1912.01	1912.01	1912.01	1912.01	1912.01	1912.01	1912.01
<i>plus</i> : Expense needs	-68.67	-350.52	32.88	346.21	-59.34	386.54	-33.92	6524.20
<i>plus</i> : Revenue needs	-211.15	161.87	38.88	-372.54	471.18	714.87	267.49	240.08
<i>plus</i> : SPP needs	9.33	27.68	-10.09	7.98	-25.50	-57.00	26.99	-593.83
GST and HCGs requirement	1641.53	1751.04	1973.68	1893.65	2298.35	2956.42	2172.57	8082.46
Per capita relativity ^(a)	0.85854	0.91581	1.03226	0.99040	1.20206	1.54624	1.13628	4.22722

(a) Per capita relativities are equal to each State's GST and HCG requirements divided by the Australian average of \$1912.01.

Table B-10 PER CAPITA GST RELATIVITIES, 2003-04

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	\$	\$	\$	\$	\$	\$	\$	\$
Average State budget result	-258.96	-258.96	-258.96	-258.96	-258.96	-258.96	-258.96	-258.96
<i>plus</i> : Standardised expenses	4821.17	4471.08	4905.85	5265.48	4845.01	5241.31	4818.01	11844.89
	4562.21	4212.12	4646.89	5006.52	4586.05	4982.35	4559.06	11585.93
<i>less</i> : Standardised revenue	2416.54	2068.31	2247.12	2574.04	1734.41	1483.55	1970.99	1981.62
Total requirement for financial assistance	2145.67	2143.81	2399.78	2432.48	2851.64	3498.80	2588.07	9604.31
<i>less</i> : SPPs treated by inclusion	383.14	330.21	379.81	363.01	398.06	402.85	324.18	987.35
GST and HCGs requirement	1762.53	1813.60	2019.97	2069.47	2453.59	3095.95	2263.89	8616.96
Per capita relativity ^(a)	0.87423	0.89957	1.00193	1.02648	1.21701	1.53563	1.12292	4.27410

Table B-11 PER CAPITA GST RELATIVITIES, ALTERNATIVE PRESENTATION, 2003-04

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	\$	\$	\$	\$	\$	\$	\$	\$
Average GST and HCGs	2016.09	2016.09	2016.09	2016.09	2016.09	2016.09	2016.09	2016.09
<i>plus</i> : Expense needs	-55.19	-405.28	29.49	389.12	-31.35	364.95	-58.35	6968.53
<i>plus</i> : Revenue needs	-189.33	158.90	-19.91	-346.83	492.80	743.66	256.22	245.59
<i>plus</i> : SPP needs	-9.03	43.90	-5.70	11.10	-23.95	-28.74	49.93	-613.24
GST and HCGs requirement	1762.53	1813.60	2019.97	2069.47	2453.59	3095.95	2263.89	8616.96
Per capita relativity ^(a)	0.87423	0.89957	1.00193	1.02648	1.21701	1.53563	1.12292	4.27410

(a) Per capita relativities are equal to each State's GST and HCG requirements divided by the Australian average of \$2016.09.

Table B-12**ASSESSED GST RELATIVITIES 1999-2000 to 2003-04**

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Per capita relativities									
1999-2000	1.00000	0.86016	0.85067	1.06746	1.08895	1.17953	1.54426	1.16360	4.21613
2000-01	1.00000	0.88747	0.85857	1.04568	1.00146	1.19268	1.57108	1.13131	4.26552
2001-02	1.00000	0.86189	0.85297	1.07215	1.01771	1.22499	1.56775	1.16087	4.35113
2002-03	1.00000	0.85854	0.91581	1.03226	0.99040	1.20206	1.54624	1.13628	4.22722
2003-04	1.00000	0.87423	0.89957	1.00193	1.02648	1.21701	1.53563	1.12292	4.27410
Assessed relativity ^(a)		0.86846	0.87552	1.04389	1.02500	1.20325	1.55299	1.14300	4.26682

(a) Average of per capita relativity factors for 1999-2000 to 2003-04.