

# GAMBLING TAXATION

---

- 1 This working paper describes how the Commission estimated revenue each State would have raised from gambling taxes if it made the Australian average effort. The development of the assessment method is in Volume 3 of the 2004 Review Working Papers.

## GAMBLING TAXES

- 2 All States levy taxes on the activities of gambling operators. The operators pay the tax.

### Why revenues raised from gambling taxes differ from State to State

- 3 Gambling tax is an important, but declining, source of State revenue, averaging around 9.1 per cent of total own-sourced revenue in recent years (Table 1).

**Table 1** Gambling tax revenue as share of own revenue, 2008 Update

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Average revenues (\$pc)	190.59	194.38	202.15	213.07	221.59	228.95
% of total own-source revenues	9.90	9.43	9.06	9.24	8.77	8.37

Source: Data collected by the Commission from the States.

- 4 Table 2 shows that the revenues per capita raised from gambling taxes differ greatly for each State and from the Australian average. The Commission seeks to understand the reasons for the differences. If the reasons are to do with gambling tax provisions, they are differences in revenue raising effort due to policy differences, and have no impact on State shares of GST revenue. If the reasons are due to circumstances beyond a State's control, they are revenue raising advantages/disadvantages and are taken into account in the revenue assessment. They do affect State shares.

**Table 2** Gambling tax revenues per capita, 2008 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
2001-02	183.68	283.32	156.79	57.20	205.87	140.85	133.64	167.01	190.59
2002-03	189.72	270.80	169.66	61.28	222.54	151.06	153.33	189.19	194.38
2003-04	196.27	267.19	187.91	67.23	246.68	164.71	163.68	200.62	202.15
2004-05	212.27	272.74	203.72	67.13	259.13	167.09	156.63	234.30	213.07
2005-06	223.80	286.77	207.74	71.78	256.70	161.79	153.06	277.81	221.59
2006-07	241.04	291.90	199.54	78.90	267.96	175.44	155.18	302.29	228.95

Source: Data collected by the Commission from the States.

**Box 1: The Commission's concept of average**

The Australian average revenue per capita is not a simple average of the revenue per capita for the eight States. It is a population weighted average, calculated by dividing the total revenues raised by all States by total population of all States. Population weighting gives equal weight to people irrespective of their State of residence. But, since more Australians live in New South Wales, that State carries more weight in the calculation of the average. For example, more than 32 per cent of Australians live in New South Wales, and less than 3 per cent in Tasmania. Population weighting gives the experience of New South Wales (\$241.04 per capita in 2006-07) about 14 times the weight of the experience of Tasmania (\$175.44 per capita). This means that the average revenue per capita is usually closer to the revenue per capita of New South Wales than the revenue per capita for Tasmania.

This concept of average also applies to the average effective tax rate. In calculating the average effort to raise revenue, the Commission divides the total revenue raised by all States by the total revenue bases of all States. This weights the revenue effort of each State according to its share of the total Australian revenue base.

- 5 The drivers of State revenues per capita are likely to include:
  - State policy influences on revenue effort (such as the gambling tax rates), restrictions on forms of gambling available and the venues where gambling may take place; and
  - non policy influences on gambling expenditure such as the level of disposable income and other socio-economic characteristics of people in each State.
- 6 Table 3 compares the effective tax rates for gambling in each State. It shows that Western Australia and the Northern Territory had relatively low effective tax rates while Victoria and South Australia had relatively high effective tax rates.

**Table 3** Gambling tax rates, 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	%	%	%	%	%	%	%	%
Gaming machines <sup>(a)</sup>	21.86	34.49	28.60	37.23	40.15	29.01	20.96	23.03
Racing <sup>(a)</sup>	19.50	18.61	10.58	24.06	6.24	n.a. <sup>(b)</sup>	22.22	12.60
Effective average tax rate <sup>(c)</sup>	21.48	32.03	26.95	17.21	36.13	27.52	19.80	18.16

(a) Calculated by dividing revenue data published in *Australian Gambling Statistics 1980-81 to 2005-06* by data on gambling expenditure (or player loss to the gambling operator). Calculations are for 2005-06, the last year for which expenditure data are available.

(b) Data on government revenue from racing has been unavailable for Tasmania since 2001-02.

(c) Calculated by dividing total gambling revenue data provided by the States by data on gambling expenditure (or player loss to the gambling operator). Calculations are for 2005-06, the last year for which expenditure data are available.

Sources: State data returns and Office of Economic and Statistical Research, *Australian Gambling Statistics 1980-81 to 2005-06*, January 2007.

7 Table 4 shows some broad indicators of ability to raise gambling tax revenues. They suggest that New South Wales, Victoria and the ACT had above average revenue raising ability.

**Table 4** Broad indicators of ability to raise taxes, 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
<b>(a) General indicator</b>									
GHDI <sup>(a)</sup>	31 750	32 551	29 483	32 286	29 377	26 956	50 966	32 886	31 581
Gambling expenditure <sup>(b)</sup>	1 041.74	895.45	770.83	417.18	710.57	587.86	772.88	1 529.85	854.91
<b>(b) Ratios<sup>(c)</sup></b>									
GHDI	100.53	103.07	93.35	102.23	93.02	85.35	161.38	104.13	100.00
Gambling expenditure	121.85	104.74	90.17	48.80	83.12	68.76	90.41	178.95	100.00

(a) Gross household disposable income.

(b) Data are for 2005-06, which is the last year for which actual data are available.

(c) Calculated by dividing the figure for each State by the Australian average figure.

Sources: ABS *Australian National Accounts (State Accounts) 2006-07*, Catalogue Number 5220.0.

Office of Economic and Statistical Research, *Australian Gambling Statistics 1980-81 to 2005-06*, January 2007.

## ASSESSING STATES' CAPACITIES TO RAISE REVENUES

### The equalisation task

8 The box below outlines the Commission's framework for measuring the ability of States to raise revenues from their own bases. For each tax, the Commission measures the revenue base available to each State, based on the average State policy of how the tax is levied, not the State's own policy. The assessed revenue base is policy neutral.

**Box 2: Revenue assessment framework for each category of tax to be assessed**

**Aim:** to measure the revenue base available to each State assuming it applied the average policy for levying the tax<sup>1</sup>.

**Step 1:** Review States' legislation and provisions to establish how the tax is levied — who pays it, on what activities or assets it is levied, and what exclusions from taxable liability are allowed by the States.

**Step 2:** Establish the average policy. The average policy is the policy applied to the majority of the total tax base and by a majority of States.

Where policy differences between States are negligible, the actual revenues raised by each State would be an appropriate measure of each State's relative ability to raise revenues from own revenue bases. In this case, it would not be necessary to measure the revenue base itself. It is called the actual per capita (APC) method of assessment. It attributes differences in observed revenues per capita between States entirely to differences in abilities to raise revenues from own revenue bases.

Most often, observed differences in per capita revenues are due to both differences in revenue effort (policy) and to circumstances beyond the direct control of State governments (revenue raising advantages/disadvantages).

**Step 3:** Determine the best conceptual measure of the revenue base under the average policy. The preference is to measure revenue bases under average policy settings from the number and value of activities, transactions or assets subject to the tax.

A broader measure (such as household disposable income, or total private expenditure) is adopted if:

- the tax itself is broad and its incidence is not easily shifted across State boundaries;
- differences in State policies have large effects on the relative number and value of activities, transactions, or assets that are taxable in each State, and it is not possible to adjust the data to remove the effects of the policy differences — in this case, data from a third party, such as the Australian Bureau of Statistics (ABS), may be used to overcome some of the problems inherent in State-provided data; or
- data on the preferred conceptual measure of the revenue base are not available.

However, broad measures tend to be more distant from the States' actual tax bases, and there is a judgment to be made as to how well they reflect the ability to raise taxes.

Where differences between each State's policy and the average policy are very large, and it is impossible to estimate a representative and policy neutral revenue base with confidence, the Commission uses State mean resident populations as the revenue base. This implies equal ability to raise revenues per capita in each State. This is the equal per capita (EPC) assessment method. It attributes differences in observed per capita revenues between States to policy, and does not cause any redistribution of GST shares.

**ASSESSING THE REVENUES FOR GAMBLING TAXES****The revenue base**

- 9 In concept, the assessment should be based on gambling expenses in each State because the States impose taxes on such expenses, disaggregated if necessary into forms of gambling — lotteries, EGMs, table games, wagering etc.
- 10 However, such an approach would not be policy neutral because gambling activities are highly regulated. The extent of regulation varies significantly across States. The differences

---

<sup>1</sup> The aim is to adopt a revenue base that inherently reflects all revenue raising advantages/disadvantages, without measuring them separately. This approach differs from the approach used for expenses which starts from an assumption of equal costs per capita and makes allowances for individual source of cost advantage/disadvantage.

are greatest for those forms of gambling that generate the bulk of the revenue. For example, for gaming machines, State policies differ on:

- location of venues;
- types of venue in which machines can be played (for example, Western Australia only allows EGMs in the Burswood Island casino whereas the ACT does not allow these in its casino);
- number and types of machines which can be played in particular venues (the ACT only allows older machines in pubs and clubs);
- proximity of the machines to other forms of gaming;
- who can manage machines; and
- regulation over other activities commonly associated with gambling, for example, smoking.

11 As a result, gambling expenses are highly policy-affected, and are not suitable as measures of policy-neutral tax bases.

12 Adjusting gambling expenses data to remove the effects of policy differences inevitably leads to complexity — it is inherently difficult to separate the impact of policy differences from the gamblers' socio-economic characteristics and predisposition to gambling. Besides, data necessary to do so accurately and reliably are not available at present.

13 Instead, the Commission uses gross household disposable income (GHDI) as a broader measure of the revenue base, with per capita GHDI adjusted by discounting interstate differences by 50 per cent to improve policy neutrality. The discount recognises that factors other than gamblers' incomes influence gambling expenses. However, despite its simplicity, the use of discounted GHDI as the proxy for the revenue base is not entirely satisfactory (see Attachment A for a more discussion of the limitations of the discount).

### **Calculating the revenue base**

14 Table 5 shows the calculation of the revenue bases for all years from 2001-02 to 2005-06. As noted, the revenue base was discounted gross household disposable income (GHDI). A discount of 50 per cent was applied to differences between each State's GHDI per capita and the average.

**Table 5** Calculation of the Gambling Tax revenue bases

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
<b>A. Gross household disposable income (\$b)</b>									
2002-03	175.1	124.7	83.5	48.2	36.9	9.7	12.1	4.8	495.0
2003-04	185.1	133.5	90.2	52.5	38.3	10.4	12.9	5.0	527.9
2004-05	195.7	142.5	98.2	55.1	40.0	11.3	13.8	5.6	562.1
2005-06	205.8	152.9	107.5	59.6	42.9	12.2	14.9	6.3	601.9
2006-07	215.9	164.7	118.4	65.6	45.5	13.1	16.7	6.7	646.6
<b>B. Gross household disposable income per capita (\$)</b>									
2002-03	26 320	25 481	22 169	24 841	24 147	20 383	37 440	23 932	25 024
2003-04	27 663	26 931	23 345	26 698	24 952	21 538	39 502	25 101	26 366
2004-05	29 066	28 395	24 812	27 539	25 881	23 232	41 861	27 463	27 728
2005-06	30 314	30 028	26 553	29 230	27 468	24 904	44 775	30 026	29 281
2006-07	31 495	31 863	28 626	31 500	28 851	26 733	49 553	31 701	30 999
<b>C. Implied capacity of GHDI per capita = <math>B / B_{\text{Australia}}</math></b>									
2002-03	1.0518	1.0182	0.8859	0.9927	0.9649	0.8145	1.4961	0.9563	1.0000
2003-04	1.0492	1.0214	0.8854	1.0126	0.9464	0.8169	1.4982	0.9520	1.0000
2004-05	1.0483	1.0241	0.8948	0.9932	0.9334	0.8379	1.5097	0.9905	1.0000
2005-06	1.0353	1.0255	0.9068	0.9983	0.9381	0.8505	1.5292	1.0254	1.0000
2006-07	1.0160	1.0279	0.9234	1.0161	0.9307	0.8624	1.5985	1.0226	1.0000
<b>D. Discounted capacity = <math>\{(C - 1) * 0.5\} + 1</math></b>									
2002-03	1.0259	1.0091	0.9429	0.9963	0.9825	0.9073	1.2481	0.9782	1.0000
2003-04	1.0246	1.0107	0.9427	1.0063	0.9732	0.9084	1.2491	0.9760	1.0000
2004-05	1.0241	1.0120	0.9474	0.9966	0.9667	0.9189	1.2549	0.9952	1.0000
2005-06	1.0176	1.0128	0.9534	0.9991	0.9690	0.9253	1.2646	1.0127	1.0000
2006-07	1.0080	1.0139	0.9617	1.0081	0.9653	0.9312	1.2993	1.0113	1.0000
<b>E. Revenue base (or discounted GHDI) (\$b) = <math>D * B_{\text{Australia}} * \text{Mean resident population}</math></b>									
2002-03	170.8	123.6	88.9	48.3	37.5	10.8	10.1	4.9	495.0
2003-04	180.8	132.1	96.0	52.2	39.4	11.5	10.7	5.2	527.9
2004-05	191.2	140.9	103.9	55.3	41.5	12.4	11.4	5.6	562.1
2005-06	202.3	151.0	113.0	59.6	44.3	13.2	12.3	6.2	601.9
2006-07	214.2	162.4	123.3	65.1	47.2	14.2	13.6	6.7	646.6

Source: ABS Australian National Accounts State Accounts 2006-07, catalogue no. 5220.0, Table 43.

15 Table 6 shows the revenue bases for all of the years of the assessment period.

**Table 6 Revenue bases for gambling taxes, 2008 Update**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
2002-03	25 672	25 253	23 597	24 933	24 586	22 704	31 232	24 478	25 024
2003-04	27 015	26 649	24 856	26 532	25 659	23 952	32 934	25 734	26 366
2004-05	28 397	28 061	26 270	27 633	26 804	25 480	34 795	27 596	27 728
2005-06	29 797	29 654	27 917	29 255	28 374	27 093	37 028	29 653	29 281
2006-07	31 247	31 431	29 813	31 250	29 925	28 866	40 276	31 350	30 999

**Calculating assessed revenues per capita**

16 Assessed revenues per capita are calculated by applying the average effective rate of tax to the revenue base per capita of each State. Table 7 shows the calculations.

**Table 7 Calculation of assessed revenue from effective rates of tax, 2006-07**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Actual revenue \$m	1 652.5	1 508.4	825.2	164.3	422.5	86.3	52.2	64.3	4 775.7
Actual revenue \$pc	241.04	291.90	199.54	78.90	267.96	175.44	155.18	302.29	228.95
Revenue base \$b	214.2	162.4	123.3	65.1	47.2	14.2	13.6	6.7	646.6
Revenue base \$pc	31 247	31 431	29 813	31 250	29 925	28 866	40 276	31 350	30 999
Effective rate of tax <sup>(a)</sup> %	0.77	0.93	0.67	0.25	0.90	0.61	0.39	0.96	0.74
Assessed revenue \$m	1 582.2	1 199.6	910.6	480.5	348.5	104.8	100.2	49.3	4 775.7
Assessed revenue \$pc	230.79	232.14	220.19	230.80	221.02	213.20	297.47	231.54	228.95

(a) Calculated as actual revenue divided by the revenue base.

17 Assessed revenues per capita can also be calculated by calculating a capacity factor from the revenue base and applying that to the average per capita revenue. Table 8 shows the calculations.

**Table 8 Calculation of assessed revenue from category capacity ratios, 2006-07**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Actual revenue \$pc	241.04	291.90	199.54	78.90	267.96	175.44	155.18	302.29	228.95
Revenue base \$pc	31 247	31 431	29 813	31 250	29 925	28 866	40 276	31 350	30 999
Revenue capacity ratio <sup>(a)</sup> %	100.80	101.39	96.17	100.81	96.53	93.12	129.93	101.13	100.00
Assessed revenue \$pc	230.79	232.14	220.19	230.8	221.02	213.2	297.47	231.54	228.95

(a) State revenue base per capitac divided by Australian revenue base per capita.

18 This approach has the advantage of making explicit the States' relative revenue capacity ratio. Also, by comparing actual revenues per capita with the assessed per capita revenues, a relative effort ratio can be derived.

19 Table 16 at the end of this section shows the average, actual and assessed revenues per capita for each State for all years of the 2008 Update.

20 Table 9 shows the actual and assessed revenues for 2006-07. Figure 1 shows them pictorially.

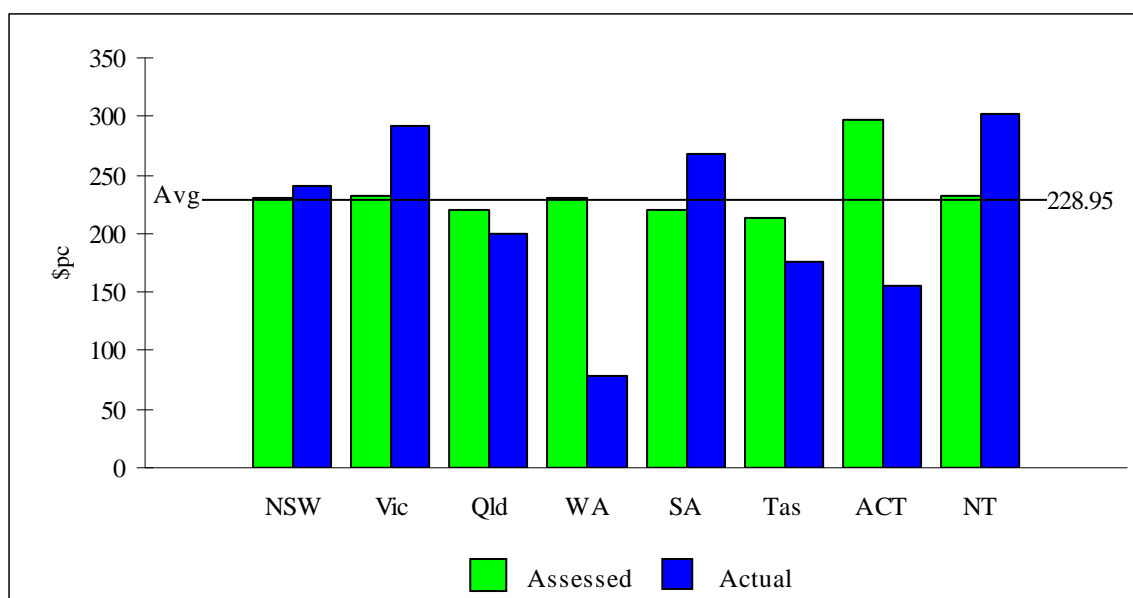
**Table 9 Gambling tax assessment results, 2006-07**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Actual revenues	241.04	291.90	199.54	78.90	267.96	175.44	155.18	302.29	228.95
Assessed revenues	230.79	232.14	220.19	230.80	221.02	213.20	297.47	231.54	228.95
	%	%	%	%	%	%	%	%	%
Assessed revenue raising capacity ratio <sup>(a)</sup>	100.80	101.39	96.17	100.81	96.53	93.12	129.93	101.13	100.00
Revenue effort ratio <sup>(b)</sup>	104.44	125.74	90.62	34.18	121.24	82.29	52.17	130.55	100.00

(a) State revenue base per capita divided by the Australian average revenue base per capita. This is the same as dividing each State's assessed revenue pc by the Australian average revenue per capita.

(b) Actual revenues pc divided by assessed revenues per capita.

**Figure 1 Gambling taxes, assessed revenue per capita, actual revenues per capita and average revenue per capita, 2006-07**



**Relative capacity to raise revenues**

21 In 2006-07, New South Wales, Victoria, Western Australia, the ACT and the Northern Territory were assessed to have above average capacity to raise gambling taxes because all

five States had above average GHDI per capita. The other States were assessed to have below average capacity.

### Revenue efforts

22 In 2006-07, New South Wales, Victoria, South Australia and the Northern Territory were assessed to make an above average effort. Victoria and South Australia had high effective tax rates (see Table 3). The high assessed revenue effort for the Northern Territory is partly because the higher propensity to gamble Territory, as seen in the higher gambling expenditure per capita, is not reflected in the assessment. Western Australia and the ACT had the lowest effort because both placed significant restrictions on where poker machines could be located.

### EFFECT ON THE DISTRIBUTION OF THE POOL FOR THE 2008 UPDATE

23 Table 10 shows the assessed difference from average for 2006-07. The difference is calculated by:

- subtracting each State's assessed revenue per capita from the average revenue per capita; and
- multiplying by each State's population.

**Table 10 Assessed revenues, difference from average, 2006-07**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Assessed revenues \$pc	230.79	232.14	220.19	230.8	221.02	213.2	297.47	231.54	228.95
Difference from average \$pc	1.83	3.19	-8.77	1.85	-7.94	-15.76	68.52	2.59	0.00
Population million	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Difference from average \$m <sup>(a)</sup>	12.6	16.5	-36.2	3.8	-12.5	-7.7	23.1	0.6	56.5

(a) Extent of difference from equal per capita for Australia is the sum of negatives, or positives.

24 Table 11 shows the assessed difference from average in \$ millions over the update period. The average of these amounts over the five year reference period provides an indication of the impact of the assessment on GST revenue shares.

**Table 11 Assessed revenues, difference from average, 2008 Update**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
2002-03	33.5	8.7	-41.8	-1.4	-5.2	-8.6	15.6	-0.8	57.8
2003-04	33.3	10.7	-44.7	2.5	-8.3	-8.9	16.4	-1.0	62.9
2004-05	34.6	12.9	-44.3	-1.4	-11.0	-8.4	17.8	-0.2	65.3
2005-06	26.5	14.4	-41.8	-0.4	-10.7	-8.1	19.5	0.6	61.0
2006-07	12.6	16.5	-36.2	3.8	-12.5	-7.7	23.1	0.6	56.5
Average	28.1	12.6	-41.8	0.6	-9.5	-8.3	18.5	-0.2	59.8

25 These amounts were assessed in the context of the size of the pool in each reference year. The actual impact of the assessment on State shares in the application year depends on the growth in the size of the pool between the reference years and the application year.

26 Table 12 shows the effect of the assessed differences on the distribution of the pool.

**Table 12 Gambling tax contribution to distribution of the pool, 2008 Update**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
	-34.2	-15.2	51.0	-0.8	10.9	9.8	-21.7	0.3	71.9

(a) This is the cumulative difference of either the positive or negative numbers.

27 The Commission estimated that the States with consistently above average assessed revenue per capita — New South Wales, Victoria and the ACT — required less assistance totalling \$74.9 m. The other States with consistently below average assessed revenues per capita — Queensland, Western Australia, South Australia, Tasmania and the Northern Territory — needed additional assistance totalling \$74.9 million.

28 This was because New South Wales, Victoria and the ACT consistently had relatively high levels of GHDI per capita and thus had the capacity to collect a high level of gambling revenue. The level of GHDI per capita in the remaining States was relatively low and they had a below average assessed capacity to collect gambling revenue.

#### **CHANGES IN DISTRIBUTION OF THE POOL: 2008 UPDATE COMPARED WITH THE 2007 UPDATE**

29 Table 13 shows:

- the impact of the 2007 Update assessment on GST revenue shares;
- the impact of the 2008 Update assessment on GST revenue shares; and
- the difference.

30 The table also breaks the difference into smaller parts.

**Table 13 Comparison of the 2008 Update and 2007 Update assessments<sup>(a)</sup>**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total redist'd
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
<b>Redistribution from EPC resulting from the 2007 Update assessment (a)</b>	-46.0	-13.1	55.8	3.3	9.8	10.9	-21.3	0.5	80.4
<b>Effect of revising category averages and revenue bases for 2001-02 to 2005-06</b>									
Category averages	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Revenue bases	1.2	-0.9	0.6	-1.2	-0.6	0.0	0.7	0.2	2.6
Interactions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	1.2	-0.9	0.6	-1.2	-0.6	0.0	0.7	0.2	2.6
<b>Effect of replacing 2001- 02 category averages and revenue bases with those for 2006-07</b>									
Category averages	1.4	0.2	-1.4	-0.2	-0.1	-0.3	0.4	0.0	2.1
Revenue bases	10.2	-1.7	-4.4	-3.1	2.0	-1.0	-1.6	-0.4	12.2
Interactions	-1.1	0.2	0.5	0.3	-0.2	0.1	0.2	0.0	1.3
Total	10.5	-1.3	-5.4	-3.0	1.7	-1.2	-1.0	-0.4	12.2
<b>Redistribution from EPC resulting from the 2008 Update assessment (a)</b>	-34.2	-15.2	51.0	-0.8	10.9	9.8	-21.7	0.3	71.9
<b>Total effect of revisions and updating (b)</b>	11.8	-2.1	-4.8	-4.1	1.1	-1.2	-0.3	-0.3	12.9

(a) All distributions are calculated using the 2007-08 GST and HCG pool and populations.

(b) This is the cumulative difference of either the positive or negative numbers. It provides an indication of the relative importance of each effect.

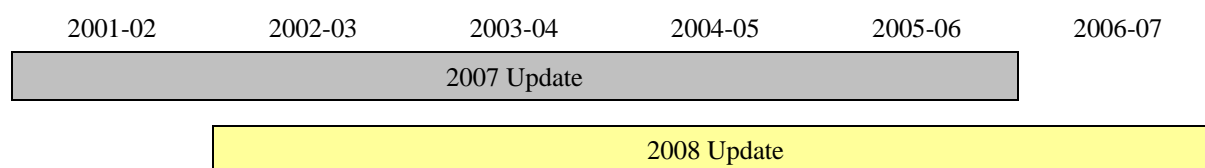
(c) The category revenue and revenue bases interact. The combined effect of changing both variables can be different to the sum of the effects of changing each separately. The difference is referred to as interactions.

### What has changed?

31 The main changes the Commission examines are:

- revisions to the financial and assessment data that were used in the 2007 Update; and
- advancing the reference period one year — a new year comes into the reference period and the oldest year drops out.

32 Figure 2 shows the reference periods for the two inquiries.

**Figure 2 Advancing the reference period, 2008 Update**

- 33 The effect of revisions is estimated by replacing 2007 Update data with 2008 Update data for the years 2002-03 to 2005-06. The effect of advancing the reference period one year is estimated by comparing the data of the year entering the reference period (2006-07) with the data of the year dropping out (2001-02). In both cases, the Commission considers the impact of replacing financial data (actual revenues) separately from the effect of replacing assessment data (revenue bases).

#### **Changes due to revising revenue data and revenue bases for years 2001-02 to 2005-06**

- 34 **Revisions of revenue data.** There were no revisions to the adjusted budget figures for 2001-02 to 2005-06. However, there were changes to the mean resident population data. These revisions were minor and had virtually no effect on the Australian average revenue per capita. This had no effect on the distribution of the pool for the 2008 Update.
- 35 **Revisions in the revenue base data.** As noted earlier, the ABS revised its data on GHDI for the years 2001-02 to 2005-06. GHDI was revised down for most years for New South Wales, Tasmania and the ACT and revised up for Victoria, Queensland, Western Australia, South Australia and the Northern Territory. This resulted in a small increase in the distribution to New South Wales, Tasmania and the ACT and a reduction in the distribution to the other States, except Queensland. In the case of Queensland, the upward revision to the mean resident population for that State more than offset the increase in GHDI. As a result, its allocation of the pool increased slightly.
- 36 Table 14 summarise these changes. It shows that change to the average revenue per capita was minor. However, there were more significant changes as mentioned earlier to the relative capacities between the years 2000-01 to 2004-05 because of the revisions.

**Table 14** Gambling tax assessment data, average of 2001-02 to 2005-06

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Actual revenues									
2007 Update	200.88	277.14	186.04	65.05	239.25	157.27	153.36	216.09	204.80
2008 Update	201.15	276.16	185.16	64.92	238.19	157.10	152.07	213.78	204.36
	%	%	%	%	%	%	%	%	%
Assessed revenue raising capacity ratios									
2007 Update	102.60	100.96	94.61	99.34	97.44	91.06	125.34	99.01	100.00
2008 Update	102.54	101.03	94.55	99.57	97.59	91.05	124.55	98.68	100.00

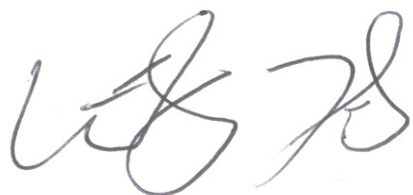
**Changes in State circumstances — the effects of replacing 2001-02 revenue data and revenue base data with those for 2006-07**

- 37 **Replacing revenue data.** The national average per capita revenues increased by 20.1 per cent, less than the increase in the GST revenue pool of 34.8 per cent. The category became less important, resulting in a slightly smaller redistribution of the pool away from those States (New South Wales, Victoria and the ACT) which had above average GHDI per capita (and hence assessed revenues per capita) to the other States.
- 38 **Replacing revenue base data.** The changes in State circumstances between 2001-02 and 2006-07 that affected the redistribution of the pool between the States were the different rates of growth in GHDI between the States.
- 39 The growth in GHDI in the five years to 2006-07 was strongest in Tasmania, the ACT and the Northern Territory. Growth in GHDI was also higher than average in the resource rich States of Western Australia and Queensland.
- 40 By contrast, the growth was below average in New South Wales and South Australia. As a result, the replacement of 2001-02 revenue bases with the revenue bases for 2006-07 resulted in redistribution of the pool towards those two States.
- 41 Table 15 shows how the average revenue and revenue base ratios for 2006-07 were different from 2001-02.

**Table 15** Gambling assessment data 2001-02 and 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Actual revenues									
2001-02	183.68	283.32	156.79	57.20	205.87	140.85	133.64	167.01	190.59
2006-07	241.04	291.90	199.54	78.90	267.96	175.44	155.18	302.29	228.95
Assessed revenues									
2001-02	197.17	191.91	179.35	186.78	188.29	170.08	230.77	185.23	190.59
2006-07	230.79	232.14	220.19	230.80	221.02	213.20	297.47	231.54	228.95
	%	%	%	%	%	%	%	%	%
Assessed revenue raising capacity ratios									
2001-02	103.46	100.70	94.10	98.00	98.80	89.24	121.08	97.19	100.00
2006-07	100.80	101.39	96.17	100.81	96.53	93.12	129.93	101.13	100.00

This chapter was prepared by the Revenue section of the Commonwealth Grants Commission. If you have any questions about its content please contact Lintong Feng on (02) 6229 8833 or [lintong.feng@cgc.gov.au](mailto:lintong.feng@cgc.gov.au).



Date: 29 February 2008

**Table 16 Assessment of revenue, Gambling Tax**

	2002-03		2003-04		2004-05		2005-06		2006-07	
	Amount	Per Capita	Amount	Per Capita	Amount	Per Capita	Amount	Per Capita	Amount	Per Capita
	\$m	\$	\$m	\$	\$m	\$	\$m	\$	\$m	\$
<b>Average Revenue</b>		194.38		202.15		213.07		221.59		228.95
New South Wales										
Assessed difference	- 33.471	- 5.03	- 33.269	- 4.97	- 34.621	- 5.14	- 26.529	- 3.91	- 12.554	- 1.83
Revenue - Assessed	1 326.696	199.42	1 386.170	207.12	1 469.145	218.21	1 530.877	225.49	1 582.222	230.79
Actual	1 262.227	189.72	1 313.548	196.27	1 429.146	212.27	1 519.388	223.80	1 652.531	241.04
Victoria										
Assessed difference	- 8.672	- 1.77	- 10.735	- 2.17	- 12.872	- 2.56	- 14.387	- 2.83	- 16.488	- 3.19
Revenue - Assessed	960.256	196.16	1 012.611	204.32	1 082.350	215.63	1 142.481	224.41	1 199.613	232.14
Actual	1 325.690	270.80	1 324.234	267.19	1 368.987	272.74	1 459.948	286.77	1 508.390	291.90
Queensland										
Assessed difference	41.780	11.09	44.733	11.58	44.327	11.20	41.793	10.32	36.249	8.77
Revenue - Assessed	690.552	183.29	736.113	190.57	798.657	201.86	855.379	211.26	910.619	220.19
Actual	639.203	169.66	725.837	187.91	805.978	203.72	841.121	207.74	825.202	199.54
Western Australia										
Assessed difference	1.379	0.71	- 2.505	- 1.27	1.449	0.72	0.395	0.19	- 3.847	- 1.85
Revenue - Assessed	375.436	193.67	400.381	203.42	424.685	212.34	451.333	221.39	480.540	230.80
Actual	118.783	61.28	132.331	67.23	134.264	67.13	146.328	71.78	164.272	78.90
South Australia										
Assessed difference	5.204	3.41	8.331	5.42	10.976	7.10	10.705	6.86	12.512	7.94
Revenue - Assessed	291.492	190.97	302.230	196.73	318.564	205.97	335.076	214.73	348.468	221.02
Actual	339.677	222.54	378.964	246.68	400.783	259.13	400.582	256.70	422.485	267.96
Tasmania										
Assessed difference	8.563	18.03	8.897	18.51	8.375	17.27	8.089	16.56	7.747	15.76
Revenue - Assessed	83.778	176.36	88.274	183.64	94.923	195.79	100.149	205.03	104.818	213.20
Actual	71.759	151.06	79.172	164.71	81.006	167.09	79.028	161.79	86.253	175.44
Australian Capital Territory										
Assessed difference	- 15.630	- 48.22	- 16.427	- 50.36	- 17.841	- 54.30	- 19.478	- 58.63	- 23.068	- 68.52
Revenue - Assessed	78.640	242.60	82.370	252.51	87.842	267.37	93.098	280.21	100.155	297.47
Actual	49.701	153.33	53.395	163.68	51.459	156.63	50.852	153.06	52.247	155.18
Northern Territory										
Assessed difference	0.846	4.24	0.974	4.85	0.207	1.02	- 0.588	- 2.82	- 0.551	- 2.59
Revenue - Assessed	37.922	190.14	39.639	197.30	43.316	212.05	46.838	224.40	49.273	231.54
Actual	37.731	189.19	40.306	200.62	47.860	234.30	57.984	277.81	64.327	302.29

# ATTACHMENT A

---

## METHOD DESCRIPTION

### Description of category

- 1 The Gambling Taxation assessment relates to revenues from licensed gambling operators and from taxing gambling activities. The taxes include casino taxes, lotteries taxes, poker machine<sup>2</sup> taxes, and bookmaker and TAB taxes.

### Assessment method

- 2 The revenue base for Gambling Taxation is gross household disposable income (GHDI), adjusted by discounting interstate differences in GHDI per capita by 50 per cent to improve policy neutrality. The discount recognises that factors other than gamblers' incomes influence gambling expenses.
- 3 In concept, the assessment should be based on gambling expenses in each State because this is the base on which States impose the taxes, further disaggregated if necessary into forms of gambling — lotteries, EGMs, table games, wagering etc.
- 4 Such an approach is however unsound because gambling activities are highly regulated. The regulation relates to many issues, for example, to numbers and types of machines, their location, proximity to other activities, who can work in venues etc.
- 5 The extent of regulation policies varies significantly across States. The differences are greatest for those forms of gambling that generate the bulk of the revenue. For example, for gaming machines, State policies differ on:
  - location of venues;
  - types of venue in which machines can be played (for example, Western Australia only allows EGMs in the Burswood Island casino whereas the ACT does not allow them in its only casino);
  - number and types of machines which can be played in particular venues (the ACT only allows older machines in pubs and clubs);

---

<sup>2</sup> These are sometimes called Electronic Gaming Machines (EGMs).

- proximity of the machines to other forms of gaming;
  - who can manage machines; and
  - regulation over other activities commonly associated with gambling, for example, smoking.
- 6 As a result, gambling expenses are highly policy-distorted, and are not suitable as measures of policy-neutral tax bases.
- 7 Adjusting gambling expenses data to remove the effects of policy differences inevitably leads to complexity, because of the need to separate the impact of policy differences from the gamblers' socio-economic characteristics and predisposition to gambling. Besides, data necessary to do so are not available at present.
- 8 Even if suitable data were available, the estimation of these adjustments would be difficult because the influence of socio-economic factors on gambling varies across forms of gambling and over time.
- 9 However, despite its simplicity, the use of discounted GHDI as the proxy for the revenue base is problematic.
- 10 Because of the lack of detailed household data on gambling expenses, the Commission used pooled (time series/cross-section) aggregate data on gambling expenses and income to analyse alternative influences on gambling. This limited analysis indicated gambling expenses were weakly, albeit positively, related to income. It also indicated significant State effects.
- 11 Because of data limitations, the Commission was limited to analysing simple linear relationships, and was not able to estimate statistically significant socio-demographic effects from the aggregate data.