Australian Government

Commonwealth Grants Commission

HISTORY OF THE GAMBLING ASSESSMENT

INFORMATION PAPER
CGC 2015-05

JULY 2015

CONTENTS

OVERVIEW

1 Gambling taxation comprises revenues from the licensing and taxing of activity of gambling operators. The main forms of gambling are:

- Racing taxes — the net proceeds from all taxes or commissions from bookmakers and totalisators.[1] It encompassed taxes on sports betting and other events with bookmakers and TABs until the mid-1990s
- Lottery taxes — the net proceeds from State lotteries, taxes on lottery subscriptions (including soccer pools, keno and minor lotteries) and shares of profits of private operators
- Poker machine taxes — the net proceeds from taxes and licences associated with poker machines in clubs, pubs and hotels and taxes on Club Keno games operated in clubs, pubs and hotels
- Casino taxes — the taxes and levies on the holders of casino licences, including one-off premiums/licence fees. It encompassed taxes on poker machines at casinos
- Sports betting taxes — the taxes and levies on approved types of local, national or international sporting activities (other than the established forms of horse and greyhound racing), whether on or off-course, in person, by telephone, or via the internet.

2 Racing and lotteries (Queensland and Tasmania only) operated in 1933, when the Commission became responsible for making recommendations in relation to special grants.[2] Poker machines were introduced in New South Wales in 1960. The first casino opened in Tasmania in 1973. Sports betting commenced from the mid-1990s.

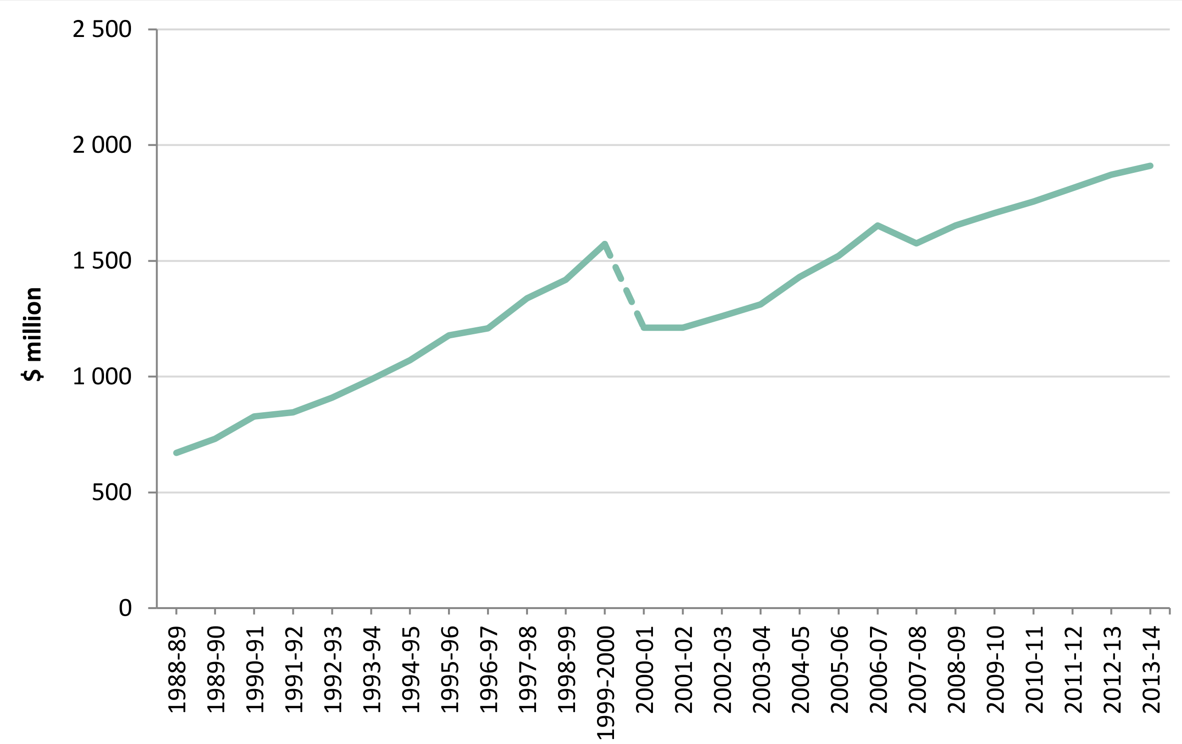
3 Figure 1 shows gambling revenue has grown steadily since 1988-89. There was a dip in 2000-01, when States reduced their gambling taxes to make room for the Goods and Services Tax (GST). Since 1988-89, gambling revenue has grown at around 5.2% per annum. However, there were years of more rapid growth:

- 10% or more in 1989-90, 1990-91, 1992-93, 1994-95 and 1995-96
- 15% or more in 1993-94.

[1] In the early reviews, racing taxes also included unclaimed totalisator dividends and fractions. It excluded revenue retained by clubs or credited to racecourse development funds.

[2] The first ten years of federation were a transition period. In the next five years, the Commonwealth distributed funds to the States on an equal per capita basis. Thereafter, some States received more assistance (called special grants). Western Australia was the first State to receive special grants, followed by Tasmania. At different stages of the special grant era, Queensland, Western Australia, South Australia and Tasmania received special grants.

Figure 1 State gambling revenue collections, 1988-89 to 2013-14



Source: Taxation revenue Australia, ABS Cat No 5506.0, various issues.

4 There were also 2 years of negative growth; the biggest (a 19% fall) coincided with the introduction of the GST.

5 Table 1 shows per capita revenue by form of gambling for 2012-13. It shows gaming machines are the major source of gambling revenue. Table 2 shows revenue per gaming machine varies across States. In 2012-13, the ACT had the lowest revenue per machine ($7,015) and Victoria the highest ($34,017).

Table 1 State per capita revenue by form of gambling, 2012-13

	Racing	Casino (a)	Lotteries	Gaming machines (a)	Sports betting	Total
	$pc	$pc	$pc	$pc	$pc	$pc
NSW	23	27	62	210	3	324
Vic	12	45	92	200	2	351
Qld	11	24	73	188	1	296
WA	20	56	143	0	1	220
SA	1	16	87	219	0	323
Tas	6	49	74	77	1	507
ACT	13	6	54	118	0	192
NT	37	64	110	95	0	306
Average	16	34	83	175	2	309

(a) Casino revenue includes revenue from gaming machines located in casinos.
Source: Australian Gambling Statistics, 30th Edition.

Table 2 State revenue per gaming machine (excluding those operating in casinos)

	NSW	Vic	Qld	SA	Tas	ACT	NT	Ave
	$	$	$	$	$	$	$	$
2001-02	7,151	33,016	9,064	14,592	12,108	5,342	15,424	11,921
2005-06	10,134	33,563	13,989	23,291	12,170	6,098	19,394	15,212
2009-10	11,271	37,108	13,551	22,180	13,493	6,657	16,053	16,161
2012-13	12,685	34,017	15,376	22,669	12,941	7,015	13,932	16,873

Source: Australian Gambling Statistics, 30th edition.

6 Gambling revenue has always been part of the equalisation system. The special grants era was a period when the Commission made recommendations in relation to special assistance for claimant States. The needs of claimant States were assessed by comparing them against standard States (normally New South Wales and Victoria).

7 However, it took the Commission until the mid-1940s to develop its approach to assessing revenue capacity.[3] When it did so, it chose turnover (a measure of gambling activity) as its capacity measure. The difficulty of removing policy influences on turnover led the Commission to turn to a broad measure of capacity. Its first broad measure was gross household income and then household disposable income. Finally, an emerging view that household disposable income was not a good measure of capacity led the Commission to discontinue a differential assessment and assess gambling revenue equal per capita.

MAJOR ASSESSMENT ISSUES

8 The main assessment question facing the Commission was how to best measure State capacity to raise revenue. It has taken three approaches to gambling.

- A direct approach. Under this approach the revenue base was based on the level of gambling activity for each form of gambling, with adjustments to remove material policy influences.
- An indirect approach. Under this approach the revenue base for gambling as a whole was free from policy influences,[4] with adjustments to bring in material differences in the propensity to engage in the activity.
- An equal per capita approach. This approach was used when the Commission was unable to develop an assessment.

---

3 In the interim, the Commission calculated an index of relative capacity using income tax data. It applied its index to most State revenues including racing revenue. It did not apply its index to lotteries revenue because it believed the revenue was raised from residents of other States. Consequently, it treated lotteries revenue as above average effort.

4 The revenue base could be a broad revenue indicator or an equal per capita assessment.

9 In relation to gambling, the dominant factors that have influenced this choice have been the Commission's views on:

- The degree of substitutability between different forms of gambling. If the degree of substitutability is deemed to be low, assessments can be developed for individual forms of gambling. If the degree of substitutability is deemed to be high, an aggregated assessment is more appropriate. [5]
- The impact of State policy differences. If State policy differences are material, adjustments are required to ameliorate or remove them from the Commission's capacity measure.
- The impact of differences in the propensity to engage in gambling. These differences can be driven by innate cultural differences or by limitations on residents' access to gambling opportunities.[6] If these differences are material, adjustments are required to ensure they are incorporated into the Commission's capacity measure.

10 When it had developed its approach to assessing revenue capacity, the Commission made direct assessments of racing (turnover) and lotteries (net operating expenses). This approach (separate assessments, direct assessments) suggested the Commission did not consider substitutability or State policy differences to be major issues.

11 Through the special grants era, States argued policy differences were material and State residents did not have equal propensities either because of cultural differences or because some people had less access to gambling opportunities. The changing gambling assessment across this period reflected the way the Commission adjusted its direct assessments to deal with these issues.

12 With the commencement of comprehensive equalisation in the 1981 Review, New South Wales and Victoria (the standard States in the special grants era) raised the issue of substitutability. In its 1993 Review, the Commission agreed with them. It concluded the different forms of gambling were highly substitutable. As a result, it assessed all gambling together and adopted a broad measure (household income), dropping its direct measure for racing in the process. Later it moved to a discounted broad measure. Eventually materiality considerations led the Commission to move to an equal per capita assessment.

13 Over the evolution of the gambling assessment, the main assessment questions considered were:

- the structure of the assessment
- the choice of measure — turnover or household income

[5] A high degree of substitutability means State policy differences that affect its capacity for one form of gambling (for example, Western Australia's poker machine restrictions) are likely to affect its capacity for the remaining forms.

[6] CGC 2015-06 *History of the regional costs assessment* discusses how population dispersion adds to the costs of delivering services.

- the need for adjustments because some States were not able to raise revenue at average rates.

14 Attachment A provides greater detail on how the Commission reached its conclusion on each of these questions. Issues other than those listed above also arose through the various reviews, but they tended to be secondary issues. Where relevant, they are mentioned in Attachment A.

THE COMMISSION'S GAMBLING ASSESSMENTS

15 The gambling assessment can be seen as evolving through four discrete periods.

- The State grants era.
  A period where the Commission assumed substitutability[7] to be low and adjustments could be made to its direct measure of revenue (turnover) to ameliorate the impact of policy differences.
- 1981 Review to 1988 Review.
  A period where the Commission assumed substitutability was low but the impact of policy differences varied for different forms of gambling.
- 1993 Review to 2004 Review.
  A period where the Commission assumed substitutability was high and the impact of policy differences was material. Adjustments were made to recognise differences in the propensity of States' population to gamble.
- 2010 Review to 2015 Review.
  A period where the Commission decided the degree of substitutability and policy influence were such that it was unable to develop a material assessment.

16 State policies differed in a number of ways, including:

- whether particular forms of gambling were permitted
- rates of tax
- policies in relation to the promotion and marketing of legal forms of gambling.

17 The different propensity of States' population to gamble was said to be due to cultural differences and to their different access to gambling opportunities. The latter has been affected by changes in technology (particularly the growth of phone and online betting).

Special grants era

18 The States introduced new forms of gambling during this period. The Commission initially treated the revenue raised as above average effort. This treatment meant

7 Gambling is substitutable if a State's decision to tax or restrict one form of gambling leads gamblers to redirect spending to other forms of gambling.

new forms of gambling did not initially affect a claimant State's special grant. The Commission took this approach to lotteries in the 1930s, poker machines in the 1960s and casinos in the 1970s.

19 When the Commission became responsible for making recommendations in relation to special grants, there were only two forms of gambling: racing taxation (3% of State revenue) and lotteries (1%). In its early reports, the Commission used income tax data to assess an index of relative capacity for each State. It applied the index to most State revenue including racing revenue, but not lotteries. Lotteries operated in only two States and the Commission believed the revenue was mainly raised from residents of other States.

20 In the mid-1940s, the Commission made direct assessments of racing and lotteries (now operating in four States). For racing, it used turnover as the revenue base with an adjustment for the small States because of the burden of fixed overheads in the operation of totalisator machines. For lotteries, it used net operating expenses as the revenue base.[8] This approach (separate assessments, direct assessments) suggests the Commission did not believe substitutability or policy neutrality were big issues.

21 By the 1970s, States and the Commonwealth had raised concerns about policy neutrality. The Commonwealth said policy differences meant the Commission should not use claimant States' revenue/turnover as its capacity measure. Queensland and South Australia said the Commission should adjust the standard States' turnover to remove the impact of their policies. South Australia argued its population had a lower propensity to gamble. These policy neutrality concerns led the Commission to change its capacity measure to the average revenue/turnover in the standard States with adjustments for the potential gambling population (as measured by non-rural population), relative income (as measured by average weekly earnings) and a lower propensity for South Australians to engage in gambling. It retained separate assessments for each form of gambling, suggesting substitutability was not considered a big issue.

1981 Review to 1988 Review

22 During this period, the States expressed differing views about substitutability and policy neutrality. New South Wales and Victoria believed the degree of substitutability between different forms of gambling was high. They considered turnover to be too policy influenced to be used as a capacity measure. They favoured a broad assessment (gross household income, wages and salaries). The other States disagreed. They believed the different forms of gambling tapped into different

8 The revenue base was subscription revenue less operating expenses less a standard proportion for prize money.

markets (no substitutability) and turnover was driven by factors other than State policy.

23 The Commission chose two different approaches to assessing capacity. For racing, it used a direct approach (turnover). It chose turnover because it believed differences in race betting per capita were primarily driven by factors other than State policies.

24 For the other forms of gambling (lotteries, poker machines and casino taxation), it chose an indirect measure (gross household income) because it believed these forms of gambling were affected by State policy differences.[9] The Commission did not use turnover for these forms of gambling because it believed turnover was too influenced by State policies and the entrepreneurial skill of gambling operators (including marketing and promotional activities).

25 States argued for a range of adjustments to the Commission's preferred measures. In the 1981 and 1982 Reviews, the Commission accepted a scale advantage operated in favour of New South Wales and Victoria and it made upward adjustments to their racing and lotteries capacities. It removed this adjustment in the 1985 Review because it accepted the success of multi-State lottery operations and instant-draw lotteries meant their scale advantage was less significant.

26 In the 1988 Review, the Commission introduced a scale of operations adjustment for the racing component. The adjustment increased New South Wales' capacity and reduced the capacities of Western Australia, South Australia and Tasmania.

1993 Review[10] to 2004 Review

27 The States continued to express differing views about substitutability and policy neutrality. By the 1999 Review, Western Australia had joined New South Wales and Victoria in believing the degree of substitutability was high. They, Queensland and Tasmania said turnover was too policy influenced to be used as the capacity measure. Collectively, they preferred a broad revenue assessment (such as household income).

28 Other States supported a direct approach (such as gambling expenditure). They did not believe a broad revenue assessment could capture the underlying differences in the propensity of States' populations to engage in gambling.

29 In the 2004 Review, the States also debated whether a discount should be applied to household disposable income and, if so, its size.

30 In the 1993 Review, the Commission said its investigation of the movements in the level of gambling turnover (especially after the introduction of a new form of gambling) and the nature and extent of gambling taxation led it to conclude the

9 For example, some forms of gambling were not permitted in some States.

10 The 1993 Review was the first review where aggregate assessed revenue equalled aggregate actual revenue. The methods previously used by the Commission created gaps between the two aggregates.

different forms of gambling were highly substitutable. It also concluded turnover was an unreliable measure because it was affected by State policies on the range of gambling activities permitted, percentage returns and promotional activities. Accordingly, it changed its gambling assessment, assessing all gambling together. The Commission concluded turnover was too policy influenced to be used as its capacity measure and decided it would apply a broad revenue assessment to all gambling. It changed its broad capacity measure from gross household income to household disposable income, because it accepted State arguments they could not access gross household income. These changes favoured the States assessed to have the biggest revenue raising capacities (New South Wales and Victoria).

31 In the 1999 Review, the Commission introduced a 50% discount to household disposable income because of the conflicting evidence about the strength of the relationship between gambling expenditure and income. It determined the size of the discount based on regression analysis it had undertaken. This change favoured States assessed to have revenue raising advantages (New South Wales, Victoria and the ACT).

32 States argued for a range of adjustments to the Commission's preferred measure. The following table shows the adjustments applied over this period.

Table 3 Adjustments applied to gambling assessment

Adjustment	Component	1993 Review	1999 Review	2004 Review
Cost of living	All	Yes	-	-
Diseconomies of scale	Racing	Yes	-	-
Diseconomies of scale	Lotteries	Yes	Yes	-
Cross-border mobility (ACT only)	Racing	Yes	-	-
Remote population	All	-	Yes	-

Source: *Report on General Revenue Grant Relativities 1993. Report on General Revenue Grant Relativities 1999. Report on State Revenue Sharing Relativities 2004.*

2010 Review to 2015 Review

33 For the 2010 Review, the Commission revisited its regression analysis on the relationship between gambling expenditures and household disposable income. It found the strength of the relationship had weakened (possibly due to the growth in online gambling), meaning an increase in the 50% discount was warranted. An increase in the discount would render the assessment immaterial. The Commission provided its analysis to States.

34 New South Wales, Victoria, Western Australia, the Australian Capital Territory and the Northern Territory supported an equal per capita assessment. New South Wales, Victoria and Western Australia said gambling revenues were too policy influenced to

be assessed reliably. Western Australia cited conflicting evidence on the drivers of gambling revenue. The ACT supported an equal per capita assessment because household disposable income did not capture the impact of differences in propensities to gamble across population groups, cross-border flows or tourism. The Northern Territory said in the absence of data on the drivers of gambling activity, a differential assessment was not appropriate.

35 Queensland, South Australia and Tasmania did not support an equal per capita assessment. South Australia said there were clear differences across States in their revenue raising capacities. In the 2015 Review, it said gambling regulations had become more consistent and it believed a differential assessment could be developed. These States suggested a range of capacity measures comprising both indirect (adjusted gross State product, adjusted household disposable income, population density, expenditure on recreation and culture from the ABS' National Accounts publication) and direct measures (gambling expenditure).

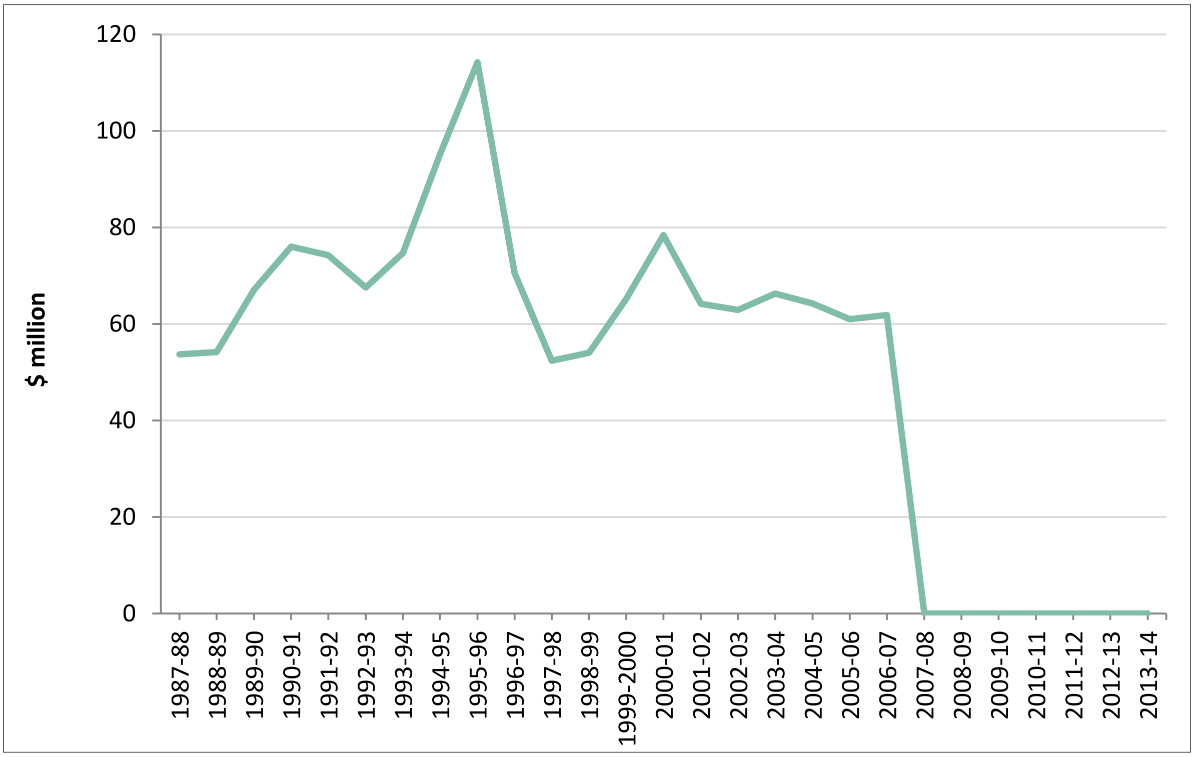
36 The Commission decided to assess gambling revenue equal per capita because neither it nor States had been able to develop a policy neutral measure of gambling expenditure. This change favoured States assessed to have revenue raising advantages (New South Wales, Victoria and the ACT).

37 In the 2015 Review, the Commission investigated a number of different approaches to assessing gambling, including the level of gambling activity, a socio-demographic approach and a broad indicator approach. None of the approaches provided a reliable and material gambling assessment. Data were either not available or did not lead to a material assessment. Consequently, the Commission retained its equal per capita assessment.

IMPACT OF GAMBLING ASSESSMENTS

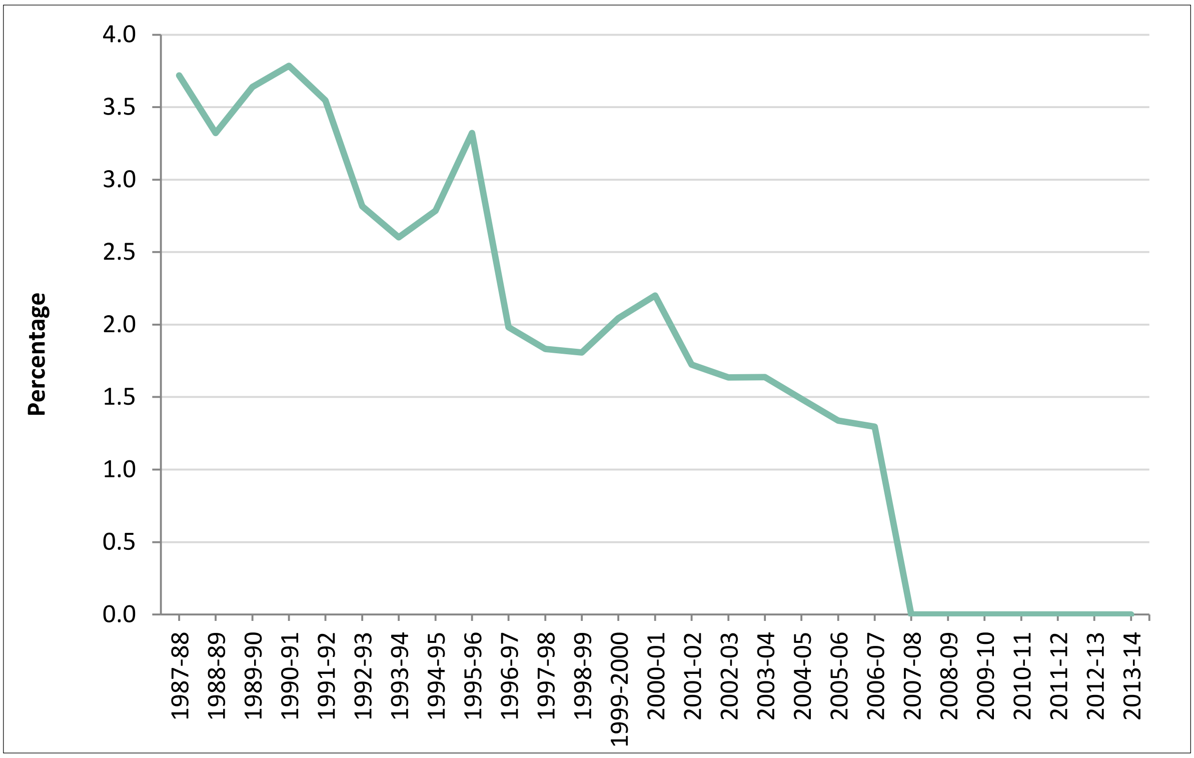
38 Figure 2 shows the extent to which the gambling assessment has moved away from an equal per capita distribution. The redistribution averaged around $70 million before it fell to zero with the introduction of the equal per capita assessment. Figure 3 shows the redistribution as a percentage of the revenue collected.

Figure 2 Redistribution attributable to gambling revenue, 1987-88 to 2013-14



Source: ABS GFS revenue data. Various Commission reports.

Figure 3 Gambling revenue redistribution as a share of revenue collected, 1987-88 to 2013-14



Source: ABS GFS revenue data. Various Commission reports.

CONCLUSIONS

39 The major issue in the evolution of the gambling assessment has been whether to assess revenue capacity using a direct or indirect approach. The factors that have influenced this choice have been the Commission's views on:

- The degree of substitutability between different forms of gambling. If the degree of substitutability is assumed to be low, assessments can be developed for individual forms of gambling. If the degree of substitutability is assumed to be high, an aggregated assessment is more appropriate.
- The impact of State policy differences. If State policy differences are material, then we need to develop approaches to ameliorate or remove them from the chosen assessment.
- The impact of differences in the propensity to engage in gambling. These differences can be driven by innate cultural differences or by limitations on the access to gambling opportunities. If these differences are material, then we need to develop approaches to ensure they are incorporated into the Commission's capacity measure.

40 The impact of technological change has influenced the Commission's views on gambling. Technological change expanded residents' access to gambling opportunities. It is likely it will continue to do so into the future. It is also likely that future technological change might reduce the influence of State policies. If gambling becomes more mobile, State policies might converge.[11]

41 The Commission's early assessments focussed on direct measures of gambling activity. This suggested the Commission deemed the degree of substitutability and the impact of State policy differences to be low and State populations to have equal access to gambling opportunities.

42 Over the special grants era, States argued policy differences were material and States did not have the same propensities either because of cultural differences or because some people had less access to gambling opportunities. The Commission's changing gambling assessment over this period reflected the way it dealt with these issues.

43 With the commencement of comprehensive equalisation in the 1981 Review, New South Wales and Victoria (the standard States in the special grants era) started raising the issue of substitutability. In its 1993 Review, the Commission agreed with them. It concluded the different forms of gambling were highly substitutable. As a result, it assessed all gambling together and adopted a broader measure (household income),[12] dropping its direct measure for racing in the process. Later it discounted its

---

11 This previously happened with two other mobile taxes — stamp duty on shares and probate duties.

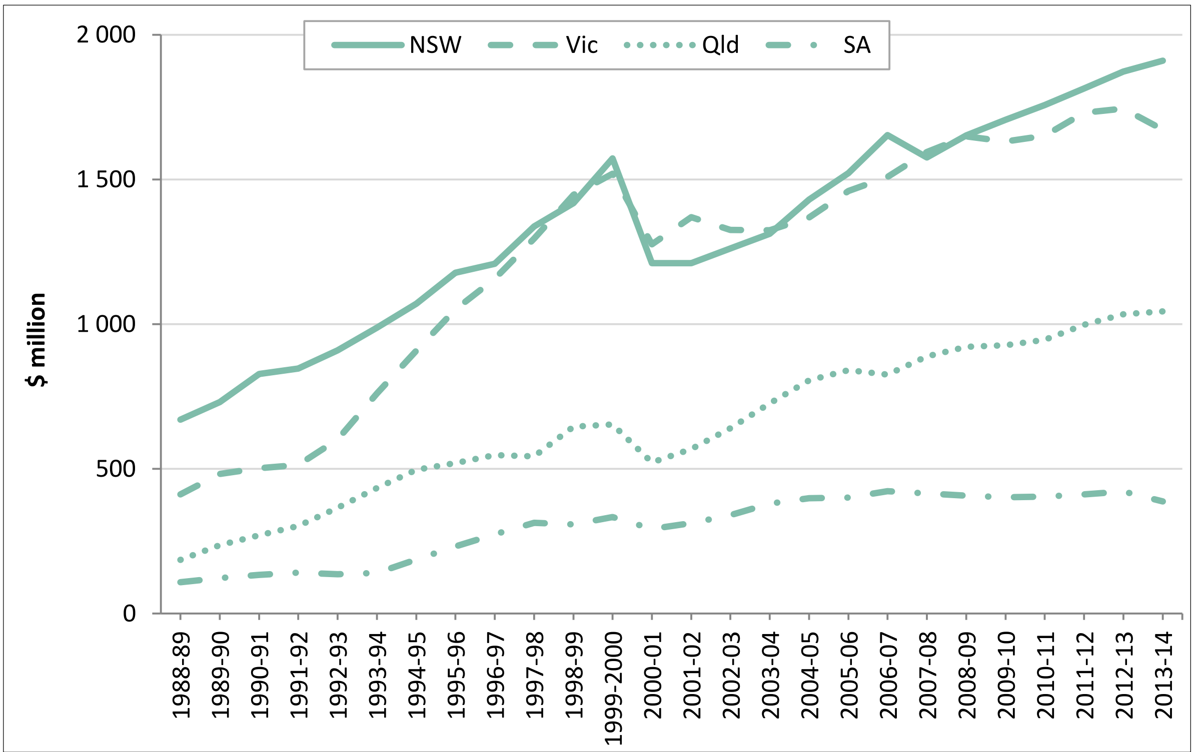
12 When direct measures are used, the Commission often has to make adjustments to remove the impact of State policy differences. When broad measures are used, the Commission often has to make adjustments to bring in factors that give rise to differences in propensities to engage in gambling.

measure by 50%. Eventually materiality considerations led the Commission to move to an equal per capita assessment.

44 On occasion, the Commission has determined one or more States were unable to raise revenue at average rates. It introduced adjustments to change their assessed capacities. In most cases, these adjustments reduced the assessed capacity of the small States.

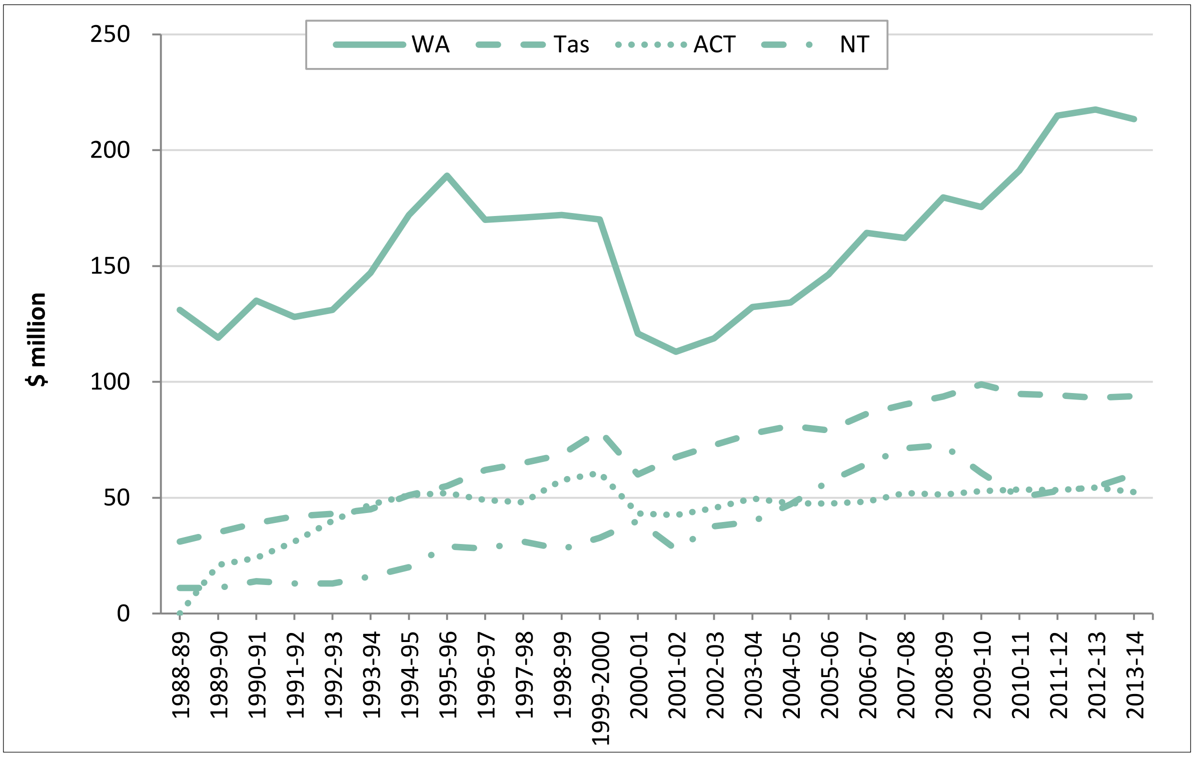
45 Figure 4 and Figure 5 show State gambling revenues have increased steadily over the last three decades. Table 4 shows gambling revenue now accounts for $5.4 billion or 4.7% of State revenue, but its proportion has declined in recent years.

Figure 4 State gambling revenue collections, 1988-89 to 2013-14



Source: Taxation revenue Australia, ABS Cat No 5506.0, various issues.

Figure 5 State gambling revenue collections, 1988-89 to 2013-14



Source: Taxation revenue Australia, ABS Cat No 5506.0, various issues.

Table 4 State gambling revenue as a proportion of State own source revenue

	2010-11	2011-12	2012-13	2013-14
Total for category ($m)	5 147	5 370	5 493	5 434
Total for own source revenue ($m)	94 581	98 644	104 644	115 464
Proportion of own source revenue	5.4	5.4	5.2	4.7

Source: Commission calculation using ABS Government Finance Statistics (GFS) and State data.

46 Table 5 provides a summary of how the gambling assessment evolved.

Table 5 Main features of the Commission's gambling assessment

Inquiry	Number of assessments	Assessment approach	Separate assessment of	Adjustment to reduce State revenue base
Prior to 1981 Review	2-3	Revenue/turnover in the standard States (a)	Racing and lotteries	Mainly SA and Tas
1981 Review	4	Turnover. Gross household income	Racing. Lotteries, poker machines and casinos	NSW (-) and Vic (-)
1982 Review	4	Turnover. Gross household income	Racing. Lotteries, poker machines and casinos	NSW (-) and Vic (-)
1985 Review	4	Turnover. Gross household income	Racing. Lotteries, poker machines and casinos	NT (b)
1988 Review	4	Turnover. Gross household income	Racing. Lotteries, poker machines and casinos	NSW (-), WA, SA, Tas and the NT (b)
1993 Review	1	Household disposable income (c)	Gambling revenue	WA, SA, Tas, ACT and NT
1999 Review	1	Household disposable income with 50% discount (d)	Gambling revenue	Tas, ACT and the NT
2004 Review	1	Household disposable income with 50% discount	Gambling revenue	No
2010 Review	1	Equal per capita	Gambling revenue	No
2015 Review	1	Equal per capita	Gambling revenue	No

(a) Adjustments for the potential gambling population (as measured by non-rural population) and relative income (as measured by AWE).

(b) Northern Territory's lottery taxation assessed actual per capita.

(c) A cost of living adjustment was introduced in the 1994 Update.

(d) A remote population adjustment.

Source: Various Commission reports.

ATTACHMENT A: THE GAMBLING ASSESSMENT

THE SPECIAL GRANTS ERA

1 The Commission became responsible for making recommendations in relation to special assistance for claimant States in 1933. The needs of the claimant States were assessed by comparing them against standard States (normally New South Wales and Victoria).

2 The range of gambling taxes and the amount collected expanded over the special grants era. The Commission considered assessing gambling taxation in its 1933 Report, but did not make its first assessment until its 1937 Report. In that report, the Commission used income tax data to assess an index of relative capacity for each State. It applied the index to all revenue including racing taxation. It treated lotteries taxation as above standard effort because only Queensland and Tasmania operated lotteries and because it believed the revenue raised was largely paid by residents of other States.

3 In its 1945 Report it made its first direct assessment of racing taxation, using turnover as its revenue base with an adjustment for the small States because of the heavier burden of fixed overheads in the operation of totalisator machines. With four States operating lotteries,[13] it also made a direct assessment of lotteries taxation, using net operating expenses as its revenue base.[14]

4 Although poker machines were legal in New South Wales from 1960, their absence in other States led the Commission to treat the revenue as above average effort. It made its first assessment of poker machine taxation in 1970s, even though they still only operated in New South Wales. The revenue base was the same as for the other forms of gambling, except it was discounted 50% because Victoria (a standard State) did not operate poker machines.

5 Throughout the special grants era, the Commission made adjustments to the claimant States' assessments for a range of reasons:

- to the small States' racing taxation assessments because of the heavier burden of fixed overhead in the operation of totalisator systems
- to South Australia's racing and lotteries assessments because it accepted that its population had a lower capacity to engage in gambling
- to Tasmania's lotteries assessment because its capacity to raise revenue was limited by its arrangement with Tattersall's in Victoria.

13 Lotteries operated in all States except Victoria and South Australia.

14 The revenue base was subscription revenue less operating expenses less a standard proportion for prize money.

The 1972 Report

6 The Commission expressed concerns about the impact of State policy differences. Only New South Wales operated poker machines. Tasmania did not operate an off-course totalisator system and South Australia's off-course totalisator system had only been in operation briefly. Tasmania did not have a State based lottery, but had an arrangement where Victoria paid it half of the tax it collected on Tattersalls' ticket sales in Tasmania.

7 The Commission made assessments of racing taxation, lottery taxation and poker machine taxation.

8 The Commission's assessment approach was to adjust the per capita revenue raised by the standard States for relative income (as measured by AWE) and the potential gambling population (as measured by the non-rural population aged 19 and over[15]).

9 The formula it used to assess revenue needs was:

$$Revenue\ needs_C = \left[\left(\frac{Rev_S}{NonRuralPop19_S}\right) * \left(\frac{AWE\ Male_C}{AWE\ Male_S}\right)\right] NonRuralPop19_C$$

Where: S = denoted the standard States (New South Wales and Victoria)
C = the claimant State.

10 The Commission made adjustments:

- to its racing assessment for South Australia because it accepted its lower turnover may be due to differences in religious and cultural background of its population
- to its lotteries assessment for Tasmania because of its arrangement with Victoria and for South Australia because its prize money was a lower percentage of its ticket sales.

11 The Commission discounted its poker machine assessment by 50% because Victoria (one of the standard States) did not operate poker machines.

The 1977 Report

12 The Commission again expressed concerns about the impact of State policy differences:

- its racing assessment was affected by the late introduction of off-course totalisator system in South Australia
- its lotteries assessment was affected by the much lower ticket sales per capita in South Australia compared to New South Wales, Victoria and Queensland

[15] The Commission removed the rural population because it accepted they had less access to gambling opportunities.

- its poker machine assessment for States not allowing this form of gambling was a matter of judgment
- it treated casino taxation as above standard effort because only Tasmania had this form of gambling.

State views

13 ***Use of actual turnover as the revenue base measure.*** South Australia said its population had a lower propensity to engage in betting on races than the standard States (New South Wales and Victoria) as South Australians had a different attitude to gambling. Consequently, it was less able to raise revenue from that source. Commonwealth Treasury said it found South Australia's arguments convincing.

14 Commonwealth Treasury also said State policy differences meant the Commission should not use the claimant States' turnover as its measure of capacity.

15 ***The impact of differential policies of the standard States.*** Queensland said the Commission should acknowledge the impact of standard State policies (such as the size of prizes and the national publicity of the Opera House lottery) on the standard States' turnover. South Australia agreed.

16 Queensland also said the Commission should allow a 50% reduction in the propensity to purchase lottery tickets in retirement.

17 ***The impact of scattered population.*** Queensland said its scattered population meant it had less potential to establish viable clubs and, thus, it had a lower poker machine revenue base. It claimed New South Wales turnover was inflated because it placed poker machine facilities near State borders. Thus, if the Commission based its capacity measure on New South Wales' turnover it would inflate the capacity of the claimant States. Commonwealth Treasury agreed.

Commission decisions

18 ***Use of actual turnover as the revenue base measure.*** The Commission accepted State policy differences meant it could not use the claimant States' actual turnover as its measure of capacity. It calculated assessed revenues using turnover in the standard States, adjusted for relative incomes (as measured by AWE) and the potential gambling population (as measured by the non-rural population).

19 The Commission accepted South Australia's claim that its population had a lower propensity to gamble than the population in the standard States and it made a downward adjustment to its capacity.

20 In this period, the Commission treated casino taxation as above standard effort. The first legal casino (Wrest Point) opened in Hobart in 1973, followed by Lasseters Casino in Alice Springs in 1981.[16]

21 ***The impact of differential policies of the standard States.*** The Commission did not accept Queensland's and South Australia's capacity to raise lottery revenue was affected by the policies of the standard States. Therefore, it made no adjustment for this influence.

22 ***The impact of scattered population.*** The Commission was unable to obtain evidence about the extent to which differences in the dispersion of rural population or interstate operations affected poker machine turnover. Therefore, it made no adjustment for those influences.

23 For each form of gambling, the Commission's assessment approach was:

$$Revenue\ needs_C = \left[\left(\frac{Turnover_S}{Pop19_S}\right) * \left(\frac{AWE\ Male_C}{AWE\ Male_S}\right)\right] Pop19_C$$

Where: S = denotes the standard States (New South Wales and Victoria)
C = denotes a claimant State.

24 It made an adjustment for South Australia because it accepted its population had a lower propensity to gamble.

25 For poker machines, the Commission determined the eligible gambling population to be the average of the population aged 19 and above with and without the rural population. It discounted this measure by 50% because Victoria (a standard State) did not operate poker machines.

REVIEW BY REVIEW

The 1981 Review

Issues

26 The main issues were:

- the level of disaggregation of the assessment
- the choice of capacity measure
- the need for adjustments because States are unable to raise revenue at average rates.

[16] There are now casinos in every State: New South Wales (1), Victoria (1), Queensland (4), Western Australia (1), South Australia (1), Tasmania (2), the ACT (1) and the Northern Territory (2).

State views

27 ***The level of disaggregation.*** States views on the level of disaggregation coincided with their views on whether the Commission should adopt broad revenue or a turnover assessment. New South Wales and Victoria favoured a combined assessment; the others supported separate assessments for each form of gambling.

28 Victoria said separate assessments would provide misleading results because they ignored the substitutability between different forms of gambling and elasticities of demand that influenced total gambling turnover. It said only a broad assessment with a proxy measure of the revenue base could remove the influence of States' policies.

29 The four smaller States said the different forms of gambling should be regarded as tapping different markets. Turnover was driven by factors other than State policies (the gambling age population, the degree of urbanisation, prize size and household income). While South Australia agreed with Victoria's view that turnover was sensitive to prize size, tax rates and the range of alternative gambling activities available, it said the existence of these and other relevant factors required separate assessments. It asked the Commission to identify all factors for each gambling activity and make appropriate allowances for policy differences.

30 ***The preferred measure of capacity.*** New South Wales and Victoria favoured a broad assessment. They suggested household income and wages, salaries and supplements as possible indicators. The other States suggested turnover.

31 New South Wales said the Commission should not base its comparisons on notional turnover adjusted for both differences in household income and differences in the proportion of population aged 18 and over. It said the inclusion of both adjustments would over-compensate States with relatively youthful populations. It believed differences in household income were already captured by the differences in the age distribution of the population.

32 South Australia said casino taxation should be excluded because a substantial proportion of casino turnover was due to interstate patrons. Tasmania disagreed. It said tourism was not an important part of a casino's profitability. It supported an assessment of casino taxation.

33 ***Adjustment because States could not raise revenue at average rates.*** The small States favoured an allowance for scale disabilities for lotteries because their smaller populations limited the degree to which they could generate large prizes.

Commission decisions

34 ***The level of disaggregation.*** The Commission decided to assess each form of gambling separately, allowing it to use different measures of capacity for different forms of gambling.

35 ***The preferred measure of capacity.*** The Commission decided to:

- to assess racing using the turnover of totalisators and bookmakers
- to assess other forms of gambling using gross household income.

36 The Commission chose turnover for racing taxation because it accepted differences in interstate betting per capita were primarily driven by factors other than State policies (for example, differences in the propensity to gamble).

37 The Commission adopted a broad revenue assessment for the other forms of gambling because it accepted they were affected by State policy differences (some forms were not permitted in some States). It said turnover was not a suitable indicator because it was too influenced by State policies and the entrepreneurial skill of gambling operators.

38 ***Adjustment because States could not raise revenue at average rates.*** After making its assessments, the Commission added them together. It decided a scale factor operated in favour of New South Wales and Victoria and it made an upward adjustment to their racing and lotteries capacities. The Commission then exercised its judgment to round States' per capita revenue needs.

Table 6 Gambling assessment in the 1981 Review

Component	Measure	Adjustments
Racing taxation	Turnover of totalisators and bookmakers	Upward adjustment for New South Wales and Victoria because of their scale of operations.
Lottery taxation	Gross household income	Upward adjustment for New South Wales and Victoria because of their scale of operations.
Poker machine taxation	Gross household income	-
Casino taxation	Gross household income	-

Source: *State Tax Sharing Report 1981*, pages 243 to 246.

The 1982 Review

State views

39 No State commented on the methods adopted for the 1981 Review.

Commission decisions

40 As no State commented on the Commission's assessment method, there was little change to gambling assessments in this review. The only change was to the method of rounding per capita revenue needs.

41 The Commission rounded New South Wales's 1980-81 gambling capacity to a slightly higher amount than Victoria because the increase in its lotto subscriptions in that year was greater than Victoria's.

Table 7 Gambling assessment in the 1982 Review

Component	Measure	Adjustments
Racing taxation	Turnover of totalisators and bookmakers	Upward adjustment for New South Wales and Victoria because of their scale of operations.
Lottery taxation	Gross household income	Upward adjustment for New South Wales and Victoria because of their scale of operations.
Poker machine taxation	Gross household income	-
Casino taxation	Gross household income	-

Source: *State Tax Sharing Report 1982*, page 80.

The 1985 Review

Issues

42 The main issues were:

- the choice of capacity measure
- the need for adjustments because States are unable to raise revenue at average rates.

State views

43 ***The preferred measure of capacity.*** New South Wales again said turnover was an inappropriate measure for the racing component because it was significantly influenced by the entrepreneurial effort of the State. It said the eligible gambling population for the poker machine component should not be limited to the urban population.[17] It said people travelled widely to use poker machines. It noted the State benefitting most from the adjustment (Tasmania) was geographically small and so had the shortest travel distances.

44 The Northern Territory said it had no capacity to raise revenue from racing taxes and using turnover as the revenue base would disadvantage it. It was unable to operate lotteries on its own or to negotiate as advantageous an agreement as other States.

45 Victoria reiterated its support for household income for all gambling.

17 This eligible population adjustment removed the income of people living away from centres of population on account of their reduced access to the licensed clubs that operated poker machines.

46 ***Adjustment because States could not raise revenue at average rates.*** New South Wales and Victoria sought to reduce or remove their upward scale adjustment that applied in the racing and lottery components. Victoria said there were fewer (if any) scale disabilities with respect to lotteries since the emergence of the Lotto block and Soccer pools.

Commission decisions

47 ***The preferred measure of capacity.*** The Commission retained its use of turnover for the racing component and gross household income for the other components.

48 The Commission accepted the Territory's claim in relation to its lower lottery capacity. It assessed its lottery capacity using the actual per capita method, which implied any difference between its per capita collections and average lottery collections was due to factors beyond its control.

49 ***Adjustment because States could not raise revenue at average rates.*** The Commission added the needs calculated for each gambling component. For New South Wales and Victoria, the Commission exercised its judgment to align their needs by setting Victoria's per capita needs to that of New South Wales. Finally, the Commission rounded each State's per capita needs to the nearest $0.50.

50 The Commission discontinued its scale adjustment for New South Wales and Victoria. It accepted the success of multi-State lottery operations and instant-draw lotteries offering smaller prizes meant their scale advantage was less significant.

Table 8 Gambling assessment in the 1985 Review

Component	Measure	Adjustments
Racing taxation	Turnover of totalisators and bookmakers	-
Lottery taxation	Gross household income (a)	-
Poker machine taxation	Gross household income	-
Casino taxation	Gross household income	-

(a) Actual per capita method used for the Northern Territory.
Source: *State Tax Sharing Report 1985*.

The 1988 Review

51 The main issues for this review were:

- the preferred capacity measure
- the need for adjustments because States are unable to raise revenue at average rates.

State views

52 ***The preferred capacity measure.*** New South Wales and Victoria continued to favour a broad assessment of gambling taxation. Victoria favoured either household disposable income or private consumption expenditure. New South Wales said household income should be retained for the lotteries component because turnover was significantly affected by promotion and marketing. Victoria said household income should be retained for the poker machine and casino components.

53 The Northern Territory said no part of the gambling assessment should be assessed using data from the ABS' survey of household expenditure because the data were not reliable. It also preferred using turnover for the racing and lotteries components.

54 ***Adjustment because States could not raise revenue at average rates.*** Victoria said the Commission should assess a downward adjustment to its poker machine assessment because of gambling excursions by its residents to New South Wales and South Australia. It was also concerned at the decision in the previous review to set its per capita needs equal to those of New South Wales.

55 The smaller States were concerned about scale of operations. Western Australia said the Commission should take account of its scale disabilities in relation to the racing and lotteries components. South Australia said economies of scale allowed the eastern States to offer greater prize money and attract the best horses from the smaller States. This made racing in the smaller States less attractive to gamblers. The Northern Territory said the Commission should make a downward adjustment to its turnover measures for the diseconomies of small scale that it experienced.

Commission decisions

56 ***The preferred capacity measure.*** The Commission decided to retain its preferred capacity measures:

- total turnover for the racing component
- gross household income for the lotteries, poker machines and casino components.

57 It added the needs for each gambling component. While the Commission again used judgment to align the per capita needs of New South Wales and Victoria, it did so by aligning them to the average of their assessed needs.[18] The Commission then rounded each State's per capita needs to the nearest $0.50.

---

18 In the previous review, it set Victoria's per capita needs equal to those of New South Wales.

58 ***Adjustment because States could not raise revenue at average rates.*** The Commission decided to make adjustments[19] to the racing component for State policy differences that might influence betting turnover. It made an adjustment for:

- the number of local racing events conducted in each State
- the proportion of total interstate racing events covered by each State's TAB.

59 These were the only changes from the assessment method adopted in the previous review.

Table 9 Gambling assessment in the 1988 Review

Component	Measure	Adjustments
Racing taxation	Total turnover of totalisators and bookmakers	Upward adjustment for New South Wales because of its scale of operations. Downward adjustments for Western Australia, South Australia and Tasmania because of their scale of operations.
Lottery taxation	Gross household income (a)	-
Poker machine taxation	Gross household income	-
Casino taxation	Gross household income	-

(a) Actual per capita method used for the Northern Territory.
Source: *Report on General Revenue Grant Relativities 1988*.

The 1993 Review[20]

Issues

60 The main issues in this review were:

- the structure of the assessment
- the preferred capacity measure
- the need for adjustments because States are unable to raise revenue at average rates.

State views

61 ***The structure of the assessment.*** States disagreed on the degree of substitutability of the different forms of gambling. Those believing the different forms

[19] It increased New South Wales' assessed revenue by $0.5 per capita and reduced Western Australia's and Tasmania's assessed revenue by $1.5 per capita and South Australia's by $2.0 per capita.

[20] This was the first review where aggregate assessed revenue equalled aggregate actual revenue. The methods previously used by the Commission had created gaps between the two aggregates.

were substitutable supported an aggregated assessment. Those believing they were not substitutable favoured a disaggregated assessment.

62 ***The preferred capacity measure.*** New South Wales said turnover was an unsatisfactory measure because it was policy influenced. It said net disposable income (with an adjustment for interstate betting) was preferable to gross household income because States were not able to access gross income.

63 The Northern Territory said it faced a cost disadvantage in relation to its racing industry. The use of gross household income instead of turnover for racing would, therefore, overstate its capacity.

64 ***Adjustment because States could not raise revenue at average rates.*** Victoria said it was planning to introduce gaming machines and a casino in an attempt to reduce the flow of revenue from its residents to other States and asked the Commission to reduce its assessed capacity in recognition of those cross-border influences.

65 Western Australia said it had increased the number of local race meetings and so its racing adjustment should be removed. The Northern Territory said the Commission should exercise its judgment in relation to the scale and dispersion disabilities faced by the Territory in relation to its TAB operations.

Commission decisions

66 ***The structure of the assessment.*** The Commission accepted:

- the different forms of gambling were highly substitutable
- the level of gambling was influenced by State policies
- gambling taxes were intended to raise revenue from a broad cross-section of the community and to access household disposable income (at least partly).

67 Its considerations led it to assessing all gambling together and to conclude an assessment of all forms of gambling should be made, as far as possible, using a similar capacity measure.

68 ***The preferred capacity measure.*** Although most gambling taxes were imposed on the amount invested, the Commission considered household disposable income would be a more appropriate starting point for measuring capacity because:

- it was not affected by State policies
- it avoided the problems associated with the substitution effects and lack of data on actual turnovers
- it reflected the broad-based nature of gambling taxes.

69 ***Adjustment because States could not raise revenue at average rates.*** The Commission accepted that a State's access to its gross income base may be affected

by other calls on that income, by certain features of gambling activities and by the nature of some gambling taxes. It decided to adjust its household disposable income measure for:

- differences between States in the cost of living, to be introduced in the 1994 Update
- diseconomies of scale faced by the smaller States in relation to on-course racing and lotteries[21]
- the constraints on the ACT's ability to apply the average effort because of the cross-border mobility of its punters.[22]

Table 10 Gambling assessment in the 1993 Review

Component	Measure	Adjustments
Gambling taxation	Household disposable income (a)	Downward adjustment to Western Australia, South Australia, Tasmania, and the ACT racing because of their scale of operations. Downward adjustment to ACT racing because of the mobility of its gambling activity. Downward adjustments to Tasmania the ACT and the Northern Territory because of lottery revenue sharing agreements.

(a) An adjustment for cost of living differences would be introduced in the 1994 Update.
Source: *Report on General Revenue Grant Relativities 1993*, Volume 2, pages 126 to 129.

The 1999 Review

70 The main issues in this review were:

- the structure of the assessment
- the preferred capacity measure
- the need for adjustments because States are unable to raise revenue at average rates.

State views

71 ***The structure of the assessment.*** The Commission had proposed splitting the category into four components to give it greater flexibility in its choice of revenue

21 A racing adjustment was made because there were fewer race meetings in the smaller States. A lotteries adjustment was made because agreements with New South Wales and Victoria meant Tasmania, the ACT and the Northern Territory received a lower share of revenue from sales of products than other States.

22 The cross-border mobility adjustment was made for the racing component only.

base in the face of rapid technological change. It also proposed to use, if possible, one assessment method because of the substitutability of different forms of gambling.

72 States disagreed about how gambling taxes should be assessed. New South Wales and Western Australia opposed disaggregation because they saw one form of gambling as substitutable for another. Queensland was indifferent because it believed the same capacity measure (household disposable income) should be used for all gambling. These States said direct measures of activity such as turnover (gross amount wagered) or gambling expenditure (net amount lost) were too policy influenced to be chosen as a capacity measure.

73 The other States supported disaggregation because they believed substitution was a minor factor. The ACT said a combined assessment would ignore the different rates of tax applying to the different forms of gambling. Victoria suggested a separate assessment of mobile gambling revenue. The Northern Territory proposed disaggregating casino revenue into domestic and high-rollers and introducing a new component for virtual gambling, in anticipation of growth of this area.

74 ***The preferred capacity measure.*** States disagreed about the capacity measure for each component. New South Wales, Victoria (not including mobile gambling), Queensland, Western Australia and Tasmania favoured household disposable income for all components because the level of activity was too policy influenced. Tasmania would not object to turnover being used for the lotteries component.

75 South Australia proposed gambling expenditure because it was the direct type of measure of taxable activity used in other revenue assessments. It said State policies on gambling were converging, so any policy differences were declining. For States that did not permit a form of gambling, it proposed estimating their capacity by extrapolating from the experience of other States.

76 The ACT said household disposable income was a poor measure of gambling propensities and turnover was too policy influenced. It proposed population aged 18 and over as the capacity measure, pending further research into the demographic and other factors that give rise to differences in propensities to gamble by different population groups.

77 Queensland suggested mobile revenues (such as telephone betting) and overseas high-rollers in casinos be assessed actual per capita. Victoria proposed an equal per capita assessment.

78 ***Adjustment because States could not raise revenue at average rates.*** States commented on adjustments to the household disposable income measure:

- New South Wales said an ACT cross-border adjustment was not warranted because the ACT was probably a net beneficiary of such flows. Queensland said the development of a national co-operative framework for interactive home gambling made an adjustment unnecessary.

- Victoria said an adjustment for the number of meetings was not warranted because the number was a policy choice. It also said other States benefitted from the promotion of Victorian racing. The ACT disagreed, it supported an adjustment and said it should distinguish metropolitan from provincial meetings.
- Victoria said a cost of living adjustment was unnecessary and detracted from the simplicity and transparency of the assessment.
- Tasmania, the ACT and the Northern Territory supported an adjustment in relation to their lotteries revenue sharing arrangements.

79 The Northern Territory argued an additional adjustment should be made. It said gambling venues were only viable in population centres above a minimum size. It hypothesised large casinos needed a local population of 500 000; small casinos 25 000; clubs and hotels 1 500; and racecourses, 15 000.

Commission decisions

80 ***The structure of the assessment.*** The Commission decided not to proceed with its proposal to disaggregate gambling. It said a disaggregated assessment would not make it any easier to remove the effect of policy differences.

81 It noted States other than South Australia agreed present (and past) government policy differences had a big effect on gambling cultures and level of gambling activity. The Commission was not prepared to speculate on what a policy neutral measure of the level of activity might be, particularly given the rapid nature of change in the gambling industry.

82 ***The preferred capacity measure.*** The Commission chose household disposable income as its capacity measure. It said there was evidence to support an income measure and evidence to the contrary. It undertook regression analysis of household disposable income and gambling expenditure (both in real terms and per person aged 18 and over).[23] That analysis suggested income explained between 43% and 89% of the variation in gambling expenditure.

83 The Commission concluded household disposable income explained some of the differences in the levels of gambling across States. The measure also had the advantage of being policy neutral. However, in the light of the mixed evidence on gambling propensities and the mobility of some forms of betting, the Commission decided to moderate the household disposable income measure by discounting it by 50%.

84 ***Adjustment because States could not raise revenue at average rates.*** The Commission adjusted its capacity measure for:

---

[23] Data were sourced from *Australian Gambling Statistics 1972-73 to 1996-97*, Tasmanian Gaming Commission, various tables. Data for the Northern Territory were only available from 1978-79.

- differences in access to gambling — in the form of a remote population adjustment
- revenue sharing arrangements for lotteries.

85 The Commission concluded access to gambling opportunity was relevant to a State government's capacity to raise gambling taxes. While technology (phone betting, the Internet) made some forms of gambling more accessible in remote areas, the Commission decided to include an accessibility adjustment. The adjustment was based on the proportion of each State's population in non-remote areas (people living in remote centres of more than 1,000 were treated as non-remote). It discounted the factor by 50% because of the possibility that remoteness might be correlated with levels of household disposable income.

86 The Commission recognised the inability of the less populous States to conduct viable lotteries. It accepted they had been forced into revenue sharing arrangements with the more populous States.

87 The Commission contemplated assessing an economic environmental factor for the advantage accruing to some States from the economies of scale of their gambling industries (especially casinos and racecourses) and their ability to attract tourists and high rollers. The lack of data meant it was not able to develop an adjustment.

88 The Commission discontinued its cost of living and cross-border adjustments because the 50% discount to household disposable income made them unnecessary. It choose not to make an adjustment for population age structure, because household disposable income accounted for differences in the proportions of population aged 18 and over.

89 While the Commission considered making adjustments for the propensities of different groups to gamble, the lack of available evidence and data meant it was unable to develop differential weighting for different groups.

Table 11 Gambling assessment in the 1999 Review

Component	Measure	Adjustments
Gambling taxation	Household disposable income discounted 50%	A remote population adjustment for all States. Tasmania, the ACT and the Northern Territory because of lottery revenue sharing agreements.

Source: *Report on General Revenue Grant Relativities 1999*, Volume 2, pages 204 to 210.

The 2004 Review[24]

90 The main issues in this review were:

- the preferred capacity measure
- the need for adjustments because States are unable to raise revenue at average rates.

State views[25]

91 ***The preferred capacity measure.*** New South Wales and Victoria were not convinced people with higher disposable incomes had higher propensities to gamble. New South Wales noted the Productivity Commission's *Inquiry into the Australian Gambling Industry* and the submission of the Council for Social Services in New South Wales both indicated there was little correlation between gross household income and gambling expenditure — most gambling was done by lower income groups and gambling was heavily concentrated in a small part of the population (90% of gambling expenditure was by 10% of the population). New South Wales said gross household income did not take account of differences in housing costs and so overestimated the discretionary income of people in high living cost areas (such as Sydney). New South Wales favoured an equal per capita assessment, Victoria preferred an assessment based on people aged 18 and above. If gross household income was retained, they both proposed increasing the 50% discount. They both opposed the use of a turnover type measure (such as gambling expenditure) as the capacity measure because they believed such measures were too policy influenced.

92 Queensland said gambling expenditure was the best proxy for the propensity to gamble and it also captured the lack of access to gambling opportunities in remote areas. However, if it was too policy influenced to be used, then gross household income should be chosen as the capacity measure because it was the measure most closely correlated to gambling expenditure without being affected by policy influences. It acknowledged the Commission's regression analysis supported a 50% discount. Queensland did not support a proposal to use expenditure on recreation and culture because it was not sufficiently broad to be a proxy for gambling expenditure and it was policy influenced.

93 Western Australia said State policy differences were not large. It said there were significant non-policy influences on gambling expenditures that were not captured by household disposable income, such as the low propensity to gamble by people in small, dispersed communities.

24 This is the first inquiry the Commission decided to treat racecourse development funds as gambling revenue. The ABS also classified contributions as gambling revenue.

25 In their submissions many States referred to gross household income, despite the Commission adopting household disposable income in the previous review.

94 South Australia also supported gambling expenditure[26] because it more closely aligned with what States actually taxed. It said the proportion of household disposable income devoted to gambling varied significantly from State to State, even though the price of gambling was substantially the same. It said it was implausible to attribute the wide variation in per capita gambling expenditure to differences in tax effort. It believed its low level of gambling revenue reflected demographic and economic influences (including its population's lower propensity to gamble), which would not be captured by gross household income. It proposed an alternative capacity measure if gambling expenditure were not adopted — the recreation and culture component of total household final consumption from the ABS' *National Accounts: State Accounts*.

95 Tasmania said the 50% discount for gross household income gave too much weight to the argument that low income households gambled more than other households. It said higher income earners were able to spend a greater proportion of their income on gambling. Its view was supported by data from *Australian Gambling Statistics* showing States with higher average disposable incomes tended to have higher average gambling expenditures. It said the relationship between the average income and gambling expenditure was fairly consistent across States. The exceptions were Western Australia and the ACT, the two States it believed had policy decisions that reduced their level of gambling expenditure. It suggested removing the 50% discount. It did not support a proposal to use expenditure on recreation and culture as the capacity measure because it did not consider it to be an improvement over gross household income.

96 The ACT opposed broad measures of revenue capacity (such as gross household income) because they were insensitive to key influences that differed markedly across States. Gross household income did not account for differences in the propensity of various groups to gamble, cross-border flows from technological advanced forms of gambling (phone betting and internet betting) or the impact of tourism. Thus, it did not capture the particular circumstances of the Territory (or its population's lower propensity to gamble). The ACT also said there was a weak relationship between gross household income and gambling expenditure. It argued that low income groups and people in non-metropolitan areas gambled more than those on high incomes. It favoured an equal per capita assessment. It said the discount should be increased to 75% if gross household income was retained.

97 The Northern Territory said gross household income overstated the average income of people living in remote communities. Nevertheless, it supported gross household income in the absence of a better alternative.

26 South Australia acknowledged that gambling expenditure would have to be estimated for Western Australia because of its poker machine restrictions.

98 ***Adjustment because States could not raise revenue at average rates.*** New South Wales, Victoria, Tasmania and the ACT said the remote population adjustment should be removed. New South Wales said no evidence had been provided to demonstrate gambling activity was lower in rural and remote areas. Victoria, Tasmania and the ACT said improved access to gambling (particularly electronic access) meant an adjustment was no longer warranted.

99 Western Australia and the Northern Territory said the 50% discount on the remote population adjustment should be reduced or removed. Western Australia provided evidence showing the population required to support a profitable Lotteries Commission agency was 4,500. The Northern Territory provided evidence showing its communities had very different levels of accessibility to gambling products. It suggested an adjustment based on the viability of gambling products.

Commission decisions

100 ***The preferred capacity measure.*** The Commission rejected an equal per capita assessment because most gambling research indicated the level of gambling was affected by a range of influences and there were material differences between States in those influences.

101 While the Commission accepted gambling expenditure reflected the underlying level of activity, differences in the way States taxed that activity prevented the Commission from using gambling expenditure as its preferred measure. If it adopted it as its preferred measure, the Commission would need to make adjustments for policy differences (including Western Australia's poker machine restrictions). The difficulty of estimating these adjustments was complicated by many factors, including the substitutability of gambling.

102 In the absence of a direct measure gambling activity, the Commission said it had little choice but to use a broad indicator of activity. It rejected the proposal to use expenditure on recreation and culture because it captured activities unrelated to gambling and because it was policy influenced (State's gambling policies would influence the gambling part of recreation and culture). In the absence of other measures, the Commission decided to continue to use household disposable income.

103 The Commission undertook regression analysis that suggested household disposable income explained about half the variation in per capita gambling expenditure across States. Its analyses provided a basis for retaining the 50% discount.

104 ***Adjustment because States could not raise revenue at average rates.*** The Commission discontinued its remote population adjustment. It accepted the gambling environment had changed substantially since the previous review. The opportunities to gamble had increased through improved communications and internet access. The Commission said the question was whether remote populations had access to

gambling opportunities, not whether they availed themselves of those opportunities. It appeared that accessibility issues were most likely restricted to small or very remote communities and an adjustment on that basis would not be material.

105 The Commission also discontinued its lottery revenue sharing adjustment because the small States had renegotiated their agreements with the larger States and an adjustment was no longer warranted.

Table 12 Gambling assessment in the 2004 Review

Component	Measure	Adjustments
Gambling taxation	Discounted household disposable income (a)	-

(a) Household disposable income with a 50% discount.
Source: *Report on State Revenue Sharing Relativities 2004*.

The 2010 Review

106 The main issue in this review was the preferred capacity measure.

State views

107 ***The preferred capacity measure.*** The Commission undertook regression analysis of gambling expenditure and household disposable income by income quintiles. The analyses showed the relationship between income and gambling expenditure had weakened and an assessment would not be material. The Commission proposed including Gambling revenue in the Other revenue category and assessing it equal per capita.

108 New South Wales, Victoria, Western Australia, the ACT and the Northern Territory supported the proposal to assess gambling revenue equal per capita. Victoria said gambling revenue was highly policy driven and a differential assessment would require complex adjustments to allow for policy influences. The ACT said household disposable income failed to capture differences in gambling propensities across population groups, to identify cross-border flows from technologically advanced forms of gambling and to capture the different capacities of States to draw on tourism as a source of gambling revenue. The ACT said a differential gambling assessment would require a detailed methodology to capture the different propensities for various socio-demographic composition groups (age, sex, ethnicity, tourists etc) to engage in gambling activities of various types. The Northern Territory said reliable data were not available to establish non-policy influences on the propensity to gamble. It cited a recent survey of gambling in the Territory that linked an individual’s propensity to gamble to a number of non-policy factors including

income, education, family status, and age[27]. This study also suggested a relatively weak relationship between income and propensity to gamble.

109 Queensland, South Australia and Tasmania disagreed with an equal per capita assessment. Queensland initially argued for differential assessment based on a general indicator such as Gross State Product or household disposable income. It subsequently provided a research report from its Office of Economic and Statistical Research. The report used local government area (LGA) based data on the number, the distribution and expenditure[28] on electronic gaming machines (EGMs) and a range of LGA-based socio-demographic variables from the 2001 Census. The report's findings were:

- the relationship between income type measure and gambling expenses was not very robust
- most socio-demographic factors were found not to be significant in explaining differences in expenditure on EGMs
- there was a link between population density and revenue raising capacity as reflected by expenditure on EGMs. The report attributed this to the proximity and ease of access to gambling facilities in areas of higher population density.

110 Based on its report, it proposed an assessment based on States' populations in accessible and highly accessible regions using the SARIA classification.

111 South Australia said there were clear differences across States in their revenue raising capacities. It proposed either gambling expenditure (adjusted to take into account Western Australia's restrictions on poker machines) or expenditure on recreation and culture from the ABS' publication on State Accounts. Tasmania supported South Australia's proposal to use gambling expenditure adjusted to take account of differences in State policies.

Commission decisions

112 ***The preferred capacity measure.*** The Commission said neither it nor the States were able to develop a reliable assessment. It concluded differences in State policies on regulatory and related matters affected the interstate comparability of gambling expenditure and those policy effects could not be reliably removed. Neither the Commission nor States had been able to develop a policy neutral measure of gambling activity or gambling expenditure.

---

27 *Northern Territory Gambling Prevalence Survey 2005*, School for Social and Policy Research, Charles Darwin University, 2006.

28 Expenditure is the net amount lost or, in other words, the amount wagered less the amount won, by people who gamble. Conversely, by definition, it is the gross profit (or gross winnings) due to the operators of each particular form of gambling.

113 While the literature indicated personal income was not a good guide to gambling expenditure, it provided limited guidance on which socio-economic and behavioural factors were relevant. The growth in online gambling, which facilitates gambling by overseas and interstate residents, had further weakened the link between gambling expenditure by residents of a State and the revenue raised by that State.[29]

114 As a result of these considerations, the Commission decided to assess gambling revenue equal per capita.

Table 13 Gambling assessment in the 2010 Review

Component	Measure	Adjustments
Gambling taxation	Equal per capita	-

Source: *Report on State Revenue Sharing Relativities 2010*, Volume 2, pages 141 to 142.

The 2015 Review

115 The main issue in this review was the preferred capacity measure.

State views

116 ***The preferred capacity measure.*** Most States supported the retention of an equal per capita assessment. South Australia and the ACT did not.

117 New South Wales and Victoria said gambling revenue was too policy influenced and it was not possible to develop a reliable assessment. Western Australia agreed citing the conflicting evidence on the drivers for gambling revenue. The Northern Territory noted the absence of data on the drivers of gambling activity and said, in such circumstances, a differential assessment was not appropriate.

118 South Australia said gambling regulations have become more consistent and a differential assessment could be based on *Australian Gambling Statistics* data and States' collections of player loss and tax revenue data. Queensland and the ACT argued there was a conceptual case for assessing gambling revenue differentially. However, Queensland concluded there was insufficient time in the current review to develop an assessment.

---

29 In its *Draft Report on Gambling (2009)*, the Productivity Commission said 'the lower rate of taxation and more permissive regulatory regime in the Northern Territory dramatically increased the size of their wagering industry resulting in funding being diverted away from other States' (pp. 13.14-15). Industry sources estimated that in 2008 $987 million of turnover leaked from New South Wales to the Northern Territory and $592 million from Victoria to Northern Territory.

Commission decisions

119 ***The preferred capacity measure.*** The Commission examined a number of different approaches to assessing gambling, including the level of gambling activity, a socio-demographic approach and a broad indicator approach.

120 An assessment based on the level of gambling activity would be marginally material (it would redistribute more than $30 per capita for one State). However, given the lack of data quantifying the nature and impact of policy differences affecting the level of gambling activity, a discount was warranted. Even with a modest discount, an assessment would not be material. Thus, the Commission concluded it was not possible to develop a material assessment based on the level of gambling activity.

121 A number of different gambling prevalence studies pointed to different forms of gambling appealing to different segments of the population. However, the Commission was not able to find data that related gambling spending or loss to specific demographic characteristics. Thus, the Commission concluded it was not possible to develop a socio-demographic indicator of gambling capacity.

122 The Commission found no link between household income and gambling activity. In the case of poker machines, there was some evidence that low income was a predictor of higher levels of gambling, but the evidence was not sufficiently robust to use. Prevalence studies suggested some forms of gambling (for example, horse racing or casino gambling) may be associated with higher incomes but, again, the effect could not be quantified. In addition, any effect could potentially be offset by the influence of low income on poker machine gambling, if that could be proven.

123 The Commission constructed an assessment using data from work undertaken by the Productivity Commission in 1999 on gambling by different age cohorts.[30] An assessment was not material. The Commission also had some concerns about the data quality and its currency. Thus, the Commission concluded it was not possible to develop a broad indicator assessment of gambling using age cohorts.

124 The Commission concluded there was insufficient evidence to construct a reliable and material differential assessment of gambling revenue. It decided to continue to assess gambling revenue EPC in the Other revenue category.

Table 14 Gambling assessment in the 2015 Review

Component	Measure	Adjustments
Gambling taxation	Equal per capita	-

Source: *Report on State Revenue Sharing Relativities 2015*, Volume 2, pages 121 to 123.

30 Technical paper 10 *Gambling Revenue*, found on the Productivity Commission's website (http://www.pc.gov.au/__data/assets/pdf_file/0006/13686/technicalpaper10.pdf).