Australian Government

Commonwealth Grants Commission

TRENDS IN HORIZONTAL FISCAL EQUALISATION

INFORMATION PAPER

CGC 2016-01

April 2016

CONTENTS

INTRODUCTION

1 From 1901-02 onwards, the Commonwealth made payments to the States in various forms to compensate them for their foregone revenue[1] and to assist them financially if they had been disadvantaged by federation.

2 In 1933, the Commonwealth Grants Commission (the Commission) was established to advise the Commonwealth on applications by financially weaker States for financial assistance under Section 96 of the Constitution. It recommended funding for claimant States to give them a fiscal capacity not appreciably different from the stronger States. Over time this basis evolved into one of fiscal equality.

3 The passage of the *States (Personal Income Tax Sharing) Amendment Act 1978* and the *Commonwealth Grants Commission Amendment Act 1978* broadened the Commission's role to advising on the allocation among all States, and later the two Territories, of a pool of Commonwealth revenue intended to equalise their fiscal capacities. Its role has remained broadly unchanged since then.

4 In 1981, the Commission recommended for the first time a set of 'relativities'[2], based on the principle of fiscal equalisation, to be used to calculate State shares. This principle has been used since then for the calculation of relativities used in the distribution of financial assistance grants (FAGs) and, since its introduction in July 2000, Goods and Services Tax (GST) revenue to the States.

5 This paper provides information, since the 1993 Review of methods used to calculate relativities[3], on:

- how much of the FAGs or GST revenue was distributed to each State
- the most important drivers of this distribution over time, nationally and for different States.

RELATIVITIES SINCE THE 1993 REVIEW

6 The fiscal capacities of the States (as measured by their relativities) change from year to year because the factors which determine them, such as the economic, demographic and social conditions in the States, change over time. The relativities

---

1 Examples of transfer of revenue collections from the States to the Commonwealth include: customs and related excise duties in 1900, income tax collection in 1942.

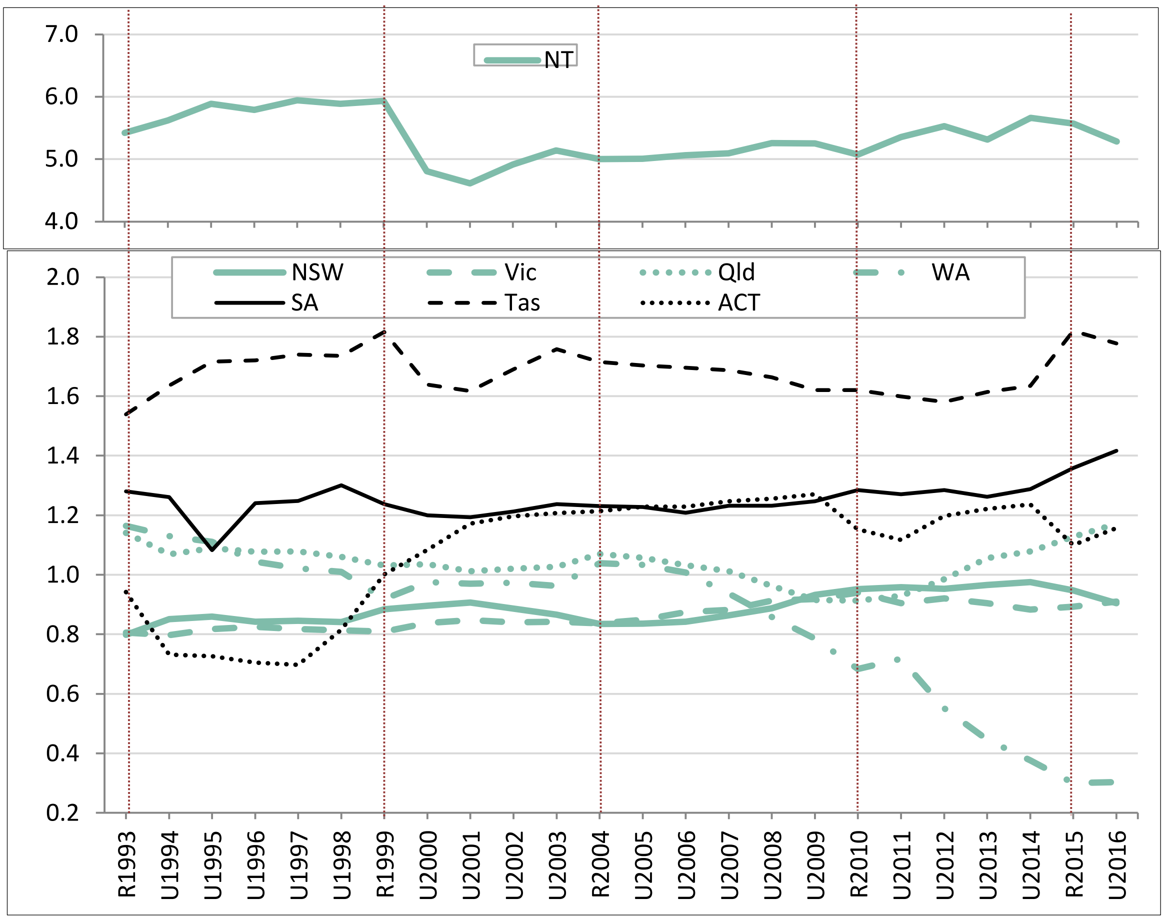
2 A per capita weight assessed by the Commission for use by the Australian Treasury in calculating the share of the pool (for example, GST since 2000-01) that a State requires to achieve horizontal fiscal equalisation. The Australian average relativity is 1.0. A fiscally stronger State might be assessed as needing 90% of the average GST available on a per capita basis — its relativity would be 0.9. A fiscally weaker State might be assessed as needing 110% of the average GST — its relativity would be 1.1.

3 For years prior to the 1993 Review, assessed expenses and revenues were calculated using a six-State rotating standard. Therefore, they were not comparable with later years, which used an Australian average standard.

can also change because of changes in the methods used to assess State fiscal capacity[4] or changes in the pool to which the relativities are applied.[5]

7 Figure 1 and Table 1 show a consistent series of relativities, relativities applicable to a pool comprising general revenue grants only.[6]

Figure 1 State per capita relativities, 1993 Review to 2016 Update



Note: The vertical lines indicate the years in which the Commission reviewed its assessment methods (for example, the 1999 Review). In the intervening years, the Commission updated the relativities using the same assessment methods as the preceding review.

Source: *Commonwealth of Australia's Final Budget Outcome* for 1993-94 to 2014-15 and Commission's *2016 Update Report on GST revenue sharing relativities*. Relativities from 1993-94 to 2008-09 were adjusted to be consistent with a pool comprising general revenue grants only.

4 Changes in methods following reviews result in a discontinuity in the relativities. For example, the change in assessment period from five years to three years in the 2010 Review increased the assessed fiscal capacities of Queensland and Western Australia (decreased their relativities) from the 2009 Update because these States' capacities to raise mining revenue in the most recent three years were higher than those of the recent five years. The changes in State assessed fiscal capacities arising from the use of shorter period were one-off and did not arise in future updates.

5 In the 2009 Update, the pool was changed from one comprising GST revenue and Health Care Grants to one comprising GST revenue only.

6 Health Care Grants were part of the pool before the 2009 Update. These relativities unwind that treatment. They treat Health Care Grants as payments for specific purposes for the whole period.

8 In the 23 years since the 1993 Review, the fortunes of individual States, and hence their GST shares, have fluctuated. The most significant development has been the strengthening of Western Australia’s fiscal capacity since the 2008 Update. Over this period, the assessed fiscal capacities of Western Australia and the Northern Territory have risen (their relativities have declined) while the fiscal capacities of other States have declined (their relativities have risen). In the 2016 Update, New South Wales, Victoria and Western Australia were assessed to have above average fiscal capacities, while other States were assessed to have below average fiscal capacities.

Table 1 State per capita relativities, 1993 Review to 2016 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
R1993	0.79844	0.80587	1.14009	1.16392	1.27997	1.53897	0.94204	5.42252
U1994	0.85117	0.79708	1.06904	1.12942	1.26083	1.63558	0.73149	5.62222
U1995	0.85950	0.81791	1.08894	1.11058	1.08241	1.71648	0.72621	5.88910
U1996	0.84258	0.82469	1.07765	1.04376	1.24074	1.72075	0.70526	5.79195
U1997	0.84514	0.81757	1.07875	1.02096	1.24845	1.73984	0.69749	5.94504
U1998	0.84159	0.81353	1.06022	1.01010	1.30036	1.73541	0.81509	5.88675
R1999	0.88394	0.80925	1.03071	0.91827	1.23721	1.81617	1.00072	5.93271
U2000	0.89543	0.83771	1.03509	0.97505	1.19927	1.63899	1.08404	4.80772
U2001	0.90659	0.84782	1.01194	0.96943	1.19270	1.61763	1.17180	4.61118
U2002	0.88659	0.84044	1.01989	0.97336	1.21241	1.69064	1.19686	4.91305
U2003	0.86632	0.84207	1.02717	0.96269	1.23759	1.75772	1.20690	5.13830
R2004	0.83474	0.83645	1.06971	1.03819	1.23050	1.71446	1.21415	5.00336
U2005	0.83571	0.84900	1.05700	1.03303	1.22712	1.70370	1.22837	5.00537
U2006	0.84193	0.87451	1.03271	1.00778	1.20839	1.69599	1.22918	5.06502
U2007	0.86380	0.88206	1.01143	0.93616	1.23141	1.68662	1.24724	5.09597
U2008	0.88743	0.91347	0.96196	0.85797	1.23192	1.66348	1.25603	5.25758
U2009	0.93186	0.91875	0.91556	0.78485	1.24724	1.62040	1.27051	5.25073
R2010	0.95205	0.93995	0.91322	0.68298	1.28497	1.62091	1.15295	5.07383
U2011	0.95776	0.90476	0.92861	0.71729	1.27070	1.59942	1.11647	5.35708
U2012	0.95312	0.92106	0.98477	0.55105	1.28472	1.58088	1.19757	5.52818
U2013	0.96576	0.90398	1.05624	0.44581	1.26167	1.61454	1.22083	5.31414
U2014	0.97500	0.88282	1.07876	0.37627	1.28803	1.63485	1.23600	5.66061
R2015	0.94737	0.89254	1.12753	0.29999	1.35883	1.81906	1.10012	5.57053
U2016	0.90464	0.90967	1.17109	0.30331	1.41695	1.77693	1.15647	5.28452

Note: The vertical lines indicate the years in which the Commission reviewed its assessment methods (for example, the 1999 Review). In the intervening years, the Commission updated the relativities using the same assessment methods as the preceding review.

Source: *Commonwealth of Australia’s Final Budget Outcome* for 1993-94 to 2014-15 and Commission’s *2016 Update Report on GST revenue sharing relativities*. Relativities from 1993-94 to 2008-09 were adjusted to be consistent with a pool comprising general revenue grants only.

SIZE OF THE EQUALISATION TASK

9 The Commission uses two summary measures of the size of the equalisation task. Both try to capture the impact of disparities in fiscal capacities among the States.

10 The first one identifies the aggregate transfer from an equal per capita share for States with above average fiscal capacities to States with below average fiscal capacities (Box 1). The second identifies how much of the pool is required to bring all States up to the standard of the strongest State (Box 2). Both illustrate two different but equivalent ways of viewing how equalisation is achieved. We can use them both to examine how the task is evolving.

Aggregate transfers

11 Box 1 illustrates how an equal per capita distribution of the GST is redistributed so that all States have the same, or average, fiscal capacity. It shows how much less than an equal per capita share is needed by States with above average fiscal capacities and how much more is needed by States with below average fiscal capacities to achieve equal fiscal capacities.

Box 1 Illustrative redistribution of the pool from equal per capita, 2016 Update

Since the introduction of the tax sharing relativity reviews, the Commission has sought to equalise all participating States to the 'same' standard. This can be thought of as occurring in two steps.

Step 1 — Share the GST on an equal per capita (EPC) basis.

Step 2 — Adjust the shares of States with above average fiscal capacities down and the shares of States with below average fiscal capacities up so that all States have the same capacity to deliver the average services if they raise revenue at average rates and operate at average levels of efficiency.

The table below shows these steps for the 2016 Update. It shows that 13% of the pool is redistributed from an equal per capita share for the fiscally stronger States and to the fiscally weaker States so that all have the same or average fiscal capacity.

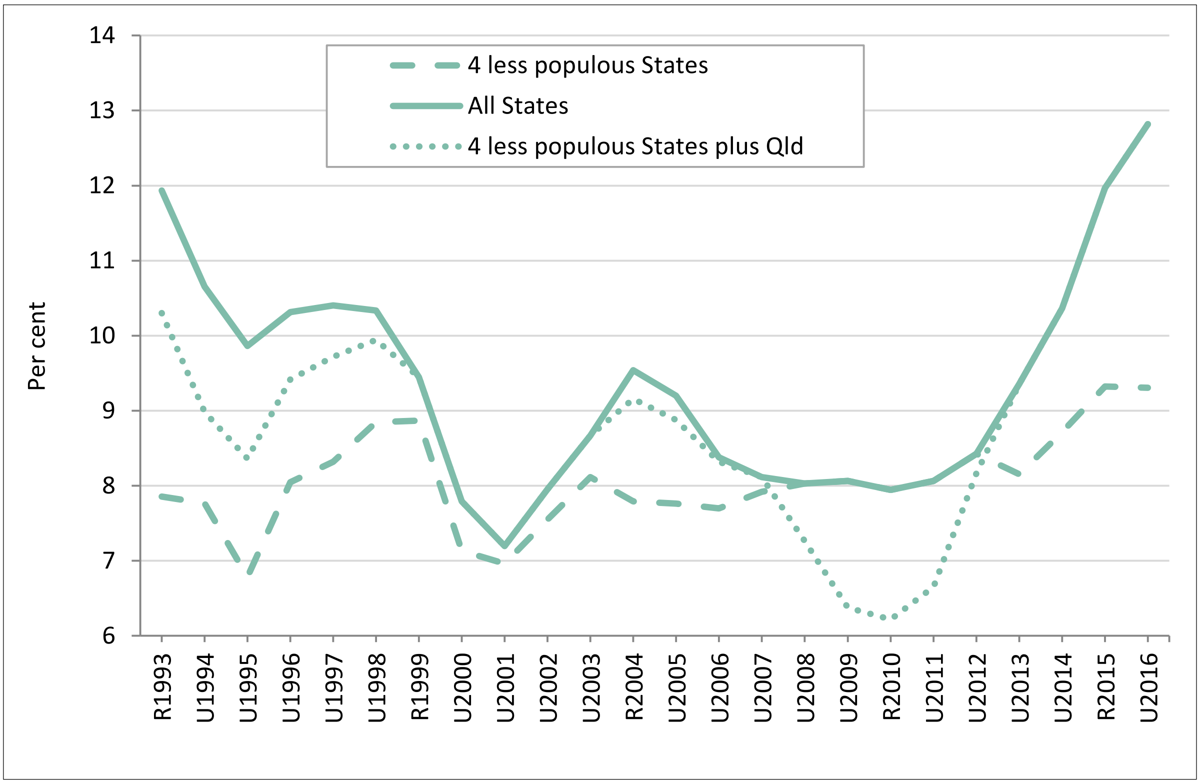
Illustrative redistribution of 2016-17 GST, per capita

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg	Total	
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$m	%
Equal per capita GST	2 496	2 496	2 496	2 496	2 496	2 496	2 496	2 496	2 496	60 720	100
Equalising adjustment	-231	-219	436	-1 737	1 051	1 952	399	10 733	0	7 786	13
GST requirement	2 265	2 277	2 932	759	3 547	4 448	2 895	13 229	2 496	60 720	100

Source: Commission's 2016 Update Report, Chapter 1, Table 1-10; Commission calculation.

12 Figure 2 shows the proportion of the pool redistributed from an equal per capita distribution to give all States the average fiscal capacity. It also shows the redistribution required for the less populous States (South Australia, Tasmania, the Australian Capital Territory and the Northern Territory) and the less populous States plus Queensland.

Figure 2 Proportion of the pool redistributed from equal per capita to States with below average fiscal capacities, 1993 Review to 2016 Update



Source: Commission calculation.

13 Over the last 24 years, 7% to 13% of the pool has been redistributed annually. The higher percentages coincide with years in which Queensland and Western Australia have been assessed to require more than their population share of the pool. The redistribution of more than 10% each year from the 1993 Review to the 1998 Update was mainly driven by the strong fiscal capacities of New South Wales and Victoria. In the last eight inquiries, the exceptionally strong fiscal capacity of Western Australia has been the main driver of the redistribution.

14 Over the same period, the proportion of the pool redistributed to the four less populous States ranged from 7% to 9%. The equalisation task (as measured by GST redistributed to them) has been slowly increasing, reaching a peak in the 2015 Review. It remained at that level in the 2016 Update.

15 Excluding the period between the 2008 and 2012 Updates, Queensland's fiscal capacity has been below average. Since the 2013 Update, its fiscal capacity has weakened further. In the 2016 Update, it was assessed to require almost a quarter of the amount redistributed because of its below average fiscal capacity.

16 Figure 3 shows, in 2016-17 dollars, the amounts redistributed to or from each State since the 1993 Review. Table 2 shows the amount redistributed per person. We have derived these redistributions by applying each inquiry's relativities to the 2016-17

pool and the relevant State populations scaled to the 2016-17 total. Doing so allows the effect of changes in population shares to be captured by the redistributions.

Figure 3 Pool redistribution, 1993 Review to 2016 Update (2016-17 dollars)

Note: These redistributions were derived by applying each inquiry's relativities to the 2016-17 pool and the relevant State populations scaled to the 2016-17 total.

Source: Commission calculation.

17 Figure 3 and Table 2 show the redistributions to the four less populous States were relatively stable during this period. For the more populous States, outcomes were stable in the first half of the period but varied in the second half. The main reasons for the divergence in their fiscal capacities were the recent mining boom in Western Australia and Queensland, and natural disasters in Queensland.

18 Specifically:

- New South Wales and Victoria were assessed to require less than their population share of the pool for the whole period.
- Queensland was assessed to require more than its population share, except for the period between the 2008 and 2012 Updates.
- In the early part of the period, Western Australia was assessed to require more than its population share. Since the 1999 Review (with the exception of the

period between the 2004 Review and the 2006 Update), it was assessed to require less than its population share.

- In the early part of the period, the ACT was assessed to require less than its population share. Since the 1999 Review, it was assessed to require more than its population share.
- South Australia, Tasmania and the Northern Territory were assessed to require more than their population share of the pool for the whole period.

Table 2 Pool redistribution per person since 1993 Review (2016-17 dollars)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redis	Redis /Pool
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	%
R1993	-507	-489	343	403	692	1 337	-150	11 007	298	11.9
U1994	-375	-510	168	318	646	1 580	-673	11 513	266	10.7
U1995	-355	-459	216	270	200	1 778	-687	12 168	246	9.9
U1996	-398	-443	187	103	593	1 788	-740	11 922	257	10.3
U1997	-392	-460	190	46	612	1 835	-759	12 304	260	10.4
U1998	-397	-467	148	23	747	1 832	-463	12 184	258	10.3
R1999	-288	-475	78	-203	594	2 039	3	12 319	236	9.4
U2000	-260	-404	88	-61	498	1 596	211	9 507	194	7.8
U2001	-232	-379	31	-75	483	1 544	431	9 019	180	7.2
U2002	-280	-395	53	-63	535	1 730	496	9 783	198	8.0
U2003	-330	-391	72	-89	598	1 898	521	10 348	216	8.7
R2004	-411	-407	176	97	577	1 786	536	9 998	238	9.5
U2005	-410	-377	142	82	567	1 756	570	9 995	230	9.2
U2006	-398	-316	78	16	516	1 731	567	10 126	209	8.4
U2007	-343	-298	24	-163	573	1 707	612	10 201	203	8.1
U2008	-281	-216	-95	-355	578	1 655	638	10 623	200	8.0
U2009	-168	-201	-208	-535	620	1 552	678	10 621	201	8.1
R2010	-116	-146	-213	-788	716	1 556	386	10 186	198	7.9
U2011	-103	-235	-175	-703	679	1 501	294	10 889	201	8.1
U2012	-111	-191	-32	-1 117	718	1 459	500	11 334	210	8.4
U2013	-78	-232	149	-1 379	663	1 547	561	10 809	233	9.4
U2014	-55	-286	205	-1 554	728	1 597	598	11 673	259	10.4
R2015	-123	-260	328	-1 744	907	2 060	259	11 455	299	12.0
U2016	-231	-218	436	-1 736	1 052	1 953	399	10 734	320	12.8

Note: These redistributions were derived by applying each inquiry's relativities to the 2016-17 pool and the relevant State populations scaled to the 2016-17 total.

Source: Commission calculation.

Difference between fiscal capacities of strongest and other States

19 Box 2 illustrates how much of the GST must be used to bring all States to the same fiscal capacity as the strongest State.

20 The GST a State receives can be viewed as comprising three amounts.

- The amount required to raise it to the average. If a State has an above average capacity, this amount is zero.

- An additional amount required to raise it to the capacity of the strongest State. If it is the strongest State, this amount is zero.
- An equal per capita amount. This is the GST that remains after the first two steps have been completed, shared on a population basis.

21 Under this approach, the first two steps together represent the equalisation task.

Box 2 Illustrative distribution of the pool in the 2016 Update

The equalisation process to bring all States to the 'same' standard can also be thought of as occurring in three steps.

Step 1 — States with a lower than average fiscal capacity are brought to average.

Step 2 — All States are brought to the capacity of the fiscally strongest State.

Step 3 — Any remaining equalisation pool funds are distributed equal per capita.

The table below shows these steps for the 2016 Update. It confirms 13% ($7 786 million) of the pool is required to bring those below average States up to the average (as in Box 1). It shows an additional 57% of the pool is required to bring all States to the capacity of the fiscally strongest State. Thus, under this approach, 70% of the pool is required for the equalisation task. The remaining 30% is distributed equal per capita.

Illustrative distribution of 2016-17 GST, per capita

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg	Total	
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$m	%
GST requirement	2 265	2 277	2 932	759	3 547	4 448	2 895	13 229	2 496	60 720	100
of which											
1. Payment to bring recipients to the average fiscal capacity	0	0	436	0	1 051	1 952	399	10 733		7 786	13
2. Additional payment to bring all States to the capacity of the strongest State	1 506	1 518	1 737	0	1 737	1 737	1 737	1 737		34 455	57
3.Total equalisation task = 1 + 2	1 506	1 518	2 173	0	2 788	3 689	2 136	12 470		42 241	70
4. Balance of GST	759	759	759	759	759	759	759	759		18 479	30

Source: Commission's 2016 Update Report, Chapter 1, Table 1-10; Commission calculation.

22 Figure 4 shows the percentage of the pool required to bring the fiscal capacities of all States to that of the strongest over the last 24 years. The percentage fluctuated between 20% and 30% for the first five years, ranged between 15% and 19% for the next eleven years and then increased dramatically from 22% in the 2009 Update to 70% in the 2015 Review. It remained at that level in the 2016 Update.

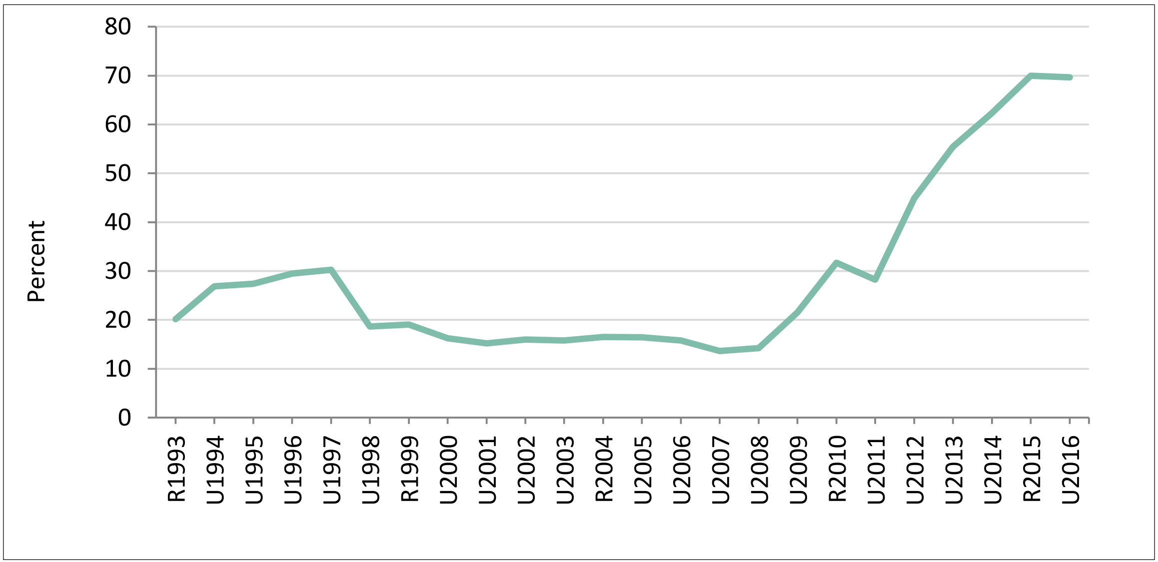
23 For most of this period, the strongest States were New South Wales or Victoria. Since the largest States contribute most to the average, the amount required to lift the

other States to the average was small. However, the mining boom in Western Australia moved it so far from the average that a considerable amount is required to lift the other States up to its fiscal capacity.

24 Over the 24 year period, the strongest States were:

- 1993 Review — New South Wales
- 1994 Update to 1997 Update — ACT
- 1998 Update to 2003 Update — Victoria
- 2004 Review to 2007 Update — New South Wales
- 2008 Update to 2016 Update — Western Australia.

Figure 4 Percentage of the pool required for equalisation task, 1993 Review to 2016 Update



Source: Commission calculation.

MAIN DRIVERS FOR DIFFERENT STATE FISCAL CAPACITIES

25 While changes in methods at a review can result in a change in measured State fiscal capacities, the underlying drivers of State fiscal capacities include their mineral endowments, levels of business activity, real estate markets, population demographics, population dispersion and the activities of the Commonwealth, mainly through payments for specific purposes. These result in States having above- or below-average fiscal capacities.

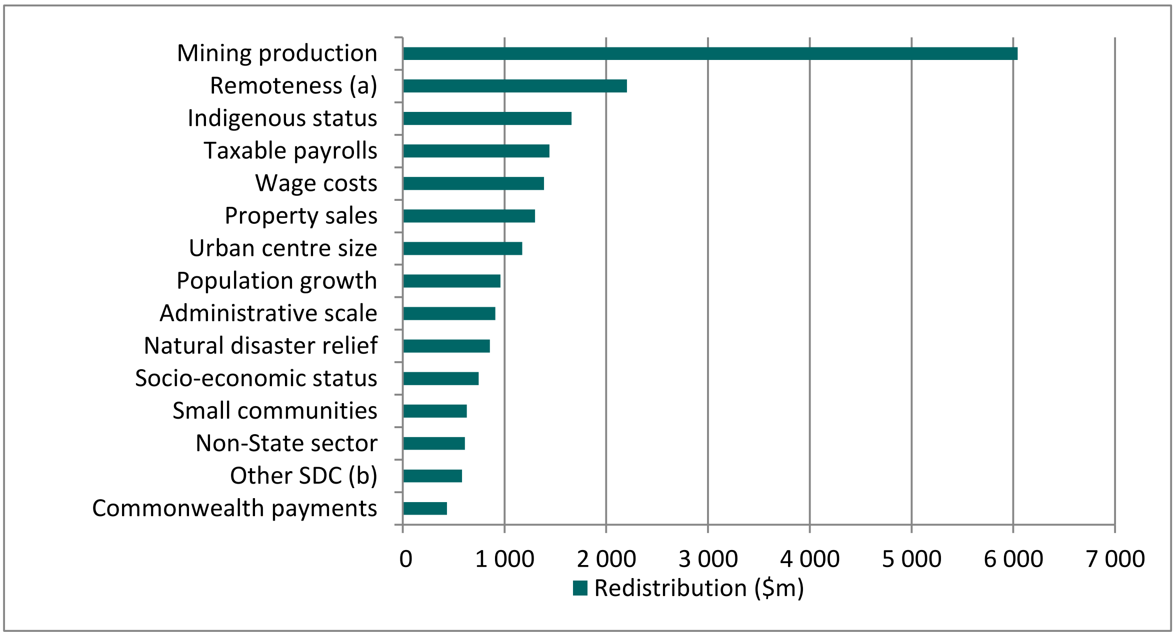
26 Figure 5 shows the main contributors to the redistribution of GST in the 2016 Update. Mining production, the effect of location on service use and unit cost (remoteness and regional costs) and Indigenous status were the three main causes of differences

in States' assessed fiscal capacity in that update. Mining revenue was the top contributor in the last 13 years.

27 In addition, the costs of providing head office functions and whole of government services (as assessed in Administrative scale) and property sales (as assessed in Stamp duty on conveyances) were important between the 1999 Review and the 2009 Update, but were overtaken by remoteness from the 2010 Review onwards.

28 Because of changes in how the effects of these drivers have been measured, we have not been able to quantify their relative impacts over time except for mining and Commonwealth payments.

Figure 5 Main contributors to the redistribution of GST in the 2016 Update



(a) Includes remoteness and regional costs.
(b) Other socio-demographic characteristics, such as age and people with disabilities.
Source: Commission calculation.

Mining production

29 Mining production was the largest single driver of differences in State fiscal capacities in the 2016 Update, even though only an average of 9% of State own-source revenue was directly collected from mining during 2012-13 to 2014-15. This is because mining is unevenly distributed between the States, much more so than all other revenue bases.

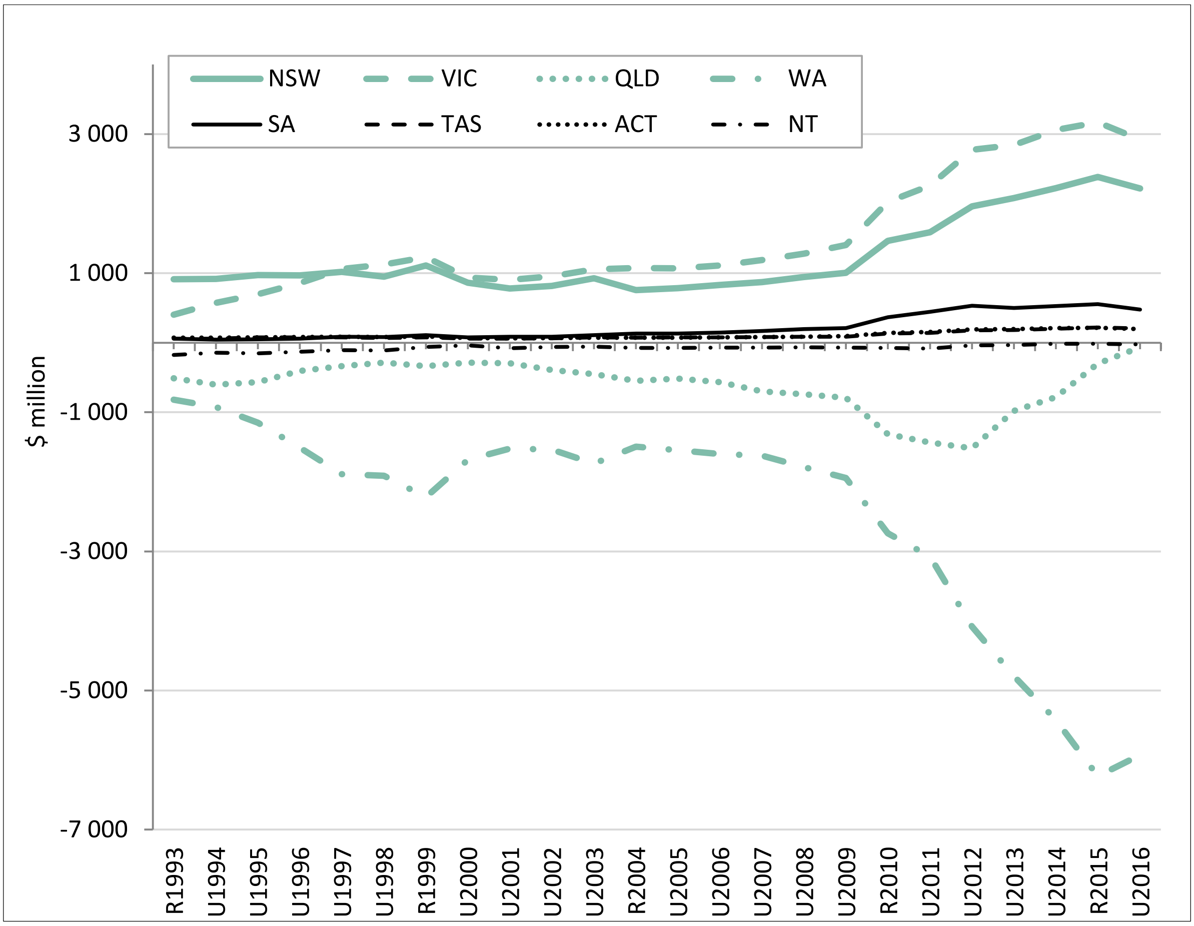
30 Figure 6 shows the pool redistribution as a result of the mining assessment since the 1993 Review.

31 During the period, Queensland, Western Australia and the Northern Territory were assessed to have the capacity to raise above average levels of mining royalties.

Western Australia's capacity grew very rapidly between the 2008 Update and the 2015 Review, but slowed in the 2016 Update. The other States, because of their below average capacities to raise mining revenue, received more than their population share of the pool.

32 The growth in mining revenue since the 1993 Review has been large (almost double the growth in the equalisation pool) as well as being skewed towards iron ore, for which Western Australia is the dominant State in terms of endowments. This combination has had a substantial dampening effect on Western Australia's relativity.

Figure 6 Pool redistribution — impact of mining assessment, 1993 Review to 2016 Update (2016-17 dollars)



Source: Commission calculation.

33 Table 3 shows the impact of mining royalty growth on relativities under different scenarios. The second line shows the estimated relativities had mining revenue grown at the rate of the pool and State shares of the base remained unchanged from the 1993 Review. The third line shows the estimated relativities had mining royalty revenue grown at its actual rate, but State shares of the base remained unchanged

from the 1993 Review. The fourth line shows the relativities recommended by the Commission in the 2016 Update. They reflect both actual rates of growth and changes in shares of the base. Western Australia's falling relativity has been driven more by the growth in revenues (1.16392-0.64226=0.52166) than its changing share of the base (0.64226-0.30331=0.33895).

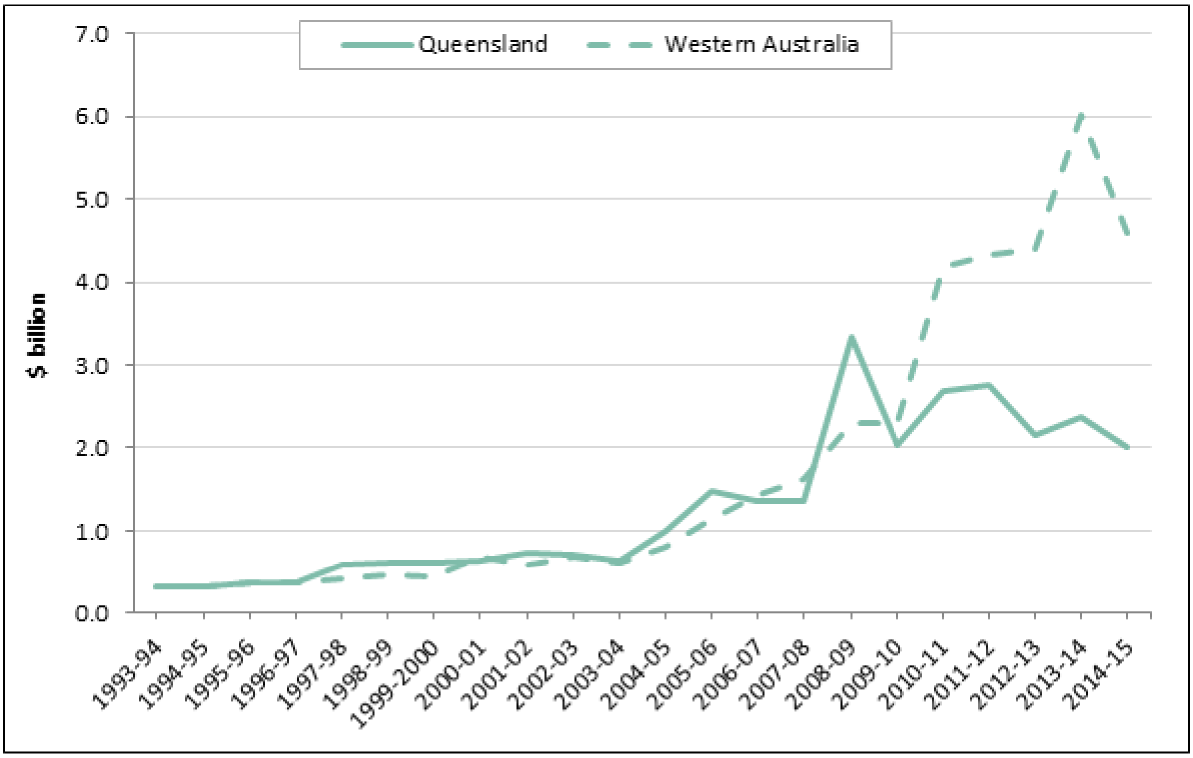
Table 3 Impact of mining growth on relativities, 1993 Review to 2016 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Relativities								
1993 Review	0.79844	0.80587	1.14009	1.16392	1.27997	1.53897	0.94204	5.42252
Pool growth, State shares constant	0.84274	0.78580	1.15991	0.90329	1.32951	1.67226	1.03164	5.12215
Actual growth, State shares constant	0.91313	0.89490	1.06340	0.64226	1.33043	1.74136	1.15239	4.59819
2016 Update	0.90464	0.90967	1.17109	0.30331	1.41695	1.77693	1.15647	5.28452

Note: The effects of method changes and second round spending effects have been ignored.
Source: Commission calculation.

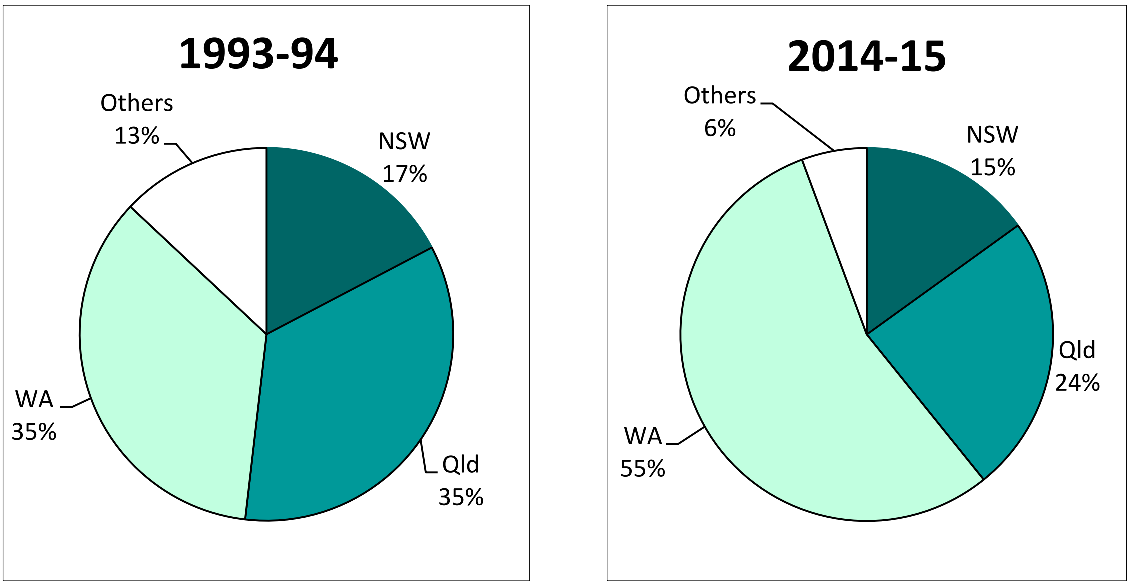
34 Figure 7 illustrates how much more mining royalties have grown in Western Australia compared with Queensland, the second largest mining State. Until about 2008-09, royalties collected in Queensland and Western Australia were roughly the same. In the four years 2009-10 to 2013-14, Western Australia's royalties tripled from $2 billion to more than $6 billion, before falling to around $5 billion in 2014-15. Its royalty collections remain much higher (some $3 billion) than the levels in Queensland. Figure 8 shows the change in Western Australia's share of royalties over the period, rising from 35% in 1993-94 to 55% in 2014-15 (was 60% in 2013-14).

Figure 7 Growth in mining royalties, Queensland and Western Australia, 1993-94 to 2014-15 (actual dollars)



Source: Commission calculation derived from ABS GFS and State data.

Figure 8 Change in share of mining royalties, 1993-94 to 2014-15



Source: Commission calculation derived from ABS GFS and State data.

Commonwealth payments

35 Under the Intergovernmental Agreement on Federal Financial Relations, the Commonwealth provides funding to the States by way of general revenue assistance (GRA) (including the GST) and payments for specific purposes (PSPs)[7]. In addition, the Commonwealth makes Commonwealth own-purpose expense (COPE) payments to the States for the purchase of goods and services. These payments are not distributed on an equal per capita basis and therefore affect each State's fiscal capacity differently.

36 Other Commonwealth payments (including PSPs, GRA other than the GST and some COPEs) the Commission considers should impact on the relativities[8] were one of the main contributors to the redistribution of GST in the 2016 Update. Their contribution was higher when the Commonwealth provided a higher level of assistance to all States in response to the global financial crisis.

37 Both the GST and other Commonwealth payments contribute to a State's fiscal capacity, equalising it. Table 4 shows how much in total States were assessed to require from the Commonwealth, compared with the average of all States, to achieve fiscal equality in the 2016 Update. It also shows the distribution of included other Commonwealth payments and the residual (a State's required GST distribution).

38 Table 4 shows that, in the 2016 Update, New South Wales, Victoria and Western Australia were assessed to require less than the average per capita total Commonwealth funding while the other States were assessed to require more than the average. Western Australia's substantially above average own-source revenue raising capacity meant it had the lowest requirement for total Commonwealth funding to meet its spending needs and achieve fiscal equalisation, at 59% of the average. As Western Australia received almost (98%) the average level of other Commonwealth payments, it was assessed as requiring only 30% of the average GST payment.

39 The impact of Commonwealth funding can be illustrated in another way. Table 5 shows Western Australia's receipt of other Commonwealth payments made up 70% of its total required Commonwealth funding. Its GST requirement made up the remaining 30%. In contrast, despite receiving a significantly above average (166%) share of other Commonwealth payments, the Northern Territory's high cost of delivering the average level of service meant that these payments only made up 19% of its total required Commonwealth funding, with the GST making up the balance.

---

7 These include payments under national agreements, specific purpose payments and national partnership payments.

8 The Commission includes payments which support State services and for which expenditure needs are assessed, in its calculation of relativities. Payments that do not meet the criteria and those payments quarantined by terms of reference are excluded.

Table 4 Assessed requirement for Commonwealth funding per capita, 2016 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
Assessed total required Commonwealth funding	3 579	3 623	4 222	2 262	4 691	5 565	4 091	14 264	3 820
Comprising:									
Other Commonwealth payments (a)	1 593	1 621	1 647	1 594	1 575	1 661	1 546	2 702	1 622
GST requirement	1 986	2 002	2 574	668	3 116	3 904	2 545	11 562	2 198
	%	%	%	%	%	%	%	%	%
Assessed total required Commonwealth funding (b)	93.7	94.8	110.5	59.2	122.8	145.8	107.0	374.6	100.0
Other Commonwealth payments (a)(b)	98.2	99.9	101.6	98.3	97.2	102.5	95.3	166.1	100.0
GST requirement (b)	90.5	91.0	117.1	30.3	141.7	177.7	115.6	528.5	100.0

Note: The assessed total requirement for Commonwealth funding is the difference between assessed own-source revenues and expenditures, averaged over the assessment period (2012-13 to 2014-15).

(a) Includes general revenue assistance (except the GST), national agreement payments, specific purpose payments, national partnership payments and some Commonwealth own-purpose expense payments that the Commission considered should affect the relativities.

(b) The assessed requirement for Commonwealth funding per capita expressed as a proportion of the average of all States.

Source: Commission calculation.

Table 5 Composition of assessed requirement for Commonwealth funding, 2016 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg
	%	%	%	%	%	%	%	%	%
Assessed total required Commonwealth funding	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Comprising:									
Other Commonwealth payments (a)	44.5	44.7	39.0	70.5	33.6	29.8	37.8	18.9	42.5
GST requirement	55.5	55.3	61.0	29.5	66.4	70.2	62.2	81.1	57.5

(a) Includes general revenue assistance (except the GST), national agreement payments, specific purpose payments, national partnership payments and some Commonwealth own-purpose expense payments that the Commission considered should impact on the relativities.

Source: Commission calculation.

40 Table 6 shows the changes in total Commonwealth funding per capita required by States to achieve equalisation, compared with the average from the 1993 Review. It also shows the actual other Commonwealth payments they received (and that the Commission considered should impact on the relativities) compared with the average for the same period. Lastly it shows the GST per capita compared with the average required for equalisation.

Table 6 Assessed requirement for Commonwealth funding per capita, compared with average, 1993 Review to 2016 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg
	%	%	%	%	%	%	%	%	%
Total Commonwealth funding (GST and other Commonwealth payments)									
R1993	85.0	84.6	106.6	114.1	124.4	144.0	98.3	454.7	100.0
U1994	88.2	84.7	103.0	111.2	120.0	147.6	88.7	477.9	100.0
U1995	88.1	86.0	102.8	108.9	119.0	148.8	87.3	477.4	100.0
U1996	87.9	87.8	102.7	105.6	118.0	149.8	88.2	470.7	100.0
U1997	88.4	87.9	102.2	104.6	118.3	149.8	88.0	470.2	100.0
U1998	88.3	88.1	101.2	104.1	119.9	149.0	93.3	460.5	100.0
R1999	90.7	88.0	99.1	102.3	116.6	149.1	109.3	432.7	100.0
U2000	91.4	88.5	100.3	104.4	115.3	142.6	110.1	383.0	100.0
U2001	92.2	88.7	99.0	104.3	115.0	142.5	112.8	370.8	100.0
U2002	90.9	88.1	99.7	105.8	116.0	145.5	113.3	384.8	100.0
U2003	89.7	88.2	100.3	106.1	117.2	148.5	112.7	394.2	100.0
R2004	88.6	87.1	105.1	102.3	118.2	150.5	111.1	396.9	100.0
U2005	88.8	88.0	104.2	101.7	117.9	149.3	111.9	397.9	100.0
U2006	89.3	89.8	102.4	100.1	116.7	148.6	111.2	401.8	100.0
U2007	90.8	90.3	100.7	95.6	118.1	147.6	112.2	404.8	100.0
U2008	92.7	92.2	97.2	90.4	118.1	146.2	112.1	416.2	100.0
U2009	95.9	93.3	94.7	86.6	117.6	138.4	113.7	391.7	100.0
R2010	97.0	94.2	97.3	82.1	118.0	134.1	103.3	351.2	100.0
U2011	96.9	91.6	99.4	85.9	117.2	133.3	100.2	353.6	100.0
U2012	96.9	92.2	101.5	79.3	117.0	135.6	103.9	357.2	100.0
U2013	97.0	92.0	104.5	74.5	117.3	135.3	104.7	349.1	100.0
U2014	97.3	92.1	105.0	70.0	116.9	136.5	107.1	375.2	100.0
R2015	95.3	94.0	107.8	59.9	123.0	147.3	103.7	386.0	100.0
U2016	93.7	94.8	110.5	59.2	122.8	145.8	107.0	374.6	100.0
Other Commonwealth payments									
R1993	90.9	87.1	94.6	128.4	118.5	131.5	83.7	365.2	100.0
U1994	91.8	91.0	94.7	128.7	107.6	121.5	81.6	349.0	100.0
U1995	91.8	91.4	94.5	128.5	110.3	119.5	75.8	336.7	100.0
U1996	90.6	89.6	93.9	129.7	113.4	122.5	83.6	375.5	100.0
U1997	91.4	88.3	93.3	131.6	114.4	121.5	85.5	363.0	100.0
U1998	91.6	88.3	95.9	136.6	106.7	114.7	83.3	341.8	100.0
R1999	93.7	95.1	93.1	130.0	101.4	104.9	106.1	239.1	100.0
U2000	93.5	94.9	93.1	131.6	102.0	104.2	105.0	232.4	100.0
U2001	92.9	94.2	93.1	135.4	101.7	107.4	104.5	226.7	100.0
U2002	92.3	93.8	93.3	141.3	101.0	102.4	104.8	211.6	100.0
U2003	92.1	93.1	93.6	143.8	100.8	101.4	103.5	211.0	100.0
R2004	98.0	90.0	103.0	98.4	107.3	124.0	102.2	251.3	100.0
U2005	98.5	90.3	103.4	97.7	106.0	119.4	99.7	254.5	100.0
U2006	99.3	90.6	102.7	98.4	105.9	116.1	94.1	245.0	100.0
U2007	99.9	91.5	101.2	99.9	104.3	112.4	90.9	241.8	100.0
U2008	101.2	90.6	100.7	101.0	104.1	111.1	85.9	233.2	100.0
U2009	100.4	95.6	99.7	100.0	105.7	99.2	91.6	171.1	100.0
R2010	99.5	94.7	103.7	98.9	105.2	100.2	89.2	161.6	100.0
U2011	98.2	93.0	105.9	100.0	106.6	105.7	88.8	167.1	100.0
U2012	98.3	92.3	104.3	100.5	106.5	115.5	89.9	184.3	100.0
U2013	97.3	93.4	103.3	100.5	109.5	113.0	89.8	193.1	100.0

Table 7 Assessed requirement for Commonwealth funding per capita, compared with average, 1993 Review to 2016 Update (continued)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg
	%	%	%	%	%	%	%	%	%
U2014	97.3	95.7	101.9	100.3	105.3	111.3	92.1	195.5	100.0
R2015	96.2	100.2	101.1	99.0	105.8	102.2	95.8	162.1	100.0
U2016	98.2	99.9	101.6	98.3	97.2	102.5	95.3	166.1	100.0
GST									
R1993	79.8	80.6	114.0	116.4	128.0	153.9	94.2	542.3	100.0
U1994	85.1	79.7	106.9	112.9	126.1	163.6	73.1	562.2	100.0
U1995	86.0	81.8	108.9	111.1	108.2	171.6	72.6	588.9	100.0
U1996	84.3	82.5	107.8	104.4	124.1	172.1	70.5	579.2	100.0
U1997	84.5	81.8	107.9	102.1	124.8	174.0	69.7	594.5	100.0
U1998	84.2	81.4	106.0	101.0	130.0	173.5	81.5	588.7	100.0
R1999	88.4	80.9	103.1	91.8	123.7	181.6	100.1	593.3	100.0
U2000	89.5	83.8	103.5	97.5	119.9	163.9	108.4	480.8	100.0
U2001	90.7	84.8	101.2	96.9	119.3	161.8	117.2	461.1	100.0
U2002	88.7	84.0	102.0	97.3	121.2	169.1	119.7	491.3	100.0
U2003	86.6	84.2	102.7	96.3	123.8	175.8	120.7	513.8	100.0
R2004	83.5	83.6	107.0	103.8	123.1	171.4	121.4	500.3	100.0
U2005	83.6	84.9	105.7	103.3	122.7	170.4	122.8	500.5	100.0
U2006	84.2	87.5	103.3	100.8	120.8	169.6	122.9	506.5	100.0
U2007	86.4	88.2	101.1	93.6	123.1	168.7	124.7	509.6	100.0
U2008	88.7	91.3	96.2	85.8	123.2	166.3	125.6	525.8	100.0
U2009	93.2	91.9	91.6	78.5	124.7	162.0	127.1	525.1	100.0
R2010	95.2	94.0	91.3	68.3	128.5	162.1	115.3	507.4	100.0
U2011	95.8	90.5	92.9	71.7	127.1	159.9	111.6	535.7	100.0
U2012	95.3	92.1	98.5	55.1	128.5	158.1	119.8	552.8	100.0
U2013	96.6	90.4	105.6	44.6	126.2	161.5	122.1	531.4	100.0
U2014	97.5	88.3	107.9	37.6	128.8	163.5	123.6	566.1	100.0
R2015	94.7	89.3	112.8	30.0	135.9	181.9	110.0	557.1	100.0
U2016	90.5	91.0	117.1	30.3	141.7	177.7	115.6	528.5	100.0

Note: Commission calculation. The dashed lines indicate the years the Commission reviewed its method.

STATE BY STATE ANALYSIS

New South Wales

41 Figure 9 shows the total redistribution (the solid black line) for New South Wales since the 1993 Review. For all of this period, it was assessed to have an above average fiscal capacity.

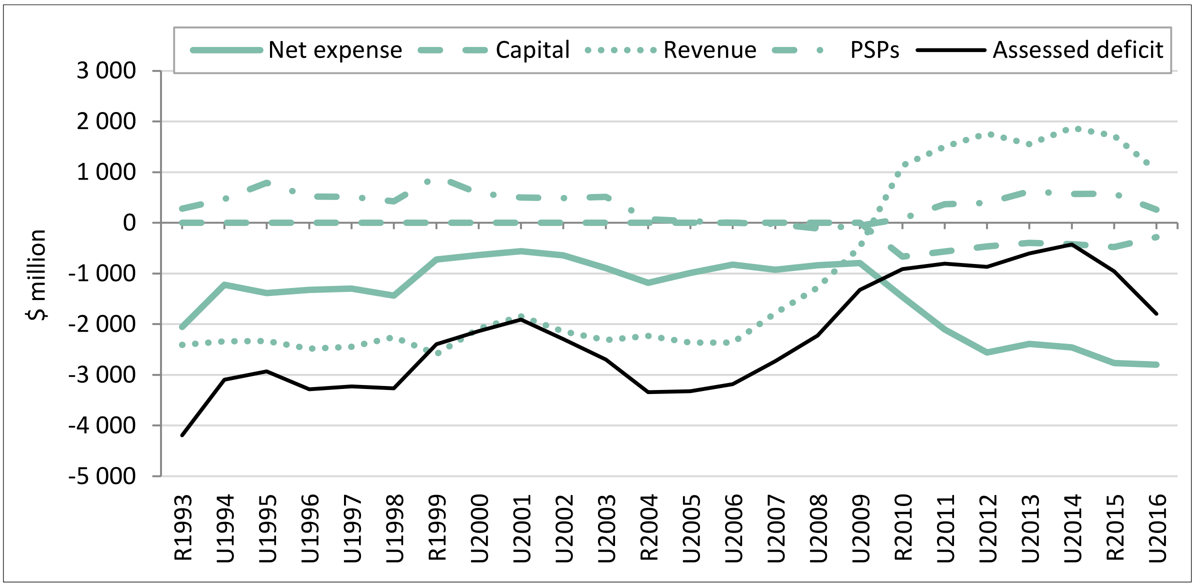
42 From the 1993 Review to the 2009 Update, New South Wales was assessed to have an advantage in both revenue raising and in the cost of providing services. Since the 2010 Review, it has been assessed to have a revenue disadvantage. While continuing to have a cost of service provision advantage, the size of its advantage increased following the 2010 Review.

43 Over the period, it experienced revenue advantages in most areas, except mining and motor taxes. Its below average share of mining production caused large amounts of the pool to be redistributed to it, especially after the 2010 Review.

44 New South Wales' cost of service provision advantage reflects its below average shares of Indigenous people and people living in remote areas, above average share of non-State provided health services and its ability to access economies of scale. These were partially offset by its above average wage costs. Its below average population growth led it to be assessed to require a below average share of new assets.

45 New South Wales' below average share of other Commonwealth payments (PSPs) increased its share of the pool.

Figure 9 Pool redistribution (2016-17 dollars) — New South Wales



Note: Capital comprises investment and net lending, which were introduced in the 2010 Review.
Source: Commission calculation.

Victoria

46 Figure 10 shows the total redistribution (the solid black line) for Victoria since the 1993 Review. For all of this period, it was assessed to have an above average fiscal capacity.

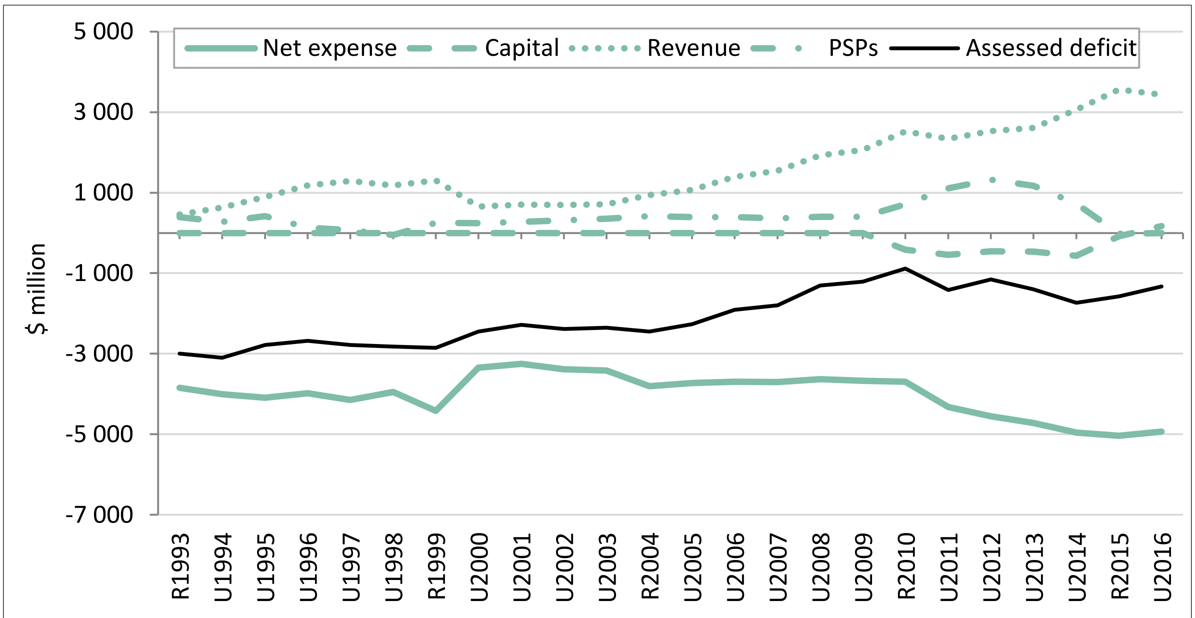
47 Over the period, Victoria was assessed to have an advantage in the cost of providing services and a disadvantage in its revenue raising. At times its revenue raising capacity has grown faster than its assessed expense advantage (reducing its total redistribution) and at times slower (increasing its total redistribution).

48 Victoria's revenue disadvantage was mainly due to its below average share of mining production. In some years, it had below average share of taxable payrolls and, in other years, a below average share of taxable land values and property transferred. These affected Victoria's revenue raising capacity differently over the years.

49 Victoria's cost of service provision advantage reflects its below average shares of government school enrolments, Indigenous people, people in remote areas and people in areas of low socio-economic status. It also experienced below average wage costs. Its below average population growth led it to be assessed to require a below average share of new assets.

50 For most of this period, it received a below average share of other Commonwealth payments (PSPs), increasing its share of the pool.

Figure 10 Pool redistribution (2016-17 dollars) — Victoria



Note: Capital comprises investment and net lending, which were introduced in the 2010 Review.
Source: Commission calculation.

Queensland

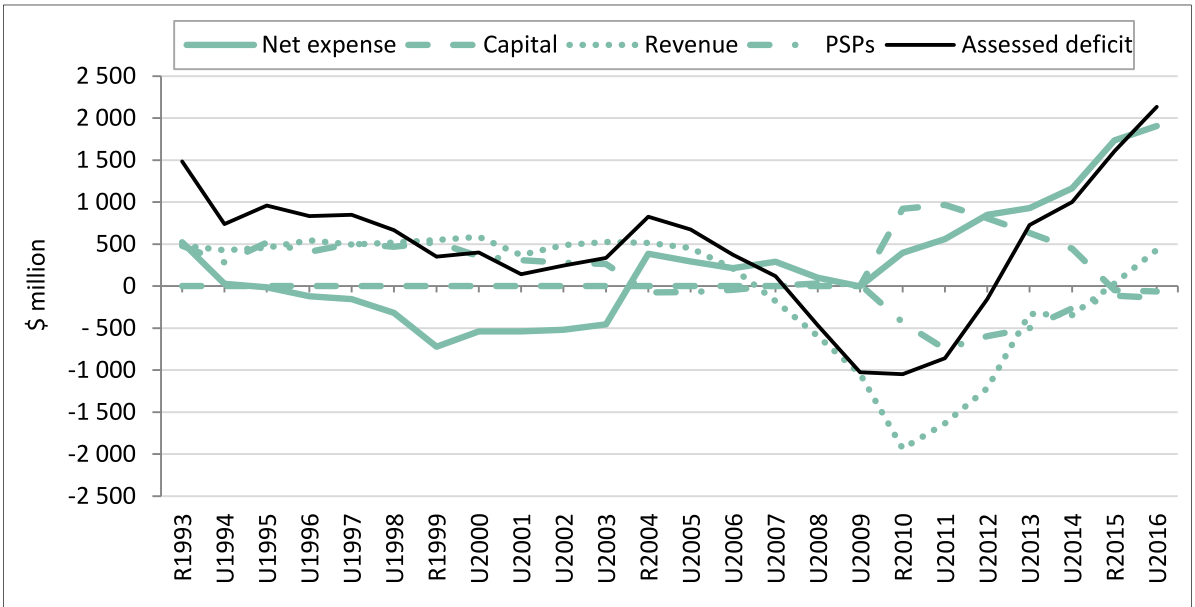
51 Figure 11 shows the total redistribution (the solid black line) for Queensland since the 1993 Review. For most of this period, Queensland was assessed to have a below average capacity.

52 In the early part of the period, Queensland was assessed to have a revenue disadvantage. The onset of a mining boom quickly turned this into a revenue advantage, which peaked in the 2010 Review and fell thereafter. In the 2015 Review, its revenue raising capacity was slightly below average, reflecting a below average share of taxable payrolls and property transferred. This was almost offset by its above average share of mining production.

53 Queensland was assessed to have a cost of service provision advantage up until the 2003 Update. From the 2004 Review onwards, it was assessed to have a cost of service provision disadvantage due to its above average shares of government school enrolments, Indigenous people, people living in remote areas and road usage. These effects were partly offset by its below average wage costs and its ability to access economies of scale. In recent years, natural disasters have increased the size of its cost of service provision disadvantage. Its above average population growth led it to be assessed to require an above average share of new assets.

54 In the first half of this period, Queensland received less than its population share of Commonwealth payments (PSPs). It now receives more than its population share of other Commonwealth payments, decreasing its share of the pool.

Figure 11 Pool redistribution (2016-17 dollars) — Queensland



Note: Capital comprises investment and net lending, which were introduced in the 2010 Review.
Source: Commission calculation.

Western Australia

55 Figure 12 shows the total redistribution (the solid black line) for Western Australia since the 1993 Review. It was assessed to have average fiscal capacity until the 2007. Its fiscal capacity has strengthened so much since then that it has the strongest fiscal capacity of any State.

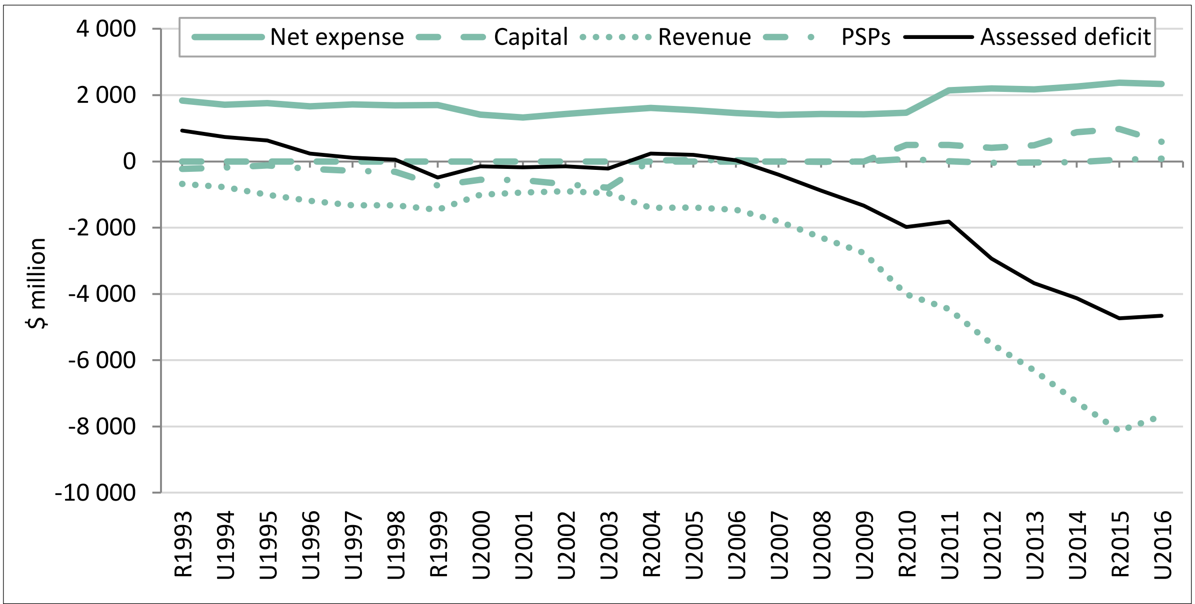
56 For all of this period, Western Australia was assessed to have a revenue advantage and an expense disadvantage.

57 Western Australia was assessed to have a revenue advantage in all State taxes, except insurance. The onset of the latest mining boom increased its capacity rapidly and is now the dominant factor determining its share of GST revenue.

58 Its expense disadvantage was due to its above average shares of Indigenous people and people living in remote areas, above average wage costs and below average share of non-State provision of health services. Its above average population growth led it to be assessed to require an above average share of new assets.

59 For most of the period, Western Australia received more than its population share of other Commonwealth payments (PSPs), decreasing its share of the pool.

Figure 12 Pool redistribution (2016-17 dollars) — Western Australia



Note: Capital comprises investment and net lending, which were introduced in the 2010 Review.
Source: Commission calculation.

South Australia

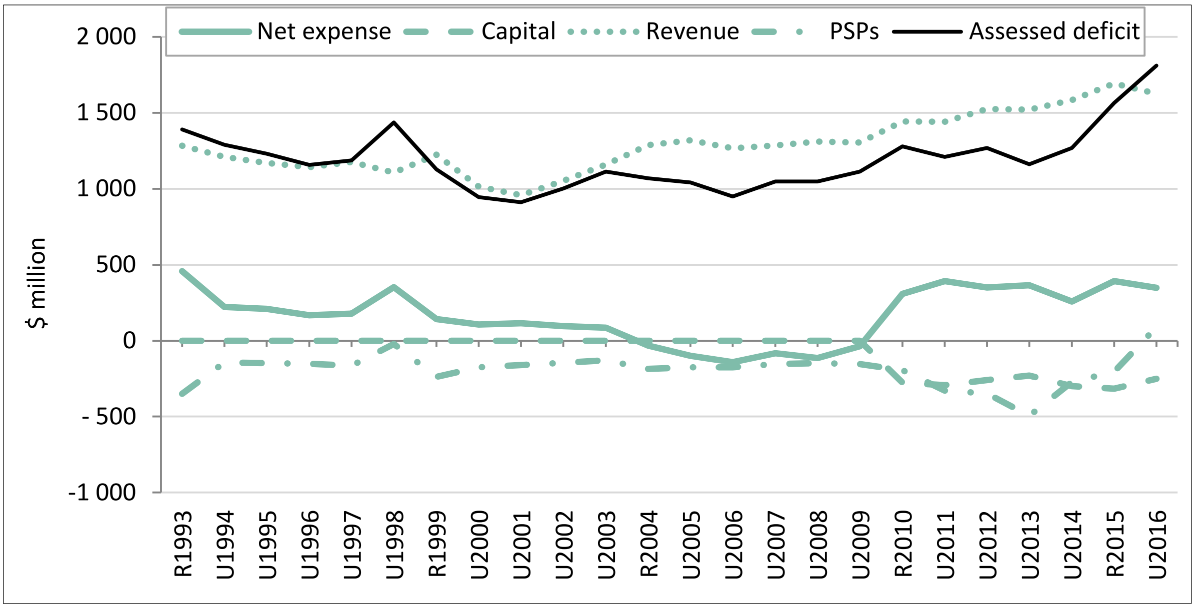
60 Figure 13 shows the total redistribution (the solid black line) for South Australia since the 1993 Review. For all of this period, it was assessed to have below average fiscal capacity.

61 Over the period, South Australia was assessed to have a revenue disadvantage, which was the dominant factor determining its share of the pool. It was assessed to have below average revenue raising capacity across all State taxes, but especially mining, payroll, conveyancing and land tax.

62 For most years, it was assessed to have slightly above average expense requirements. Its above average shares of older people and people with low socio-economic status were partially by its below average wage costs and assessed transport costs. Its below average population growth led it to be assessed to require a below average share of new assets.

63 For the whole period, South Australia received more than its population share of other Commonwealth payments (PSPs), decreasing its share of the pool.

Figure 13 Pool redistribution (2016-17 dollars) — South Australia



Note: Capital comprises investment and net lending, which were introduced in the 2010 Review.
Source: Commission calculation.

Tasmania

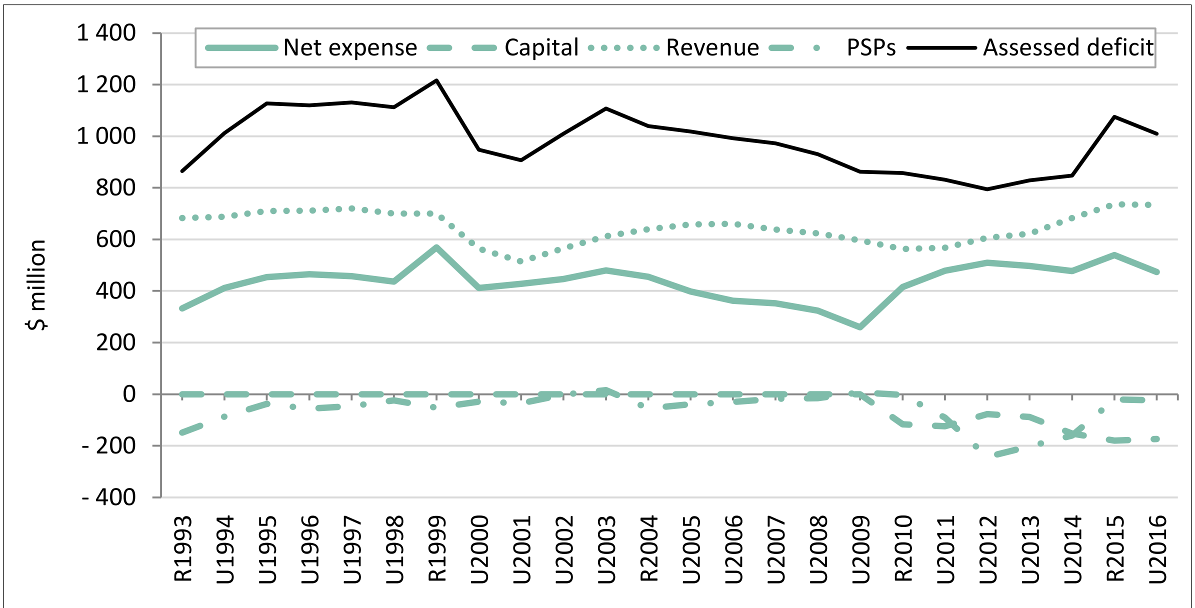
64 Figure 14 shows the total redistribution (the solid black line) for Tasmania since the 1993 Review. For all of this period, it was assessed to have below average fiscal capacity.

65 Over the period, Tasmania was assessed to have a revenue and cost of service provision disadvantage. It was assessed to have the weakest revenue raising capacity for most State taxes.

66 Its cost of service provision disadvantage was due to above average shares of people in areas with low socio-economic status, older people and government school students, compounded by diseconomies of small scale in administration. Its below average population growth led it to be assessed to require a below average share of new assets.

67 For the whole period, Tasmania received more than its population share of other Commonwealth payments (PSPs), decreasing its share of the pool.

Figure 14 Pool redistribution (2016-17 dollars) — Tasmania



Note: Capital comprises investment and net lending, which were introduced in the 2010 Review.
Source: Commission calculation.

Australian Capital Territory

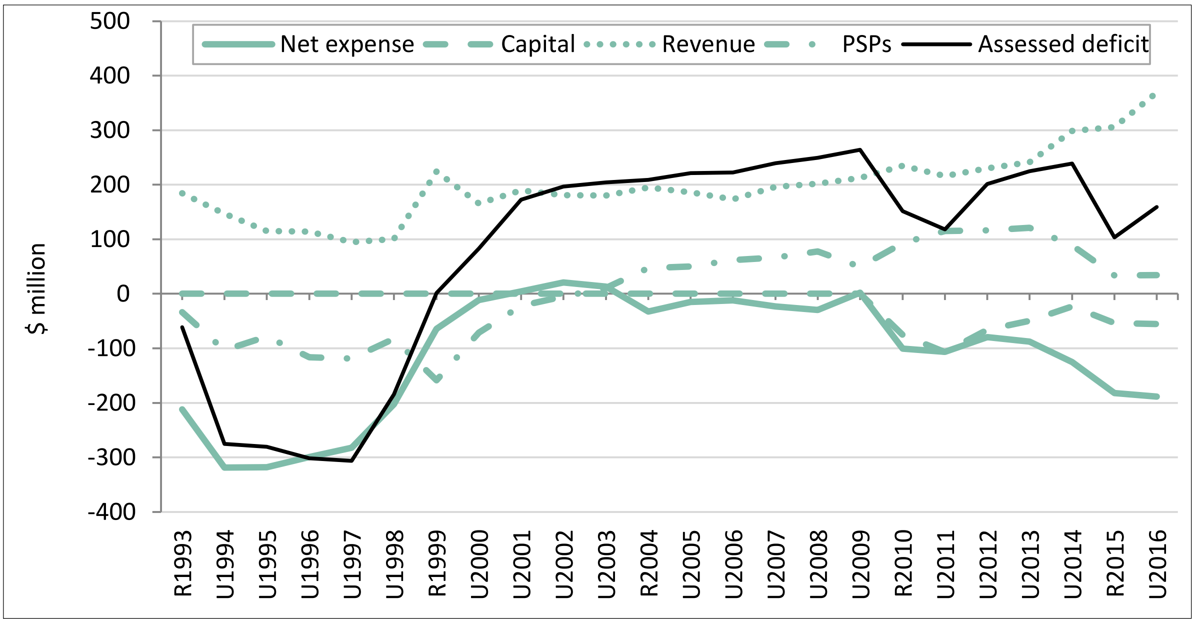
68 Figure 15 shows the total redistribution (the solid black line) for the ACT since the 1993 Review. In the early part of this period, the ACT was assessed to have an above average fiscal capacity, mainly because of a cost of service provision advantage. Since the 1999 Review, it has been assessed to have a below average fiscal capacity, mainly because of a revenue disadvantage.

69 The ACT had a revenue disadvantage for most State taxes. It had no mining industry and very low motor vehicle and land tax capacity. Its inability to raise payroll tax from the Commonwealth contributed to its below average payroll capacity.

70 The ACT had a cost of service provision advantage due to its above average share of young people, people living in urban areas and people with higher socio-economic status, above average wage costs and diseconomies of small scale in administration. These were partially offset by the absence of remote centres and a rural road network. Its below average population growth led it to be assessed to require a below average share of new assets.

71 During the first half of the period, ACT received more than its population share of Commonwealth payments (PSPs). It now receives less than its population share of other Commonwealth payments, increasing its share of the pool.

Figure 15 Pool redistribution (2016-17 dollars) — Australian Capital Territory



Note: Capital comprises investment and net lending, which were introduced in the 2010 Review.
Source: Commission calculation.

Northern Territory

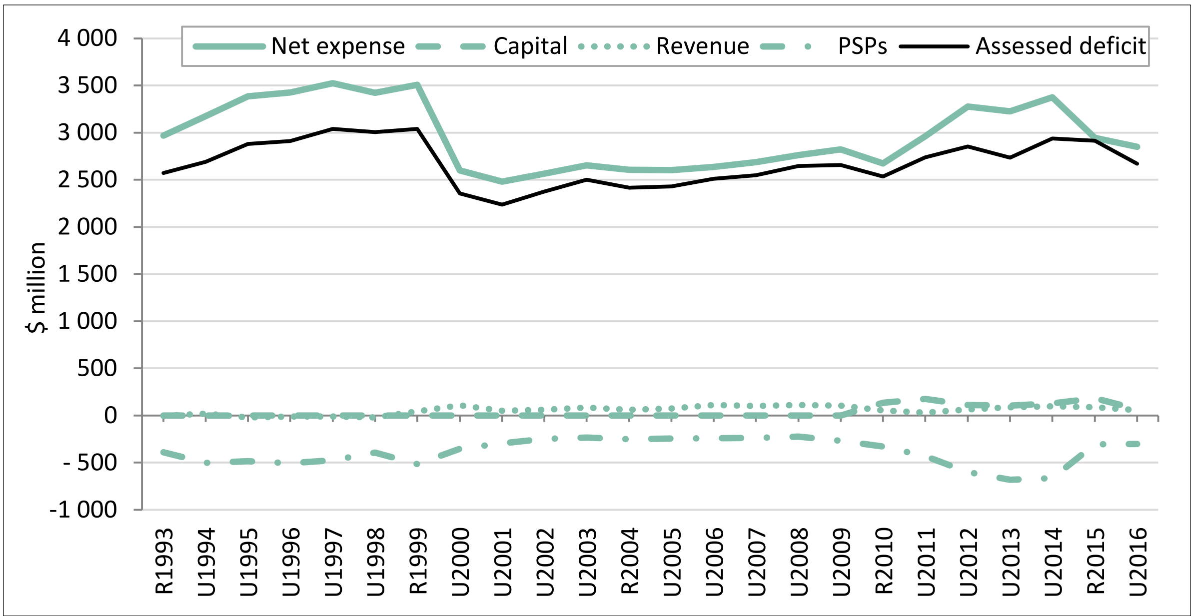
72 Figure 16 shows the total redistribution (the solid black line) for the Northern Territory since the 1993 Review. For all of this period, it was assessed to have below average fiscal capacity.

73 The Territory was assessed to have a revenue advantage until the 1998 Update. Since then it has been assessed to have a revenue disadvantage. It experiences a revenue disadvantage in all State taxes except mining.

74 The Territory is assessed to have the biggest cost of service provision disadvantage. Its cost disadvantage is driven by its above average shares of government school students, Indigenous people and, young males and people in remote areas. It is also driven by its low share of non-State provision of health services, above average wage costs and diseconomies of scale in administration. Its above average population growth led it to be assessed to require an above average share of new assets.

75 For the whole period, the Northern Territory received more than its population share of other Commonwealth payments (PSPs), decreasing its share of the pool.

Figure 16 Pool Redistribution (2016-17 dollars) — Northern Territory



Note: Capital comprises investment and net lending, which were introduced in the 2010 Review.
Source: Commission calculation.