

Chapter 14

Further Reflections on Relative Benefit Estimates

Chapter 14 has five sections which seek to clarify the relative benefit estimates presented in Chapters 11 to 13. The first examines relative benefit estimates in relation to the relativities determined using Commonwealth Grants Commission methodologies. The second describes tax expenditures in Australia and their possible impact on relative benefit estimates. The third similarly assesses privatisation in Australia and its possible impact on relative benefit estimates. The fourth section describes selected features of Australia's industrial and economic geography which shed further light on relative benefit estimates. The final section then concludes with the main findings presented in this chapter.

Relative Benefit Estimates and the Commonwealth Grants Commission

As noted in earlier chapters, the Commonwealth Grants Commission (CGC) calculates a set of numbers referred to as *per capita revenue sharing relativities* (or just *relativities* for short) that are used to substantially determine the levels of Commonwealth grants to the eight States and Territories. These CGC relativities significantly influence the expenditure levels of the eight STUs and must also significantly influence the relative benefit estimates presented in Chapters 11 to 13 which are based entirely on STU expenditure levels and populations.¹ This section specifically examines this link by assessing the relative benefit estimates that would arise if Australia-wide public sector expenditure levels reflected the *relativities* calculated by the CGC. Appendix 14A, as previously noted in Chapter 10, provides further descriptions of the Grants Commission and its role in determining the *relativities* which form the basis of Commonwealth grants to the STUs.

Table 14-1 below provides the relativities employed by the Grants Commission since 1998. The relativities for 1998 were employed in the derivation of the grants awarded to the STUs in 1998-99, and similarly for the other years shown below. Following the introduction of the Goods and Services Tax (GST) in 2000, these relativities became known as the GST relativities. The Commission also calculates Financial Assistance Grant (FAG) relativities, based on the intergovernmental financial agreement in place prior to the introduction of the GST.

Table 14-1 includes, for all eight STUs and for all eight financial years considered: relativities as determined by the Grants Commission; populations as at 31 December in the middle of the financial year in which the grant is awarded; weighted populations obtained by multiplying respective relativity and population figures; weighted population shares, as a percentage of the sum total across all eight STUs; and STU shares of an illustrative one billion dollar grant, which follow directly from the weighted population shares. The three rightmost columns contain eight and four year average figures. The lower portions of Table 14-1 provide summaries of the least squares linear regression relationship between population and grant level. The regression intercept A is positive for all individual years, and for the eight year average and the two four year averages considered, for both the 8ST and 5MS regressions. The p_A values, representing the one-tailed probabilities associated with the A estimates, are in all cases less than 0.100, but mostly in the range between 0.050 and 0.100, so the A estimates are in all cases found to be positive to a statistically significant extent at the 10% significance level, but generally not at the 5% significance level.

The EST_{8ST} and EST_{5MS} values provide the differences between the \$1 billion figure and the grant levels estimated for a single Australia-wide STU using the regression equations derived here. These estimates are equivalent to the linear regression technique Unification model and Functional Transfer model relative benefit estimates presented in Chapters 12 and 13. The EST_{8ST} percentage entries in Table 14-1 show that the Grants Commission relativities, and the grants these give rise to, are consistent with a relative benefit in the order of 10% or so. The EST_{5MS} percentage entries indicate a slightly higher figure of approximately 14%. These figures are consistent with the regression technique relative benefit estimates in the order of five to ten per cent as shown in Chapter 12 for the Total Public Sector and General Government expenditure categories.² These results hence demonstrate that the results in Chapter 12 really do, to some extent at least, appear to reflect the Grants Commission methodologies that are employed in determining relativities and grant levels for the STUs. Further research could further clarify this connection.

Table 14-1: Relativities, Grants and Regression Estimates

STU	1998 Update for 98-99 Grants	1999 Review for 99-00 Grants	2000 Update for 00-01 Grants	2001 Update for 01-02 Grants	2002 Update for 02-03 Grants	2003 Update for 03-04 Grants	2004 Review for 04-05 Grants	2005 Update for 05-06 Grants	8 Year Average 98-99 to 05-06	4 Year Average 98-99 to 01-02	4 Year Average 02-03 to 05-06
Relativities (R)											
NSW	0.87765	0.89948	0.90913	0.92032	0.90631	0.89117	0.86750	0.86846	0.89250	0.90165	0.88336
VIC	0.88042	0.86184	0.87049	0.87539	0.86824	0.87010	0.86534	0.87552	0.87092	0.87204	0.86980
QLD	1.02186	1.00687	1.01830	1.00269	1.01174	1.01902	1.05504	1.04389	1.02243	1.01243	1.03242
WA	0.98252	0.94793	0.98365	0.97516	0.97592	0.96946	1.03054	1.02500	0.98627	0.97232	1.00023
SA	1.22194	1.20680	1.18258	1.17941	1.19447	1.21215	1.20407	1.20325	1.20058	1.19768	1.20349
TAS	1.55086	1.60905	1.51091	1.50095	1.55419	1.59948	1.55939	1.55299	1.55473	1.54294	1.56651
ACT	0.95145	1.10270	1.11289	1.14633	1.15216	1.14979	1.12930	1.14300	1.11095	1.07834	1.14356
NT	4.81869	0.89948	0.90913	0.92032	0.90631	0.89117	0.86750	4.26682	1.80993	1.88691	1.73295
Populations on 31 Dec of Year of Review or Update (P, in millions)											
NSW	6.375118	6.448683	6.530563	6.607706	6.661171	6.706629	6.747467	6.801137	6.60981	6.49052	6.72910
VIC	4.662048	4.713790	4.772927	4.838513	4.891943	4.942007	4.992570	5.052300	4.85826	4.74682	4.96970
QLD	3.474469	3.531351	3.595084	3.667852	3.753814	3.841325	3.925839	4.002467	3.72403	3.56719	3.88086
WA	1.836151	1.862055	1.887762	1.914196	1.938602	1.966010	1.994032	2.026324	1.92814	1.87504	1.98124
SA	1.493680	1.501424	1.508379	1.515979	1.523268	1.530270	1.537373	1.546707	1.51964	1.50487	1.53440
TAS	0.471698	0.471419	0.471602	0.472260	0.475009	0.479710	0.483747	0.486784	0.47653	0.47174	0.48131
ACT	0.311105	0.313767	0.317259	0.320566	0.322590	0.323692	0.324640	0.325683	0.31991	0.31567	0.32415
NT	0.191302	0.194143	0.196661	0.197890	0.198278	0.199227	0.201308	0.204289	0.19789	0.19500	0.20078
TOTAL	18.815571	19.036633	19.280238	19.534961	19.764676	19.988870	20.206975	20.445691	19.63420	19.16685	20.10155
Weighted Populations (R multiplied by P, in millions)											
NSW	5.595122	5.800461	5.937131	6.081204	6.037086	5.976746	5.853428	5.906516	5.89846	5.85348	5.94344
VIC	4.104560	4.062533	4.154785	4.235586	4.247380	4.300040	4.320270	4.423390	4.23107	4.13937	4.32277
QLD	3.550421	3.555611	3.660874	3.677718	3.797883	3.914387	4.141917	4.178135	3.80962	3.61116	4.00808
WA	1.804055	1.765098	1.856897	1.866647	1.891920	1.905968	2.054929	2.076982	1.90281	1.82317	1.98245
SA	1.825187	1.811919	1.783779	1.787961	1.819499	1.854917	1.851105	1.861075	1.82443	1.80221	1.84665
TAS	0.731538	0.758538	0.712548	0.708838	0.738255	0.767287	0.754350	0.755970	0.74092	0.72787	0.75397
ACT	0.296000	0.345991	0.353075	0.367474	0.371675	0.372178	0.366615	0.372256	0.35566	0.34064	0.37068
NT	0.921826	0.174628	0.178791	0.182123	0.179702	0.177545	0.174635	0.871664	0.35761	0.36434	0.35089
TOTAL	18.828710	18.274779	18.637880	18.907551	19.083401	19.269068	19.517250	20.445988	19.12058	18.66223	19.57893
Weighted Population Share (%)											
NSW	29.72	31.74	31.86	32.16	31.64	31.02	29.99	28.89	30.88	31.37	30.38
VIC	21.80	22.23	22.29	22.40	22.26	22.32	22.14	21.63	22.13	22.18	22.09
QLD	18.86	19.46	19.64	19.45	19.90	20.31	21.22	20.43	19.91	19.35	20.47
WA	9.58	9.66	9.96	9.87	9.91	9.89	10.53	10.16	9.95	9.77	10.12
SA	9.69	9.91	9.57	9.46	9.53	9.63	9.48	9.10	9.55	9.66	9.44
TAS	3.89	4.15	3.82	3.75	3.87	3.98	3.87	3.70	3.88	3.90	3.85
ACT	1.57	1.89	1.89	1.94	1.95	1.93	1.88	1.82	1.86	1.83	1.89
NT	4.90	0.96	0.96	0.96	0.94	0.92	0.89	4.26	1.85	1.94	1.76
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Share of \$1b in Grants to the Eight STUs Based on Relativities, Population and Weighted Population Shares as Above (\$m)											
NSW	297.2	317.4	318.6	321.6	316.4	310.2	299.9	288.9	308.8	313.7	303.8
VIC	218.0	222.3	222.9	224.0	222.6	223.2	221.4	216.3	221.3	221.8	220.9
QLD	188.6	194.6	196.4	194.5	199.0	203.1	212.2	204.3	199.1	193.5	204.7
WA	95.8	96.6	99.6	98.7	99.1	98.9	105.3	101.6	99.5	97.7	101.2
SA	96.9	99.1	95.7	94.6	95.3	96.3	94.8	91.0	95.5	96.6	94.4
TAS	38.9	41.5	38.2	37.5	38.7	39.8	38.7	37.0	38.8	39.0	38.5
ACT	15.7	18.9	18.9	19.4	19.5	19.3	18.8	18.2	18.6	18.3	18.9
NT	49.0	9.6	9.6	9.6	9.4	9.2	8.9	42.6	18.5	19.4	17.6
TOTAL	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Regression Summary for $G = A + BP$ (where $G =$ STU grant share of \$1b and $P =$ STU population, as above)											
A	23.05	12.09	11.18	10.31	11.60	12.69	14.45	22.65	14.77	14.15	15.35
P_A	0.010	0.057	0.058	0.055	0.053	0.051	0.062	0.009	0.023	0.021	0.026
B	43.35	47.45	47.23	46.97	45.90	44.95	43.77	40.05	44.92	46.27	43.64
r^2	0.9830	0.9891	0.9907	0.9924	0.9905	0.9887	0.9827	0.9843	0.9908	0.9919	0.9892
EST_{ST}	161.3	84.6	78.3	72.2	81.2	88.8	101.1	158.6	103.4	99.1	107.5
$EST_{ST}(\%)$	16.1	8.5	7.8	7.2	8.1	8.9	10.1	15.9	10.3	9.9	10.7
Regression Summary as above but this time based on just the Five Mainland States											
A	29.54	24.23	23.72	20.64	23.89	26.82	34.57	32.34	26.99	24.53	29.42
P_A	0.037	0.080	0.071	0.082	0.072	0.063	0.053	0.046	0.055	0.062	0.053
B	41.97	44.79	44.53	44.77	43.32	42.01	39.63	38.11	42.34	44.03	40.74
r^2	0.9875	0.9848	0.9872	0.9891	0.9868	0.9850	0.9770	0.9812	0.9863	0.9876	0.9838
EST_{SMS}	180.8	123.0	117.8	104.8	120.0	133.5	164.7	188.4	141.8	131.6	151.7
$EST_{SMS}(\%)$	18.1	12.3	11.8	10.5	12.0	13.3	16.5	18.8	14.2	13.2	15.2

Sources: For 1998, CGC 1999 (Vol II): 5, Table 2-1; For 1999 through 2004, CGC 2004b: 22, Table 4-2; For 2004 (again) and 2005, CGC 2005b: 19, Table 4-1.

Note that $EST_{ST} = \$1b - (A + BP_{AUS}) = 7A$, using regression coefficients A and B; and $EST_{SMS} = \$1b - (A + BP_{AUS}) \neq 7A$.

Grants Commission methodologies, as described in detail in Appendix 14A, are based on the eminently sound and laudable assumption that if States and Territories continue to exist as sovereign polities, then they are entitled to a standard of existence that is fiscally equitable relative to Australia-wide standards. When political leaders of NSW (and sometimes other States and the ACT) express the view that their inhabitants are unfairly treated by current CGC methodologies (see, for example, Refshauge 2005: 9; Wade 2005: 35), they effectively argue that their inhabitants are unfairly treated by Australia's federal system of government and the egalitarian ethos which underlies the CGC approach. So if the egalitarian ethos is to be maintained, then the options are: (1) continuing with Australia's federal system and Commonwealth government grants to the STUs more or less as currently determined by the CGC, or (2) moving to a unitary system emphasising fiscal egalitarianism. If a unitary system of government was established for Australia, then a reformed national Grants Commission could formulate grants – using methods similar to those employed by the CGC now – to be paid directly to local or regional governments or communities. Further research could clarify the financial and overall benefits and costs of such a system of direct national government grants to localities or regions, relative to the current grants systems, in terms of criteria relating to equity, justice, finance, economy, efficiency, outcome effectiveness across public and private sectors alike, and other social, economic and environmental factors.

Relative Benefit Estimates and Tax Expenditures

At a conference at Griffith University in November 2002, Professor John Wanna advised that it would be a good idea to investigate how estimates such as those presented previously (Drummond 2002) may be affected by tax expenditures, noting that the States and Territories generally employ different levels of various forms of tax expenditures. This section describes the magnitude of tax expenditures (TEs) at Commonwealth and State-Territory levels, and the impact of TEs on the relative benefit estimates obtained for the TPS expenditure category using the linear regression technique in terms of 2001-02 data. Appendix 14B defines and describes tax expenditures in general terms and describes the reporting of tax expenditures in Australia at both Commonwealth and State-Territory levels.

Commonwealth Tax Expenditures

Table 14-2 below summarises Commonwealth tax expenditure estimates over the period 2000-01 to 2003-04, for individual years and as three year averages (3YA):

Table 14-2: Commonwealth Tax Expenditures (\$b) Between 2000-01 and 2003-04

YEAR	2001-02	2002-03	2003-04	3YA
Total Commonwealth Tax Expenditure = CTE	29.73	30.52	31.21	30.49
Superannuation TE = STE	9.86	10.99	12.03	10.96
Other TE besides superannuation TE = Non-STE	19.87	19.53	19.18	19.53
Social Security and Welfare TE = SSWTE	19.03	20.25	21.90	20.39
TE in Functions Other than Social Security and Welfare = Non-SSWTE	10.70	10.27	9.31	10.09
Components as % of CTE				
STE	33.2	36.0	38.5	35.9
Non-STE	66.8	64.0	61.5	64.1
SSWTE	64.0	66.4	70.2	66.8
Non-SSWTE	36.0	33.6	29.8	33.2
Total Direct Expenditure = TDE	166.76	169.49	181.27	172.51
Total Expenditure = TOTE = TDE + CTE	196.49	200.01	212.48	202.99
CTE as a Percentage of TOTE	15.1	15.3	14.7	15.0
CTE as a Percentage of GDP	4.2	4.0	3.8	4.0

Source: Australian Treasury (2005), *Tax Expenditure Statement 2004*, pages 8, 9 and 13, Tables 2.1, 2.2 and 2.5.

As Table 14-2 shows, Commonwealth tax expenditures in recent years have totalled approximately \$30 billion per annum, 15% of total Commonwealth expenditures (defined, as above, as direct expenditures plus tax expenditures), 20% of Commonwealth own purpose expenditures (defined as total Commonwealth expenditures less transfers [mainly in grants] to State, Territory and local governments), and 4% of Australia's GDP (see also Wanna 2003: 3; Smith 2003: 1, 4). The magnitude of Commonwealth tax expenditures is hence "equivalent to twice the size of the Defence budget and roughly equals Commonwealth spending on health" (Smith 2003: 5; see also Wanna 2003: 2).

State and Territory Tax Expenditures

Based on mainland State estimates alone totalling over \$9.0 billion, Smith (2003: 5, 19) estimates that State and Territory government tax expenditures exceeded \$9.5 billion in 2001-02, and observes further that "while the aggregate level of tax expenditures by state governments is considerably less than for the Commonwealth, the use of tax expenditures is comparable relative to their tax revenues", and that in Victoria, for example, "tax expenditures are around 17 per cent of collections" (Smith (2003: 19-20). According to Warren (2004: 211), "State Governments probably have higher levels of tax expenditures relative to their overall level of tax revenue collections than the Commonwealth".

Table 14-3 below shows that mainland State tax expenditures totalled some \$9.3 billion in 2001-02, hence supporting the estimate by Smith, as above, that total STU tax expenditures exceeded \$9.5 billion in 2001-02. Table 14-3 also contains results of a regression analysis of the tax expenditure versus population relationship among the mainland States in 2001-02.

These results again reveal the by now familiar pattern exhibited extensively in Chapter 12 and in the earlier section in Chapter 14 on grant levels as determined by the Grants Commission. Table 14-4 then carries out regression analyses using three separate mainland State expenditure measures: tax expenditure (TE), total public sector expenditure (TPS), and tax expenditure adjusted total public sector expenditure (TEATPS) defined as follows:

$$\text{TEATPS} = \text{TPS} + \text{TE} \quad \dots [14.1]$$

Table 14-3: Mainland State Tax Expenditures in 2001-02

STU	Population at 31 December 2001 (m)	Tax Expenditures (TE) in 2001-02 (\$m)	Tax Expenditures Per Capita (\$ per person)	Tax Expenditures Per Capita Relative to 5MS = 100
NSW	6.61	2.69	407	81
VIC	4.84	2.77	572	114
QLD	3.67	1.99	542	108
WA	1.91	1.08	562	112
SA	1.52	0.78	512	102
5MS (TOTAL)	18.54	9.29	501	100
Regression Summary for TE = A + BP where TE = STU Tax Expenditure and P = STU population, for just the Five Mainland States				
A	0.3497	With $p_A = 0.1977$, A is significantly positive at the 20% (one-tailed) significance level, but not at the 10% or lower significance levels, so A is <i>not</i> positive to a statistically significant extent		
p_A	0.1977			
B	0.4068	With $p_B = 0.0087 < 0.010$, B is significantly positive at the 1% (one-tailed) significance level		
p_B	0.0087			
r^2	0.8842			
TE _{5MS-total}	9.29	(TE _{5MS-total} = TE _{NSW} + TE _{VIC} + TE _{QLD} + TE _{WA} + TE _{SA})		
TE _{5MS-reg}	7.89	(TE _{5MS-reg} = A + B × P _{5MS} ,		
EST = TE _{5MS-total} - TE _{5MS-reg}	1.40	where P _{5MS} = P _{NSW} + P _{VIC} + P _{QLD} + P _{WA} + P _{SA})		
EST (%)	15.05			

Sources: NSW Treasury, *Budget Statement 2001-02*, Chapter 7, p. 7.1; VIC Department of Treasury and Finance, *Budget Statement 2001-02*, Appendix F, pp. 309-313; QLD Government, *State Budget 2002-03*, Budget Paper No. 3, p. 53; Government of WA, *2002-03 Budget*, Budget Paper No. 3, p. 162; Government of SA, *Budget Statement 2002-03*, Appendix F, pp. 7-8.

The TEATPS results in Table 14-4 are especially significant, as they provide some insight into how the inclusion of tax expenditure data might affect the main results obtained using the linear regression technique as presented in Chapter 12. For 2001-02 data, at least, it is observed that the inclusion of the TE data increases the relative benefit estimate in percentage and dollar terms. The Australian Treasury (2005: 13) observes, however, that "the addition of tax expenditures and direct expenditures will ... tend to overstate the impact on the fiscal balance", as exemplified by "certain income support benefits, pensions or allowances", in which direct expenditure "includes the full cost to government of the program", but "there is also an associated tax expenditure for the value of the income tax exemption to the recipient". The TEATPS values in Table 14-4 may therefore be less than fully accurate and meaningful, and hence need to be viewed with caution. Improved relative benefit estimates could be generated if government budgeting practices and government finance data were improved to more accurately

report tax expenditures, but the magnitudes of STL level tax expenditures, relative to TPS figures, as in Table 14-4 below, suggest that such inaccuracies are unlikely to be large enough to significantly affect the TPS relative benefit estimates in Chapters 11 to 13.

Table 14-4: Relative Benefit Estimated Using the LR Technique and Mainland State (5MS) Regression Set for Tax Expenditure Adjusted Total Public Sector Expenditure (TEATPS) in 2001-02

STU	TE (\$b)	TPS (\$b)	TEATPS = TPS + TE (\$b)
NSW	2.6876	45.745	48.433
VIC	2.7660	32.066	34.832
QLD	1.9874	28.885	30.872
WA	1.0750	16.601	17.676
SA	0.7756	11.485	12.261
TOTAL	9.292	134.782	144.074
Populations on 31 Dec 2001			
NSW	6.607706	6.607706	6.607706
VIC	4.838513	4.838513	4.838513
QLD	3.667852	3.667852	3.667852
WA	1.914196	1.914196	1.914196
SA	1.515979	1.515979	1.515979
TOTAL	18.544246	18.544246	18.544246
Regression Summary for $E = A + BP$ where E = STU Expenditure (TE, TPS and TEATPS [TPS + TE] in turn) and P = STU population, for just the Five Mainland States			
A	0.3497	3.3619	3.7115
p_A	0.1977	0.0982	0.0788
B	0.4068	6.3617	6.7685
p_B	0.0087	0.0005	0.0004
r^2	0.8842	0.9826	0.9854
$E_{5MS-total}$	9.292	134.782	144.074
$E_{5MS-reg}$	7.893	121.335	129.227
$EST = E_{5MS-total} - E_{5MS-reg}$	1.399	13.447	14.846
EST (%)	15.05	9.98	10.30

Further analysis of data for several years could be undertaken to clarify the impact of tax expenditure data upon relative benefit estimates, but this brief analysis for just 2001-02 indicates that any such impact is likely to be minimal, and may if anything lead to higher RB estimates for Unification (DNC and NCL) models.

Relative Benefit Estimates and Privatisation

Whereas the previous section examined the impact of differential levels of tax expenditures upon the relative benefit estimates presented in Chapters 11 to 13, this section similarly examines the extent to which different levels of privatisation across the eight STUs could impact upon relative benefit estimates.

This study has extensively used separate public and private sector expenditure categories and expenditure data and has hence relied upon the extent of like-with-like comparability of the eight STU public and private sectors. It has been acknowledged on numerous occasions that the ACT is a special case among the STUs because of the dominance of its public sector, and that some relative benefit estimates based on ACT data are less than reliable because of the ACT's uniqueness and associated data limitations. Privatisation is considered here because different levels of privatisation among the eight STUs provide another source of departure from like-with-like comparability across the STUs. It is possible, however, that privatisation has merely meant that some STU governments have gone from being payer-providers to payer-purchasers for services provided by privatised entities. If this is the case then differing levels of privatisation may have done little to diminish the like-with-like comparability of STU public and private sector expenditures. Further research could clarify these questions.

By the end of the 1990s, there had been close to \$100 billion worth of privatisations across the Commonwealth and State governments, and among the eight STUs, Victoria has experienced by far the greatest extent of privatisation. Walker and Walker (2000: 18; see also Carstairs 2002: 28-29, citing Moran 2000) observe that "since 1990, sales of GTEs [government trading enterprises] and other agencies owned by the Commonwealth totalled over \$48 billion", and that "equivalent sales by state governments were nearly \$47 billion", with Victoria's sales alone (mainly from electricity and gas) totalling "over \$31 billion".

Table 14-5 below employs data tabulated by Walker and Walker (2000: 20-23) to summarise the total value of privatisations by Commonwealth and State governments up until 2000.

Table 14-5: Privatisations by Commonwealth and State Governments Until the Year 2000

PPU	Privatisation Sale Proceeds (\$ million)	% of All Government Sales	% of State Government Sales	Sale Proceeds Per Capita (\$ per person)*	State Level Sale Proceeds Per Capita Relative to VIC = 100
Commonwealth	48,426	50.8	N/A	2544	N/A
NSW	3,120	3.3	6.7	484	7.29
VIC	31,265	32.8	66.8	6633	100.00
QLD	3,628	3.8	7.7	1027	15.49
WA	3,377	3.5	7.2	1814	27.34
SA	5,400	5.7	11.5	3597	54.23
TAS	42	0.0	0.1	89	1.34
Total of State Governments	46,832	49.2	100.0	2528	38.11
Total All Governments	95,258	100.0	N/A	5004	N/A
State Governments Besides VIC	15,567	16.3	33.2	1127	16.99
State Governments Besides VIC and SA	10,167	10.7	21.7	826	12.45

Sources of data as above include (as cited in Walker & Walker 2000: 23): Reserve Bank of Australia (1997, 1999) and the Commonwealth Office of Asset Sales and IT Outsourcing.

* Per capita figures are calculated using the 31 December 1999 populations in Table 6-3 in Chapter 6.

Walker and Walker (2000: 23) also note that the privatisations cited in Table 14-5 above refer "to the sale of government trading enterprises or business units, and [do] not include the sale of assets such as buildings, plant or equipment." So in terms of sale proceeds, STU level privatisations accounted for approximately half of the privatisations summarised in Table 14-5, and Victoria accounted for two-thirds of all State level privatisations. On a per capita basis, Victoria again stands out as by far the most extensively privatised State, with South Australia an equally clear second.

Privatisations have generally involved the sale to the private sector of public sector corporations (also referred to as government business enterprises [GBEs] or government trading enterprises [GTEs]), so the ongoing process of privatisation throughout the 1990s and since can to a large extent explain why the public sector corporations share of total public sector expenditures has declined over time, as shown in Table 7A-21 in Appendix 7A. The high levels of privatisation in VIC and SA can also explain the percentage figures in Tables 7A-5 and 7A-7 in Appendix 7A. In all four years considered, Victoria's public sector (described in terms of Public Final Demand [PubFD] in Appendix 7A) makes up the lowest percentage share of any STU economy (as given by Gross State Product in Table 7A-5 and by State Final Demand in Table 7A-7), except for 1999-00 when the SA figure falls below the VIC figure. It is also shown in Table 7A-21 that by the financial year of 2001-02, the public sector corporations percentage share of total public sector expenditures is lower in VIC and SA (both 16.4%) than in all other States besides NSW (15.9%), though the Territories, the ACT (3.6%) and NT (14.5%), have the lowest PSC percentage shares of TPS. The fact that Victoria in 2001-02 certainly doesn't stand out in terms of private sector corporations, however, suggests that Victoria's significant privatisation initiatives as reflected in Table 14-5, to some extent at least, may have merely brought Victoria more into line with NSW and other STUs in terms of public and private sector corporatisation. Benchmarking against NSW certainly formed a prominent basis of the *Project Victoria* initiatives of the Victorian government under Premier Kennett in the mid 1990s (see, for example, Moore 1996: 64-67) which included extensive public school closures, local government amalgamations, privatisation of local government roles, and privatisation generally.

Further research would be needed to clarify the extent to which differing levels of privatisation among the eight STUs might impact on the relative benefit estimates obtained in Chapters 11 to 13.

Australia's Industrial and Economic Geography

Economic, demographic and geographic data are used extensively by the Commonwealth Grants Commission to guide its processes of determining relativities and the levels of Commonwealth grants to the eight STUs, as described in Appendix 14A. Such data are also relevant to this present study, especially to assist in the interpretation of the relative benefit estimates presented in Chapters 11 to 13, and to help better understand Australia and its current eight STUs in terms of their current situation and future prospects under current or reformed government structures.

Appendix 14C provides detailed descriptions and comparisons of selected features of Australia's industrial and economic geography at both national and State-Territory levels, all based on ABS data, in terms of industry profiles, business and business employment levels across both public and private sectors, single-STU and multi-STU businesses, and bankruptcy levels, as indicators of industrial and economic strength over the 1998-99 to 2001-02 period which this study focuses on. Findings of particular significance are summarised below.

Industrial Profiles of the Eight STUs

In the financial year 2002-03:

- *Manufacturing and Property and Business Services* made the largest contributions to Australia-wide total factor income (11.7% each), with *Ownership of Dwellings* (9.3%), *Finance and Insurance* (7.7%), *Construction* (6.7%), *Health and Community Services* (6.3%), *Retail Trade* (5.7%), *Wholesale Trade* (5.5%) and *Mining* (5.2%) also contributing over 5.0%;
- *Agriculture, Forestry and Fishing* made up 2.9% of Australia's total factor income, 6.1% for TAS, 5.4% for SA, 4.2% for QLD, 3.1% for VIC, 2.9% for WA, 2.7% for NT, 1.7% for NSW, and 0.1% for the ACT;
- *Mining* made up 5.2% of Australia's total factor income, but 20.2% and 23.0% of the total factor incomes of WA and NT respectively, 7.7% for QLD, and less than 3.0% for the other five STUs; and
- *Manufacturing* made up 11.7% of Australia's total factor income, 14.7% for SA, 14.5% for VIC, 13.7% for TAS, 11.7% for NSW, 9.9% for QLD, 9.0% for WA, 3.6% for NT, and 1.6% for the ACT.

Among the STUs in 2001-02, on a per capita basis: Australia's largest agricultural producer was SA, followed by WA and then QLD; the largest mining producer was NT, followed closely by WA, with QLD a distant third; and the largest manufacturing producer was VIC, followed by SA.

Business Units and Business Employment Levels in September 1998

The most populous STUs – NSW and VIC – had significantly more private sector business units per capita and significantly more private sector business employment per capita than the other six STUs, and public sector employment levels significantly below the Australia-wide average and well below the levels of the other six STUs, in September 1998, hence suggesting that the NSW and VIC economies were more self-sustaining than the other STUs and less reliant upon their public sectors.³

In terms of public and private sector business employment, NSW, VIC and the ACT stood out from the other five STUs in significant respects in September 1998. Australia-wide, the private sector accounted for approximately 75% of all business employees and the public sector the remaining 25%, and NSW and VIC were the only two STUs with more than 75% of people employed in the private sector, and hence less than 25% in the public sector. In NSW and VIC combined, the private sector accounted for 80% of all business employees and the public sector 20%. In the six STUs besides NSW and VIC, the private sector accounted for just 64% of all business employees and the public sector 36%, although these figures would become 69% and 31% if the ACT were excluded. In the ACT, the private sector accounted for just 21% of all business employees and the public sector 79%. These ACT figures yet again reflect the ACT's role as national capital.

Some 20.5% of all business employees Australia-wide were working in the public sector at State-Territory or local government levels (the STL level as defined here) in September 1998. In each of NSW, VIC and the ACT, STL level public sectors accounted for at most 17% of all business employment, but in each of the other five STUs, at least 29% of business employees worked for State, Territory or local governments. In NSW and VIC combined, the STL level public sector accounted for just 17% of all business employees. In the six STUs besides NSW and VIC, the STL level public sector accounted for just 28% of all business employees, or 30% if the ACT were excluded.

New South Wales and Victoria were the only STUs above the September 1998 Australia-wide average in terms of (1) numbers of large business units (with 200 or more employees), (2) large business employees, and (3) large business sizes in terms of the average number of employees per large business unit. In VIC and NSW, there were 13,002 and 12,352 large business employees per 100,000 population respectively, with the third ranked STU being WA with just 6,200 large business employees per 100,000 people. This comparison very starkly illustrates the

difference between NSW and VIC on the one hand, and the other six STUs on the other. New South Wales and Victoria were also the only STUs below the Australia-wide average in terms of (1) numbers of STL level public sector large business units (again with 200 or more employees) and (2) STL level public sector large business employees. In VIC and NSW there were 4,673 and 5,236 people per 100,000 population respectively employed in large STL level public sector business units, with SA the third lowest STU on this measure with 5,538.

The above comparisons seem to very closely align with the RB estimates presented in Chapter 11 for the major public and private sector expenditure categories, and with the relativities and grant levels determined by the Commonwealth Grants Commission, as described earlier in this chapter (see especially Table 14-1) and in Appendix 14A. The privatisation patterns described in Table 14-5 above can also perhaps to some extent help explain some of the private sector business employment patterns observed above, especially the relatively high levels of private sector employment and low levels of STL level public sector employment in Victoria. Further research could clarify these connections.

Single-State and Multi-State Businesses

The following observations on Australia's single-State and multi-State businesses show that Australian businesses are largely confined to just single STUs and thus highlight the extent to which the STUs operate as separate economies:

- As at 30 October 2000, 98.0% of all Australian employing businesses (EBs) were *single-State employing businesses* (SSEBs) operating solely in one STU, and only 2.0% of all EBs were *multi-State employing businesses* (MSEBs) operating in more than one STU, although 42% of EBs with annual turnover of \$20 million or more were MSEBs. This concurs with the expectation that larger businesses are more likely to operate over larger markets and across State and Territory borders.
- About 59% of all MSEBs operated in just two STUs in 2000, 80% operated in four STUs or less, and only 8% operated in all eight STUs.
- Only 0.17% of all EBs operated in all eight STUs in 2000, but among EBs with estimated annual turnovers of \$20 million or more, 2.59% operated in all eight STUs.
- MSEBs whose main business location is NSW and VIC had business units in an average of 2.38 and 2.22 other STUs respectively, in 2002, whereas the corresponding figures for the other six STUs range from 1.98 for WA and the ACT down to 1.45 for NT.
- The ACT, NSW and VIC are the three STUs which had more MSEBs per 100,000 people than the Australia-wide average of 80.5, a result which seems to reflect population densities in border regions.

These SSEB and MSEB comparisons possibly provide at least some support for the border cost estimates calculated in Chapter 3 (based on the study by Shaw & Associates and various ABS

data). A future research project could combine these SSEB and MSEB comparisons with border cost analyses like that attempted in Chapter 3 in order to better assess the overall costs of Australia's STU borders, in terms of business compliance costs, opportunity costs and efficiency losses (as described in detail in Chapter 5), at levels ranging from individual business units through local and regional economies to the Australian economy as a whole.

Bankruptcy Levels

The NT, NSW, VIC and WA had the least bankruptcies on a per capita basis over the period 1998-99 to 2001-02, and the ACT, QLD and TAS had the most. These findings are again substantially consistent with the private sector relative benefit estimates established in Chapter 11 which indicated that WA, NSW and VIC had the strongest private sectors over the period 1998-99 to 2001-02 in terms of Gross Private Product (GPP) as defined here.

General Trends in Data Presented

The comparisons summarised above and presented in detail in Appendix 14C very substantially align with the results obtained in Chapters 11 to 13 – especially those in Chapter 11. Data presented confirm the private sector and overall economic strength of NSW, VIC and WA, and also confirm that the NSW and VIC economies are by far the least dependent upon their STL level public sectors for business activity and employment. These comparisons again highlight the ACT as a special case dominated by the presence of Commonwealth government agencies.

Conclusion

This chapter has shown that the relative benefit estimates presented in Chapters 11 to 13 almost certainly reflect Commonwealth Grants Commission methodologies to a large extent, and are unlikely to be affected to any appreciable extent by varying levels of tax expenditures and varying degrees of privatisation across the eight STUs.

Assessments of Australia's national and STU level industrial and economic geographies have shown that NSW, VIC and WA have generally displayed the greatest economic strength among the eight STUs in recent years, and that NSW and VIC are the least dependent upon their private sectors among the eight STUs, findings which again largely align with the relative benefit estimates established in Chapter 11.