

Estimating the Revenue Raising Capacities of the States and Territories and the Implications for the Equitable Distribution of GST Revenue

Peter Abelson

School of Economics, Sydney University

Abstract

The Commonwealth Grants Commission's recommended allocation of some \$45 billion of GST (VAT) revenue annually to the states and territories is heavily influenced by its estimate of their revenue raising capacity, which it argues is primarily a function of the value of a jurisdiction's tax bases. This paper argues that a jurisdiction's revenue raising capacity is primarily a function of the real household disposable income of residents after allowances for major cost of living differences, such as housing and journey to work costs, and tax exportation (the ability to tax non-resident income). Using this measure of revenue raising capacity we find that the CGC methodology significantly underestimates the real revenue capacity of the ACT and Victoria and significantly overestimates the capacity of Queensland and Western Australia. The paper provides numerical estimates of the differences. The paper concludes that the principles on which the CGC determines the distribution of billions of dollars of funds are flawed and should be reformed.

JEL H70, H73, H77

Key words GST revenue, revenue raising capacity

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1 Introduction

Under Commonwealth-State agreements, the Commonwealth Grants Commission (CGC) effectively determines the distribution of all GST funds (net of Commonwealth administrative expenses) to the states and territories.¹ In 2010-11 this amounted to a distribution of \$45 billion. This represents about 30% of the total recurrent revenues of the states and territories and has a major impact on state revenue and programs. Although the CGC is arguably the third most influential economic agency in Australia, after the Reserve Bank and the Treasury, its work receives little academic scrutiny.

The CGC's recommendations are based on the concept of fiscal equalisation between the states and territories and its assessments of the expenditure requirements and revenue raising capacities of the jurisdictions. As household welfare is a function of private and non-market goods as well as publicly provided goods it is not clear that equalisation of one element of the welfare function (publicly provided goods) is in practice either equitable or welfare enhancing. Nor is it necessarily efficient (Pincus, 2011). As we will see, this issue cannot be entirely ignored when we consider the relevance of cost-of-living differences to revenue capacity. However in this paper we work under the premise of fiscal equalisation. Given this framework, the paper examines how the CGC assesses the revenue raising capacity of the states and territories, other measures of revenue raising capacity and the implications for the distribution of GST revenue.

¹ GST denotes the Australian goods and services tax which is described in most countries as a value added tax.

Section 2 describes the CGC method for estimating a jurisdiction's revenue capacity, based principally on the size of tax bases, and the results. Section 3 critiques this and other measures of revenue capacity, including measures based on gross state product (GSP), disposable household income and tax exportation capacity. Section 4 provides an overview of GSP and household incomes (gross and disposable) and their implications for revenue capacity. Section 5 provides estimates of real household disposable income per capita in each state and territory allowing for differences in rental housing and journey to work costs. Drawing on these estimates for households plus an estimate of tax exportation capacity based on CGC work, Section 6 assesses the implications for the distribution of GST funds, which turn out to be considerable. There is a brief concluding section.

2 CGC Framework and Method for Estimating Revenue Capacity

The CGC (2010) defines fiscal equalisation to mean that “if states levied comparable taxes, then with their GST revenue they would have the same capacity to fund comparable services”. To this end, the CGC recommends GST grants per capita equal to the sum of assessed recurrent and capital expenses needed to achieve equal services in each jurisdiction less the sum of their revenue capacity to achieve these services and Commonwealth payments outside the GST system. Formally,

$$\text{Recommended GST revenue per capita} = (\text{ARE} + \text{ACE}) - (\text{ARC} + \text{ANL} + \text{ACP}) \quad (1)$$

where for each state and territory

ARE = assessed recurrent expenses per capita

ACE = assessed capital expenses per capita

ARC = assessed revenue capacity per capita

ANL = assessed net lending capacity per capita

ACP = assessed Commonwealth payments per capita

The CGC estimates each of these amounts for the most recent three years for which relevant data are available and takes the average outcome for these three years as the basis for recommending the current and immediate future distribution of GST revenues.

Table 1 shows the CGC's estimates for the five components of Equation 1 for each state and territory and the overall relativity using 2007-08 data drawn from the latest major CGC review (CGC, 2010). The year 2007-08 was the middle of the three years that determined the current relativities. The last row shows the actual relativities recommended for 2010-11. Under these recommendations, the Northern Territory (NT), South Australia (SA), Tasmania and ACT receive significantly more GST revenue per capita than the national average.

Insert Table 1

It is also clear from Table 1 that assessed revenue capacity is an important factor in determining the overall relativities. The four recipient states and territories (with relativities over 1.0) have the lowest assessed revenue capacities.

The CGC derives estimates of revenue capacity in three ways. The main CGC measure, which accounts for over half of estimated revenue capacity of the states and territories, is the value of the relevant tax base for each tax in each jurisdiction,

given state taxation policies. *The tax base is defined as an average of state taxation policies.* Most of the balance of the revenue capacity is estimated on a per capita basis. There is an additional allowance for the value of mineral production in each jurisdiction which now accounts for nearly 10% of state revenue per capita.

Table 2 summarises how the CGC estimates the tax base for the major state and territory taxes. For example, the tax base for the payroll tax is the gross earnings of private sector employees and public trading enterprises working in companies with payrolls over a certain threshold. The tax base for the land tax is the value of various categories of land excluding principal residence. The tax base for stamp duty is the value of dutiable transactions.

Insert Table 2

Table 3 shows the CGC's assessment of revenue capacity per tax instrument per capita and associated relativities in 2007-08. The total revenue figures vary slightly from those in Table 2 due to changes between the draft and final CGC 2010 reports. The final report does not provide the details for 2007-08.² Overall the CGC estimates that Western Australia (WA) and Queensland have the highest revenue raising capacities and Tasmania, the ACT and NT the lowest capacities.

Insert Table 3

² CGC (2010) provides revenue details for 2008-09, but for consistency through the whole paper I have used 2007-08 data where these are available.

3 Alternative Measures of Revenue Capacity

Revenue capacity refers to the relative ability of a jurisdiction to raise funds from its own revenue resources. As Barro (2002) notes, this capacity should reflect the resources on which the jurisdiction can legally draw not its decisions on how it actually raises revenue.

In this section I review four ways to measure this revenue capacity:

1. The tax base system adopted by the CGC and also used in Canada where it is known as the Representative Tax System (Barro, 2002),
2. Real disposable household income plus exported taxes (revenues that can be raised on non-resident households and businesses)
3. Per capita personal income (PCPI) which has been used in the United States,
4. A broad macroeconomic indicator of a jurisdiction's income such as GSP.

Starting with (1), the value of a state or territory's tax bases may sometimes be a reasonable proxy for a capacity to raise revenue. But this value is *not* a measure of capacity to pay and is often poorly correlated with capacity to pay. For example, the value of land is not necessarily correlated with household income. Incomes in Canberra are the highest in the country but land values are lower than in several other cities. Moreover, high land and property prices *increase* the cost of living and *reduce* a household's capacity to pay tax. By associating high land values with revenue capacity, the CGC is effectively taxing households that have high housing costs.

Likewise there is little correlation between the value of the payroll tax base and income. Because of the exemptions of governments including the Commonwealth and of all small and some medium sized businesses, the payroll tax base depends on the corporate structure (the presence of large private companies) in the respective state or territory economy. This is in no way a measure of either wage earnings or household income in a jurisdiction, with the ACT again a prime example.

The reality is that all taxes are borne ultimately by households (albeit some by non-resident households). The capacity of households to pay for state or territory provided goods depends on their real after-tax income. This is their gross income less income taxes and *after* adjustment for cost-of-living differences. Income here would include income from all earnings and savings from all sources including sources external to the jurisdiction and imputed rent net of interest and housing operating expenses. On the other hand, differences in real housing costs would be part of the cost of living differentials.

The burden of tax on households is most evident for taxes that are levied directly on them such as taxes on land owned by households, property transactions between households, insurance premiums and motor vehicles. There is little opportunity to shift these taxes. Thus in each case the capacity to raise tax revenue depends largely if not wholly on the capacity of the household to pay the tax. Certainly, the capacity to pay rates on land or taxes on insurance premiums or motor vehicles depends on the household's income, not on the value of the land, the insurance premium or the motor vehicle. These values are irrelevant considerations.

The Productivity Commission's (2008) report on the revenue raising capacity of local government discussed these issues in detail and comprehensively dismissed the idea that a local council's revenue capacity depended on the value of the land tax base. In the words of the Commission (p.49): "income is a more appropriate indicator of the fiscal capacity of a local government than the rateable value of land". And (p.69): "The best indicator of fiscal capacity is the aggregate after-tax income of the local community". This view is supported by the mainstream public finance literature. As Musgrave and Musgrave (1989, p.480) note: "A first approximation to fiscal capacity is given by per capita income".

Identifying the real burden of tax and hence capacity to pay is more complex when business bears the statutory incidence of a tax. It is a basic theorem of public finance (Rosen and Gayer, 2010; Abelson, 2008) that the real incidence of a tax depends on the relative elasticity of demand and supply for the taxed item rather than on the statutory incidence. Thus a general payroll tax levied on gross wage income payable by the employer has a similar impact on wages received by workers as an income tax levied on gross income payable by employees.

The issue is complicated when a tax, like the payroll tax in most states, is a partial (selective) tax on labour incomes. Here employers in the taxed sector may bear some of the costs of the tax because labour can escape to the untaxed sector. However, Abelson (2008) shows that a selective tax on payroll reduces the wage received in both the taxed and untaxed sector. In equilibrium, workers of similar skills receive the same after-tax wages in both sectors. Thus most of the burden of a selective payroll tax is also borne by labour, which overall is in relatively inelastic supply.

The impacts of taxes on intermediate goods, such as commercial land or vehicles, are borne initially by firms using the land or vehicles. However, these taxes are either passed on in higher prices to consumers or result in lower company profits and hence lower shareholder income. Either way, resident households bear most of the tax and household disposable income is again the real criterion of capacity to pay. Thus, *however taxes are levied, capacity to pay taxes depends principally on the real disposable income of resident households.*

The major exception to this principle is the capacity of jurisdictions to raise tax revenue from non-resident households and businesses, known as exported taxes. In Australia, unlike the United States where the states can utilise retail taxes, this is principally a capacity to tax corporate surpluses that accrue to non-residents. Returns to fixed (immobile) natural resources are especially suited to state taxation. In so far as non-residents derive income from land or natural resources, the value of the resources on which these returns are based are part of a state's fiscal capacity and this is appropriately included in a jurisdiction's fiscal capacity.

The capacity to tax mobile capital is more arguable. Most Australian jurisdictions make tax concessions in order to attract marginal external capital. If major corporates have a clear location preference, which limits the mobility of capital, it may be feasible (and not inefficient) to tax their surpluses via payrolls or land taxes, so that this would constitute extra revenue capacity. However it would be difficult to distinguish firms with inelastic location preferences from those with more elastic preferences and it would be hard to base a tax policy on this difference.

In summary, revenue capacity is based on the real income available to pay taxes. As Barro (2002, p.9) observes, the ability of a jurisdiction to pay for public services “depends ultimately on the overall purchasing power of its people as supplemented through tax exportation”. This is essentially the aggregate income of residents of the state or territory after income tax and modified for differences in the cost of living plus income from fixed resources accruing to non-residents that can be taxed.³ In effect this is option (2) of the four alternatives noted at the start of this section. By comparison, option (1), the tax base system, “has serious theoretical flaws” as a measure of fiscal capacity and produces distorted results (Barro, 2002).

There may however be practical problems with estimating both cost-of-living differentials and the capacity to tax exports. Thus a simpler capacity measure such as (3) or (4) above may be adopted instead. The PCPI measure, option (3), is simpler because it does not include cost-of-living allowances or exported taxes, but these are of course also important limitations. GSP, option (4), is limited because it omits resident income from external jurisdictions and does not clearly identify tax export capacity. Nor does it allow for Commonwealth taxation. However it is a practical option and appears to be a better index of fiscal capacity than the value of a jurisdiction’s tax base.

Accordingly, we examine below the implications of option (4) gross state product and related concepts such as disposable household income per capita and then

³ Arguably capacity to pay should also be standardised for differences in working hours since wage rates are in some ways a better measure of earning capacity than actual incomes. However at the state level (though not at city level) there are minor differences in average hours worked (ABS 6291.0.55.003, Table E03).

consider the implications of the preferred option (2) — household disposable income plus exported taxes.

4 Gross State Product and Disposable Household Income per Capita

Table 4 shows three sets of statistics for each jurisdiction in 2007-08: GSP per capita; gross household income per capita; and estimated disposable household income per capita. GSP includes not only wages and salaries but also gross operating surplus, income of unincorporated businesses and taxes less subsidies on production and imports. It also includes household ownership of dwellings, which is estimated imputed rents less operating costs. These costs include rates and repairs but exclude interest and mortgage repayments as these do not represent a current production activity.

Gross household income is the total income, in cash or in kind, received by persons normally resident in the jurisdiction. The income includes returns for productive activity, gross operating surplus on dwellings owned by persons, property income receivable and transfers such as social assistance benefits and non-life insurance claims. The income from dwellings includes imputed rent but in this case takes out interest payments as well as rates and repairs. The income includes income from other jurisdictions and other countries.⁴ Thus on several counts this is a fuller and more accurate measure of resident household than is GSP.

⁴ The ABS obtains these estimates from the Australian Taxation Office.

Overall gross household income per capita is 83.6 per cent of GSP per capita. However the ratio of household income per capita to GSP per capita is much lower in Western Australia and the Northern Territory because of outside ownership of resources. On the other hand, household income per capita in the ACT is almost as high as GSP per capita because ACT households receive substantial income from assets outside the ACT.

Gross disposable household per capita is gross household income less income tax, other current taxes on income (such as Medicare levy), consumer debt interest and interest payable by unincorporated enterprise, net non-life insurance premiums and other current transfers payable by households. Across Australia gross disposable income is 74 per cent of gross income, ranging from 71 per cent in WA up to 79 per cent in the ACT.

Table 5 provides an insight into some reasons for the differences between GSP per capita and the household income indices. The main factor is corporate profits. Gross operating surplus is a much higher proportion of GSP in WA and NT than elsewhere. It is also a relatively high proportion of GSP in Queensland. On the other hand, net taxes on production are a low proportion of GSP in both WA and NT. Not surprisingly corporate profits and unincorporated income are a small proportion of GSP in the ACT.

The dollars amounts shown in Table 4 are converted to index numbers in Table 6. The two most significant columns are those for GSP per capita and disposable household income per capita. On both these measures, the CGC greatly

underestimates the revenue capacity of the ACT and NT and overestimates the capacity of Queensland.

Insert Tables 4, 5 and 6

5 Real Household Disposable Income per Capita in the States and Territories

Ideally real disposable income per capita in each jurisdiction would be estimated by applying officially estimated cost-of-living differences to the estimates of disposable household income per capita cited above. However the Australian Bureau of Statistics does not publish or indeed even estimate these cost-of-living differences.⁵ Given the lack of such general data we have focused on what are likely to be the two most important differences—housing and journey to work costs.

Housing costs account for between 25% and 30% of household expenditures for many households and clearly vary between jurisdictions. However there are several complications in estimating housing costs. One is whether the imputed rent of owner occupiers is a cost as well as income. If the housing were everywhere of similar quality, then higher prices would reflect higher costs for some reason and it would be reasonable to treat higher imputed rents as costs. In fact, as will be seen, higher housing expenditures are often associated not with more or higher quality housing but actually with inferior housing. But this does not make any allowance for

⁵ In informal discussion ABS officials advised the writer that the Bureau had considered trying to estimate cost of living differences in the major cities but not proceeded because of both conceptual difficulties (in determining appropriate baskets of goods) and practical difficulties in terms of sample size.

environmental differentials that may also influence house prices. There are also practical problems with extracting imputed rents as the published data provides net housing income or costs and does not break this down into components. Therefore in this exercise we do not make any deductions against imputed rent other than those in the ABS estimates of disposable household income. We simply net out the cost of housing renters against household income safe on the supported assumption that higher rents do not imply better quality housing and .

Commuting expenditures have long been regarded as defensive or intermediate goods and on these grounds Nordhaus and Tobin (1973) in an oft cited paper argued that they should not be included in estimates of GDP or household income. As an input to earnings they should also not be viewed as part of a jurisdiction's taxable capacity. While some households choose to travel further to work, if they chose to reduce commuting costs they would pay more for housing. Given the relationship between housing prices and commuting costs it is logical to include both.

Of course from a welfare perspective, it would also be appropriate to count travel time as a cost of earnings and indeed to allow for any differences in working hours per annum as well. However, as we observed at the start, the CGC is interested only in fiscal equalisation and not in welfare equalisation and so we do not make any allowances here for differences in travel times or in working hours.

Housing costs

For completeness, Table 7 shows the weekly costs per household for owners as well as for renters by jurisdiction in 2005-06 as estimated by the ABS (2007). Table 8 shows estimated average housing costs per annum per household and per capita by jurisdiction in 2007-08 housing prices. This allows for an 8.8 per cent increase in housing costs between 2005-06 and 2007-08 (ABS, Cat. 6401.0). There is no allowance for Commonwealth rent assistance. Table 8 also shows some key demographic and housing quality information for each state.

Insert Tables 7 and 8

As shown in Table 8, housing costs per household and per capita were highest in NSW and the ACT. The latter statistic reflects the absence of low priced regional or rural housing, the high proportion of owners with mortgages and the quality of the housing. The latter two may be viewed as choice variables.

Importantly, these costs do **not** account for differences in housing quality around Australia. Housing quality, as measured by average number of bedrooms dwelling and average number of bedrooms per capita, was highest in the highest income jurisdictions (ACT and WA). On the other hand, NSW not only had highest housing costs, it also had low housing quality with the highest proportion of units and the second lowest number of bedrooms per capita (after NT). Ideally housing costs across jurisdictions would be standardised for quality, but this is beyond the scope of this paper.

Journey-to-work costs

Out-of pocket commuting costs depend on the mode of travel. In this paper, estimated JTW costs are based on bus travel which is generally available and a low cost form of travel.

To estimate these commuting costs, we assume an average journey length of 16 km in the large cities (Sydney and Melbourne), 9 km in the other state capitals, and 5 km in the regions. These are inevitably approximations given that we have been able to find information only for Sydney and Brisbane.⁶ Drawing on IPART (2009), the bus fares in 2008 for each of these trip lengths were about \$5.00, \$3.50 and \$2.50 respectively. Allowing 400 commuting trips per annum, this translates into average annual out-of-pocket commuting costs of \$2000, \$1400 and \$1000 per annum per worker respectively.

Table 9 shows the estimated cost per worker per jurisdiction, weighted for metropolitan and other areas, which are then converted to a per capita basis allowing for non-workers. Journey-to-work costs are lowest in NT, Tasmania and SA. They are highest in NSW, Victoria and the ACT (the latter because of the absence of non-metropolitan population and jobs).

Insert Table 9

Real household income by jurisdiction

⁶ The average JTW distance in Sydney is 16 km (source: Transport Data Centre, 2002, p.35, *2006 Household Travel Survey*). The average travel distance in Brisbane is 9 km (source: Queensland Transport Main Roads, *South East Queensland Travel Survey - Fast Facts*).

Table 10 shows estimated real household disposable income after allowing *only* for rental housing costs and commuting out-of-pocket costs per capita. Real income is highest in the ACT with an index of 1.645 followed a long way behind by NT with an index of 1.068 compared with an Australian average of 1.000. The jurisdictions with the lowest real income are Queensland, Tasmania and SA with indices of 0.902, 0.916 and 0.934 respectively.

Insert Table 10

6 Implications of Real Measures of Revenue Capacity

In order to reach a final measure of revenue capacity per jurisdiction, we need to add on a measure of tax exportation capacity. In lieu of our or any other independent measure of this capacity, we adopt the CGC's estimate of the revenue capacity related to mineral production. Arguably, mineral profits would be a better measure of taxable capacity than the value of mineral production (which is the CGC's measure of revenue capacity), but we do not have data on mineral profits by jurisdiction.

Table 11 provides our summary on revenue capacity and relativities. First we apply our household relativities to the national average state tax revenue per capita for 2007-08 (namely \$3750). We then add on the CGC's estimate of mining revenue per capita to obtain our estimate of total revenue capacity per capita per jurisdiction and

the related relativity. The final row shows the CGC's estimated relativity for the same period.

Insert Table 11

Table 12 summarises the dollar differences per capita and in total per jurisdiction between our estimates and the CGC estimates. A negative figure implies that the CGC underestimates revenue capacity. For a jurisdiction it shows the amount by which that jurisdiction's revenue raising capacity has been underestimated. Positive results signify that the CGC has overestimated the revenue raising capacity of the jurisdiction.

Insert Table 12

This paper finds that the CGC methodology significantly underestimates the real revenue raising capacity of the ACT and Victoria. It also underestimates the capacity of NT, South Australia and Tasmania. On the other hand, the CGC greatly overestimates the real revenue raising capacity of Queensland and WA.

Specifically, we find that the CGC methodology underestimates ACT's annual revenue raising capacity by over a billion dollars and Victorian capacity by some \$800 million. On the other hand, the CGC overestimates Queensland's revenue raising capacity by over two billion dollars and WA capacity by over half a billion dollars.

7 Conclusions

In this paper I have argued that the revenue raising capacity of the states and territories should be measured principally by disposable household income after allowances for major differences in the cost of living. This is likely to be differences in housing and journey to work costs. In addition, revenue raising capacity is augmented in so far as jurisdictions can tax the profits from fixed assets owned by non-resident corporations, which is mainly fixed mineral resources but could also include capital invested in commercial property.

On the other hand, the CGC determines fiscal capacity as a function principally of the estimated values of the tax bases. This paper has argued that this is a fundamentally flawed approach and produces flawed conclusions. This is supported by a common sense test. Whereas average disposable household income in the ACT is far higher than in any other state and territory and over 60% higher than the Australian average, the CGC concludes that that the ACT has only 89% of the average Australian capacity to raise revenue. This extraordinary conclusion suggests that something is seriously amiss with the CGC's calculation method.

Using our measure of revenue raising capacity, the estimated per capita relativities differ significantly from the CGC's relativities. We find that the CGC methodology significantly underestimates the real per capita fiscal capacity of the ACT and Victoria. On the other hand, the CGC greatly overestimates the real per capita financial capacity of Queensland and WA.

It is recognised that these findings are based on limited data with regards both to cost of living differentials and tax exportation capacity and that further work on these issues is appropriate. Nevertheless the estimated orders of magnitude in this paper (running into billion dollar differentials) are considered reasonable. More importantly, the principles on which the CGC determines the distribution of billions of dollars of funds to the states and territories are fundamentally in error and should be reformed.

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Table 1 CGC recommended per capita relativities for 2007-08 and 2010-11 (\$s)

	NSW	Vic	QLD	WA	SA	Tas	ACT	NT	Average
Assessed recurrent expenses	7277	6938	7470	7908	7574	8004	7183	15652	7418
+ assessed investment	336	338	506	528	303	257	226	1038	391
- assessed revenue capacity	3995	3858	4387	5379	3543	3398	3725	3871	4125
- assessed net lending capacity	227	202	168	165	235	251	215	172	203
- Commonwealth payments	1470	1419	1532	1502	1555	1528	1357	2404	1486
Assessed share of GST revenue	1922	1798	1889	1392	2544	3085	2113	10243	1993
Illustrated relativity for 2007-08	0.964	0.902	0.948	0.698	1.276	1.547	1.060	5.138	1.000
Recommended relativity 2010-11 ^a	0.952	0.940	0.913	0.683	1.285	1.621	1.153	5.074	1.000

(a) Average of estimated relativities 2006-07 to 2008-09,

Sources: CGC, *Report on GST Revenue Sharing Relativities—2010 Review*.

Table 2 Revenue base for major state and territory taxes

Tax	Revenue base	Comments / qualifications
Payroll tax	Gross income of employees	Gross earnings of private sector employees and public trading enterprises above a company threshold
Land tax	Value of residential, commercial and industrial land	Excludes value of land for principal residences
Stamp duty	Value of household and commercial transactions that attract stamp duty	Mainly real property transactions
Insurance taxes	Premiums collected on general, life and CTP policies	Excludes workers compensation and revenues for fire/emergency services
Motor taxes	Value of private and commercial vehicles	
Mining taxes	Value of mining production	Proxy for tax on mining resources
Other taxes (e.g. gambling taxes)	Estimated on per capita basis	The per capita criterion accounts for about 42% of assessed revenue capacity.

Source: CGC, *Report on GST Revenue Sharing Relativities 2010 Review*.

Table 3 CGC assessment of revenue capacity per capita in 2007-08 (\$ per capita)

	NSW	Vic	QLD	WA	SA	Tas	ACT	NT	Average
Payroll tax	824	775	661	829	627	531	635	604	753
Land tax	238	196	210	300	125	68	182	84	213
Stamp duty on conveyances	610	594	894	811	461	448	673	449	668
Insurance taxes	135	115	109	118	109	90	85	94	119
Motor taxes	285	313	336	399	305	316	261	278	315
Total of above taxes	2092	1992	2211	2456	1627	1452	1837	1510	2068
Mining revenue	110	21	341	986	113	93	0	452	224
Other revenue sources	1682	1682	1682	1682	1682	1682	1682	1682	1682
Total rev. capacity /capita	3884	3696	4234	5124	3422	3227	3519	3644	3974
Total revenue relativities	0.977	0.930	1.065	1.290	0.861	0.812	0.885	0.917	1.000

Source: CGC, *Draft Report on State Revenue Sharing Relativity 2010 Review*.

Table 4 GSP and household income per capita in 2007-08 (\$s)

	GSP per capita	Gross household income per capita	Disposable household income per capita
NSW	54,639	48,040	35,127
Victoria	53,521	47,043	35,326
Queensland	53,402	42,698	31,350
South Australia	47,434	42,723	32,180
Western Australia	74,527	49,866	35,258
Tasmania	44,211	40,391	31,311
Northern Territory	71,333	45,897	36,620
ACT	71,147	69,893	55,479
Australia	55,771	46,663	34,569

Source: ABS, 2007-08, *Australian National Accounts, State Accounts*, Cat. No.5220.0.

Table 6 GSP and household income per capita in 2007-08 in index numbers

	GSP per capita	Gross household income per capita	Disposable household income per capita	CGC estimated revenue capacities
NSW	98.0	103.0	101.6	0.977
Victoria	96.0	100.8	102.2	0.930
Queensland	95.8	91.5	90.7	1.065
South Australia	85.1	91.6	93.1	0.861
Western Australia	133.6	106.9	102.0	1.290
Tasmania	79.2	86.6	90.6	0.812
Northern Territory	127.9	98.4	105.9	0.917
ACT	127.6	149.8	160.5	0.885
Australia	100.0	100.0	100.0	1.000

Source: ABS, 2007-08, *Australian National Accounts, State Accounts*, Cat. No.5220.0.

Table 5 GSP by income components in 2007-08 (%)

	Employee compensation	Gross operating surplus	Gross mixed income	Net taxes on production
NSW	52.4	29.9	7.0	10.9
Victoria	50.7	28.6	8.9	11.5
Queensland	48.0	35.3	7.4	9.6
South Australia	49.9	29.1	9.1	12.1
Western Australia	39.2	44.4	8.4	7.6
Tasmania	48.6	28.9	9.3	10.7
Northern Territory	40.7	46.7	4.8	6.9
ACT	63.9	22.4	4.8	9.2
Australia	49.2	32.6	7.8	10.4

Source: ABS, 2007-08, *Australian National Accounts, State Accounts*, Cat. No.5220.0.

NOTE TABLE 5 COMES BEFORE TABLE 6 IN THE TEXT

Table 7 Housing costs per household per week in 2005-06

	NSW	Vic	QLD	WA	SA	Tas	ACT	NT	Average
Owners									
Without mortgage	29	31	30	24	28	24	31	32	29
With mortgage	405	309	326	322	258	232	343	276	338
Renters									
Public housing	105	109	109	81	87	81	104	86	100
Private landlord	258	203	223	180	186	156	280	248	223
All renters	227	188	204	162	156	138	228	180	199
Average all housing	213	168	186	179	145	123	221	187	185

Source: ABS, 2007, *Housing Occupancy and Cost*, Cat: 4130.0.

Table 8 Housing costs per annum in 2007-08 and other housing data in 2005-06

	Unit	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust.
Housing cost										
Average cost per household	\$	11076	8736	9672	7540	9308	6396	9724	11492	9620
Average cost per capita	\$	4347	3521	3828	3177	3820	2687	2684	4576	3859
Demographics										
No. of households	('000)	2570	1988	1545	638	804	200	53	129	7962
Population	('000)	6549	4932	3904	1514	1959	476	192	324	19850
Housing quality / size										
Average persons / household	No.	2.60	2.50	2.51	2.36	2.42	2.39	2.83	2.49	2.51
Average bedrooms / dwelling	No.	3.05	3.01	3.1	2.92	3.21	2.96	2.87	3.27	3.06
Average bedrooms / person	No.	1.17	1.20	1.24	1.24	1.33	1.24	1.01	1.31	1.22
Percentage of flats/units	%	15.5	9.3	8.9	6.3	6.1	6.9	7.9	7.6	10.6
Home ownership										
Owner without mortgage	%	30.5	34.8	33.1	33.7	28.9	36.1	17.7	27.3	32.1
Owner with mortgage	%	35.9	35.6	34.9	34.6	41.9	35.8	39.6	42.5	36.5
Total home ownership	%	66.4	70.9	68.0	68.3	70.8	71.9	59.3	69.8	68.6
Total renters	%	33.6	29.1	32.0	31.7	29.2	28.1	40.7	30.2	31.2

Source: ABS, *Housing Occupancy and Cost*, Cat: 4130.0.

Table 9 Estimated costs of journey to work (JTW) per worker and per capita per jurisdiction

Region	2007 Cost of fares	Population No	Workers by region %	Weighted average cost \$ / annum	Workforce as % population %	Annual cost per capita in 2007 \$ /annum
Sydney	2000	4,284,379	63	1628	48	789
Rest of NSW	1000	2,532,803	37			
Melbourne	2000	3,744,373	73	1730	50	862
Rest of Victoria	1000	1,383,937	27			
Brisbane	1400	1,820,400	44	1178	51	599
Rest of QLD	1000	2,271,146	56			
Perth	1400	1,476,143	72	1287	52	671
Rest of WA	1000	582,902	28			
Adelaide	1400	1,146,119	73	1292	48	626
Rest of SA	1000	422,085	27			
ACT	1400	334,225	100	1400	56	782
Tasmania	1400	489,922	100	1400	46	637
Northern Territory	1000	210,674	100	1000	48	481
Australia		20,699,108			50	

Table 10 **Average real income per capita per state and territory in 2007-08**

State / territory	Disposable income per capita	Rental housing costs per capita ^a	Commuting costs per capita	Real income per capita	Real income per capita
	\$	\$	\$	\$	Index
ACT	55,479	1272	782	53,425	1.645
NT	36,620	1449	481	34,690	1.068
Vic	35,326	1248	862	33,216	1.023
WA	35,258,	1058	671	33,529	1.033
NSW	35,127	1693	789	32,645	1.005
SA	32,180	1224	626	30,330	0.934
Tas	31,311	922	637	29,752	0.916
Qld	31,350	1462	599	29,289	0.902
Aust.	34,569	1418	681	32,470	1.000

(a) No allowance is made for difference in housing stock or size.

Table 11 Assessed revenue capacity per capita as per 2007-08 (\$)

	NSW	Vic	QLD	WA	SA	Tas	ACT	NT	Average
Real per capita relativities	1.005	1.023	0.902	1.033	0.934	0.916	1.645	1.068	1.000
Total of household taxes	3769	3836	3383	3874	3503	3435	6169	4005	3750
Plus mining revenue	110	21	341	986	113	93	0	452	224
Total rev. capacity /capita	3879	3857	3724	4860	3616	3528	6169	4457	3974
Final per capita relativity	0.976	0.971	0.937	1.223	0.910	0.888	1.552	1.122	1.000
CGC per capita relativity	0.977	0.930	1.065	1.290	0.861	0.812	0.885	0.917	1.000

Table 12 Financial implications of our estimates of revenue capacity compared with CGC

	Unit	NSW	Vic	QLD	WA	SA	Tas	ACT	NT
Differences per capita	\$	+5	-161	+511	+264	-194	-301	-2650	-813
Differences per jurisdiction	\$m	+35	-827	+2089	+544	-303	-100	-1298	-176