



Australian Government

The Treasury

**SUBMISSION TO THE GST DISTRIBUTION
REVIEW**

OCTOBER 2011

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PURPOSE

The purpose of this submission is to outline research and analysis that Treasury has conducted into Australia's horizontal fiscal equalisation (HFE) system in the context of the GST Distribution Review (the review). Views expressed in this submission are those of the Treasury, not necessarily the Australian Government, which will respond to the final report of the review.

OVERVIEW

The Australian system of HFE has both supporters and critics across governments and academia. The workings of the system are not highly visible in the broader community, notwithstanding that the results of the system influence the provision of key services in which the public is keenly interested.

The review will provide all interested parties with the opportunity to have an open discussion about the advantages and disadvantages of the current system, and allow a systematic examination of possible reform options.

The Treasury submission to the review is presented in four parts, as follows:

1. Introduction and context: setting out the features of the current HFE system, and the expected long term economic context in which the system will operate.
2. State and Territory (State) differences within the Australian Federation: focusing on key points of difference that have an impact on GST shares.
3. Assessment of the impact of the current system: against the review criteria of efficiency, equity, simplicity, and predictability and stability.
4. Discussion of potential reform options: based on analysis undertaken in part three.

EXECUTIVE SUMMARY

The terms of reference for the GST Distribution Review emphasise that the long-standing practice of equalisation between the States has served Australia well. In addition, the terms of reference indicate that the GST will continue to be distributed to the States as untied payments on the basis of equalising payments to the States, consistent with the principle that jurisdictions should have equal capacity to provide infrastructure and services to their citizens.

The main messages of the submission are identified as ‘key points’ throughout the text, which are introduced and summarised below.

Part one outlines Australia’s current federal financial framework, including the high levels of vertical fiscal imbalance and the key features of the current form of HFE.

- GST revenue makes up about half of all Commonwealth grants to the States. Analysis of the distribution of total Commonwealth grants reveals that actual shares of total Commonwealth assistance are quite different to State shares of GST revenue.

Key point 1: Overall, although some States receive less than an equal per capita (EPC) share of GST, if all Commonwealth payments are considered, shares of total Commonwealth funding are much closer to EPC. For example, in 2011-12 Western Australia is expected to receive 72 per cent of an equal population share of GST, however if all Commonwealth payments (including GST) are taken into account it is expected to receive 95 per cent of an equal population share.

Part one also outlines the complex mix of long-term trends that will have significant impacts on the structure of the Australian economy and on the wellbeing of current and future Australians. Australia’s system of HFE needs to ensure that Australia is best placed to respond to these challenges.

Part two illustrates that the population composition and resource endowment shares of the States are quite diverse. This makes a case for distributing GST on a different basis to EPC, and highlights that States will be affected differently by the long-term trends identified in part one and short-term economic volatility.

Key point 2: HFE shares the benefits of the resources boom with States that do not benefit as directly from the boom as those States with large natural resource endowments. HFE also acts as a form of insurance (albeit with a lag) for States that are benefiting from the strong demand for Australia’s non-rural commodities, but that are relatively more exposed if those conditions change rapidly or unexpectedly.

Part three assesses HFE against the criteria set out in the Review’s Terms of Reference of efficiency, equity, simplicity, and predictability and stability.

The efficiency of HFE is analysed in two parts, the general, theoretical efficiency effects of engaging or not engaging in HFE within a Federation and the particular efficiency effects of Australia’s current form of HFE.

- There are aspects of HFE that may increase or decrease economic efficiency when considered at the general, theoretical level. For example, redistributing location specific rents such as mineral royalties is expected to improve economic efficiency, while compensating States for the consequences of poor economic policy decisions may decrease economic efficiency.
- The efficiency effects of Australia’s current form of HFE are then considered in relation to their potential impact on state government decisions to realise efficiencies in service delivery or adjust tax policy.

Key point 3: The averaging approach currently adopted by the Commonwealth Grants Commission (CGC) results in relatively small impacts on States that realise efficiency gains in government expenditure, and in some cases, there is an added incentive to improve efficiency.

Key point 4: HFE is one of many issues influencing state tax reform, and should be viewed within this environment. The averaging approach currently adopted by the CGC results in relatively small impacts on States that engage in tax reform. Additionally, efficiency gains associated with the reforms flow to the reforming States.

The strength of any potential disincentive for economic reform will depend on the relative importance that individual State governments place on their GST share in comparison to other considerations. It seems unlikely that there are a large number of unambiguously efficiency enhancing reforms for which HFE is the marginal factor that is dissuading governments from pursuing reform. This review provides an opportunity for governments and other participants to identify any efficiency enhancing reforms which have not proceeded due to HFE.

Key point 5: Overall, there are some HFE effects that discourage efficiency to a greater or lesser extent, and therefore there may be a case for modest reforms in order to mitigate those effects. However, there does not seem to be an efficiency case for radical reform of the HFE system. Further, impacts for individual States are generally situation-dependent.

Equity, as defined and pursued through the HFE system, is examined with a view to discerning whether the achievement of full equalisation of State fiscal capacities is justified, and whether this objective could be better balanced against the other review criteria.

Key point 6: In aggregate, the CGC assessment of State needs appear to closely mirror State expenses, suggesting that the objective of equalising State fiscal capacity is being met to a high degree of accuracy on the expenditure side. However, there are differences between actual State expenditure in sectors, and the amount of funding provided for those sectors through the HFE process. This is a design feature of the current form of HFE and reflects the role of State governments in setting policy.

Key point 7: Equalising State fiscal capacity does not, and is unlikely to lead to, equalisation of individual outcomes. This raises the question as to what role, if any, HFE should play in addressing entrenched disadvantage.

Key point 8: The current system places a premium on inter-state equity, and seeks comprehensive HFE to that end. Perfect individual equity cannot be achieved by HFE alone, and therefore there may be room for reform of the system that seeks to balance equity more evenly against other policy priorities.

Simplicity was a major focus of the CGC's 2010 Methodology Review and is analysed in the context of the current form of HFE.

Key point 9: Within the bounds of the current system, the CGC appears to have found a good balance between simplicity and accuracy, at least in terms of the number of assessments performed. The majority of assessments are material for most States, with the exception of New South Wales and Queensland, which have amongst the largest influence on the average. For revenue assessments, there is likely to be room for further simplification.

The predictability and stability of GST revenue is considered in comparison to the largest own-source taxes levied by the States. The 2008 reforms to Federal Financial Relations which gave greater funding certainty to the States through the creation of National Specific Purpose payments are also highlighted.

Key point 10: Analysis of GST payments to the States suggests that as a source of revenue, GST payments exhibit similar variability to major State own-source tax revenues; including when changes in GST relativities are taken into account. Further, reforms to Commonwealth-State financial relations over the past several years have provided the States with significant additional certainty regarding future Commonwealth funding.

The key conclusion from Part three is that there are efficiency arguments both for and against HFE. Where potentially efficiency reducing distortions are brought about by the HFE system, they are likely to have a small overall effect, and therefore do not provide a basis for radical reform. Nevertheless, potentially efficiency reducing distortions do exist at the margin. There may therefore be room for reform of the system that seeks to ameliorate the potential effects of these efficiency reducing distortions.

In light of this conclusion, part four briefly outlines some of the benefits and costs of various reform options.

1. INTRODUCTION TO HORIZONTAL FISCAL EQUALISATION AND THE LONG TERM ECONOMIC CONTEXT

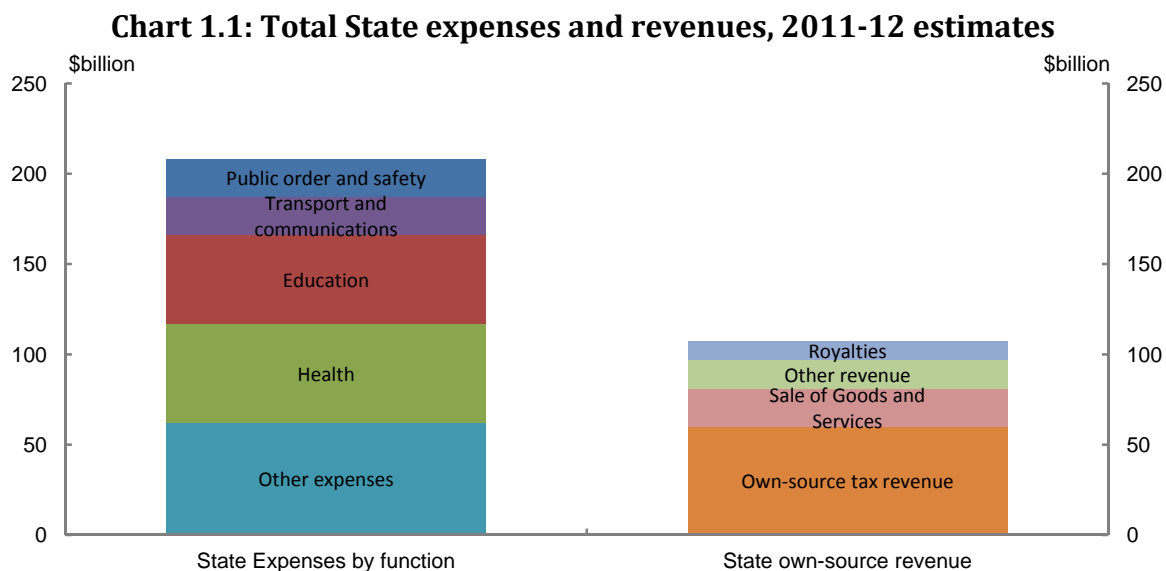
Australia’s federal financial relations are characterised by two broad features:

- the large expenditure responsibilities of the States relative to their revenue capacities means that they rely on transfers from the Commonwealth to finance their activities — referred to as vertical fiscal imbalance (VFI); and
- the differing capacities of the States to raise revenue and deliver services — referred to as horizontal fiscal imbalance.

Vertical fiscal imbalance

Vertical fiscal imbalance is common to most, if not all federal systems of government, including Australia. It results when a level of government has expenditure functions that are not wholly financed through its own assigned tax bases. Since Federation, the Commonwealth has collected more revenue than it needs to fund its service delivery responsibilities, however the high level of VFI in Australia can mainly be traced back to World War II, when the Commonwealth took control of income taxation. VFI increased further following the introduction of the GST in 2000, when the States agreed to abolish a number of inefficient State taxes, reducing their own source revenue and substituting GST revenue grants from the Commonwealth.

Chart 1.1 shows the main expenses of the States compared to their main own sources of revenue. The resulting difference is the overall level of VFI in Australia. As States have different abilities to raise revenue and different expenditure needs, the level of VFI is different for individual States (this is discussed further below).



Source: 2011-12 State Budgets

It is difficult to make the case that VFI is necessarily good or bad in and of itself. More important are the underlying arrangements and whether they give rise to inefficiencies. In Australia, following 2008 reforms to federal financial relations, the Commonwealth covers the State funding gap largely through untied grants, or grants with very limited conditions. It can be argued that this system allows the Federation to take

advantage of the principle of subsidiarity in service delivery, as well as the efficiency and macroeconomic stability advantages of having a centralised, nationally consistent income and consumption taxation system.

The Commonwealth's grants are either payments for specific purposes or general revenue assistance.

Payments for Specific Purposes

The Commonwealth supports the States' efforts in delivering services in the major service delivery sectors through payments for specific purposes, made up of National Specific Purpose Payments (National SPPs) and National Partnership payments (NP payments). The National SPPs are to be distributed among the States in accordance with population shares based on the Australian Statistician's determination of States' population shares as at 31 December of that year.¹

Further details on these payments can be found in Appendix A.

General Revenue Assistance

General revenue assistance is available to the States to spend according to their own budget priorities, and is therefore more akin to state own source revenue. The majority of general revenue assistance paid to the States is made up of the GST revenue, distributed to the states in accordance with the principles of HFE, discussed further below.

Horizontal fiscal equalisation

The objective of HFE is currently for all States to have the same capacity to provide services at the same standard to people in like circumstances, if each made the same effort to exploit its revenue bases. This is referred to as full equalisation, as it is intended to fully equalise the fiscal capacities of the States across all major areas of revenue and expenditure (including infrastructure investment). The definition used by the CGC in its 2010 Methodology Review and 2011 Update is:

'State governments should receive funding from the pool of goods and services tax revenue such that, after allowing for material factors affecting revenues and expenditures, each would have the fiscal capacity to provide services and the associated infrastructure at the same standard, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency.'²

The current form of HFE does not guarantee that the States will provide a uniform standard of service: its aim is to equalise the fiscal capacity of each State to do so, while leaving each State free to determine the standard of service provision.

As noted in the GST Distribution Review Issues Paper (Issues Paper), Australia's system of HFE has steadily evolved since Federation, culminating in the current system of full HFE where both revenue and expenditure capacities are equalised. The practice of equalising revenue capacities and/or expenditure capacities between the States in a federation is common, although no other federation pursues full HFE.

1 In recognition that an immediate shift to equal per capita shares may have implications for State allocations, an equal per capita distribution is being phased in over five years from 2009-10. The National schools SPP is distributed on the basis of school enrolments.

2 Commonwealth Grants Commission (CGC) 2011. *Report on GST Revenue Sharing Relativities - 2011 Update*, Canberra. pp 31.

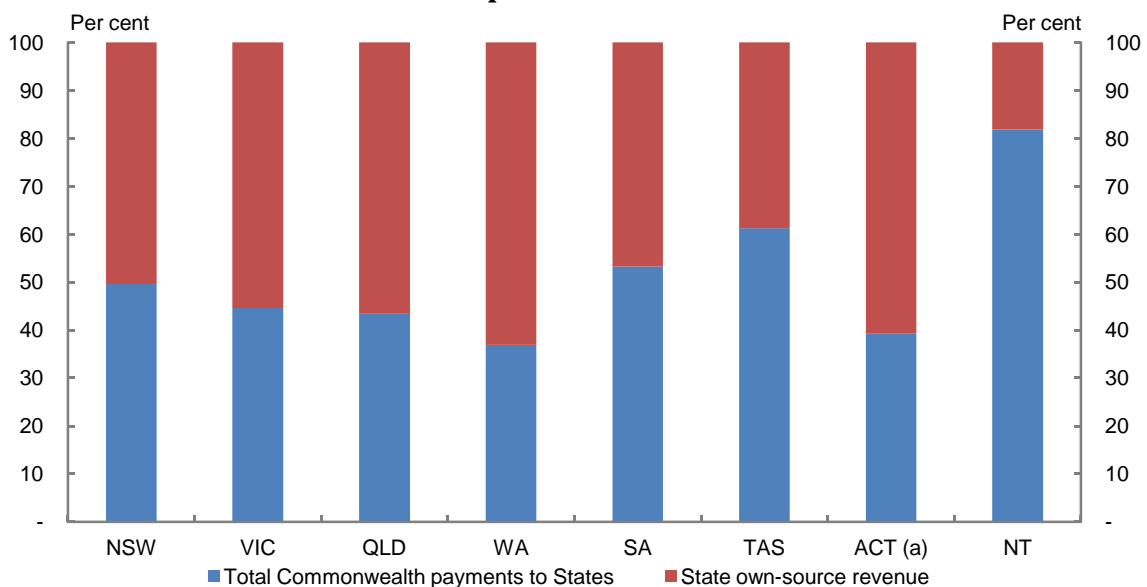
It is usual for individual States within a federation to have different capacities to raise revenue or deliver services, and indeed this has been the case throughout the history of the Australian Federation. However, as identified in the Issues Paper:

‘the current mining boom and the global financial crisis have contributed to substantial changes in the distribution of the GST amongst the States and heightened scrutiny about the equalisation process and its outcomes.’³

Chart 1.2 shows the relative importance of expected total Commonwealth payments to different States in 2011-12 as a proportion of their total revenue. States with a higher than average fiscal capacity have greater own-source revenue and will hence rely less on Commonwealth payments, as a direct result of the HFE system. That is, the level of VFI is lower for States with stronger own-source revenues, reflecting their relatively lower need for Commonwealth assistance as assessed under the HFE system.

Given the importance of Commonwealth payments to State Budgets, as shown by **Chart 1.2**, the system of HFE has been subject to a high degree of scrutiny.

Chart 1.2: Estimated composition of State revenues: 2011-12



Source: Commonwealth Budget Papers, 2011-12 State Budgets

(a) Note that the ACT is not directly comparable to the other States as it does not have separate Local Governments.

Current GST distribution arrangements

Australia’s current system of HFE is based upon GST revenue sharing relativities that are assessed by the CGC. These are provided to the Standing Council for Federal Financial Relations with the Commonwealth Treasurer then making a formal determination of the distribution of the GST revenue. The relativities determine how much GST revenue each State receives compared to an EPC share.

The CGC determines the relativities for each State by calculating the average expenses incurred by the States in aggregate to provide services and the average revenues collected from their taxes and charges across discrete expense and revenue categories. It undertakes a similar process for investment, net lending and Commonwealth payments. The CGC then assesses individual States’ needs compared to these averages, with

3 Commonwealth of Australia 2011. *GST Distribution Review Issues Paper*, Canberra. pp 3.

regard to use and cost disabilities⁴ for expenses, and the relative size of revenue bases, both reflecting factors outside of a State's control. The outcomes of these assessments are used to generate a relativity which shows the extent to which a State needs a higher or lower than EPC share of the GST to achieve fiscal equalisation.

The relativities are also based on an average of the relativities of the three most recent years. For example, the 2011-12 relativity is based on an average of the annual relativities for 2007-08 to 2009-10.

The relativities recommended for 2000-01 to 2011-12 are shown in **Table 1.1**.

Table 1.1: Relativities used for distributing the GST, 2000-01 to 2011-12

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
2000-01	0.89	0.85	1.03	0.99	1.20	1.61	1.17	4.79
2001-02	0.90	0.85	1.01	0.98	1.20	1.60	1.21	4.62
2002-03	0.88	0.84	1.02	0.98	1.22	1.68	1.23	4.92
2003-04	0.87	0.84	1.02	0.96	1.24	1.75	1.23	5.13
2004-05	0.83	0.84	1.07	1.04	1.23	1.71	1.21	5.00
2005-06	0.84	0.85	1.06	1.03	1.23	1.70	1.23	5.01
2006-07	0.84	0.87	1.03	1.01	1.21	1.70	1.23	5.07
2007-08	0.86	0.88	1.01	0.94	1.23	1.69	1.25	5.10
2008-09	0.89	0.91	0.96	0.86	1.23	1.66	1.26	5.26
2009-10	0.93	0.92	0.92	0.78	1.25	1.62	1.27	5.25
2010-11	0.95	0.94	0.91	0.68	1.28	1.62	1.15	5.07
2011-12	0.96	0.90	0.93	0.72	1.27	1.60	1.12	5.36

Source: CGC, Report on GST Revenue Sharing Relativities — 2011 Update

Note: Prior to 2009-10 the HFE pool was a combined pool of GST revenue and healthcare grants. These relativities relate to a pool comprising GST revenue only.

These relativities can be interpreted as follows; in 2011-12 Victoria will receive 90 per cent of its EPC share of GST revenue, while the Northern Territory will receive over five times its EPC share. In dollar terms, it is estimated that these relativities will result in a distribution away from an EPC share of approximately \$4 billion in 2011-12, out of a pool of approximately \$48 billion.⁵ This redistribution represents about 0.26 per cent of estimated GDP for 2011-12.⁶

Table 1.1 also shows that since the GST was introduced in 2000-01, New South Wales and Victoria have been donor States. That is, they have received less than an EPC distribution of GST, although they have been shifting closer to an EPC share in recent years (especially New South Wales). Conversely, South Australia, Tasmania, Australian Capital Territory and Northern Territory have been recipient states, receiving more than an EPC distribution of GST.

The table also shows that over time the relativities for Queensland and Western Australia have declined significantly, reflecting very strong growth in revenue driven by the mining boom. Western Australia was a recipient State from 2004-05 to 2006-07, and a minor donor in the prior years back to 2000-01. Queensland was a recipient State until 2008-09.

4 Cost disabilities reflect characteristics of a State that result in higher than average costs in delivering services, such as having a larger proportion of its population residing in remote areas. Use disabilities reflect higher than average proportional shares of particular sections of the population (such as the elderly), that use public services more intensively.

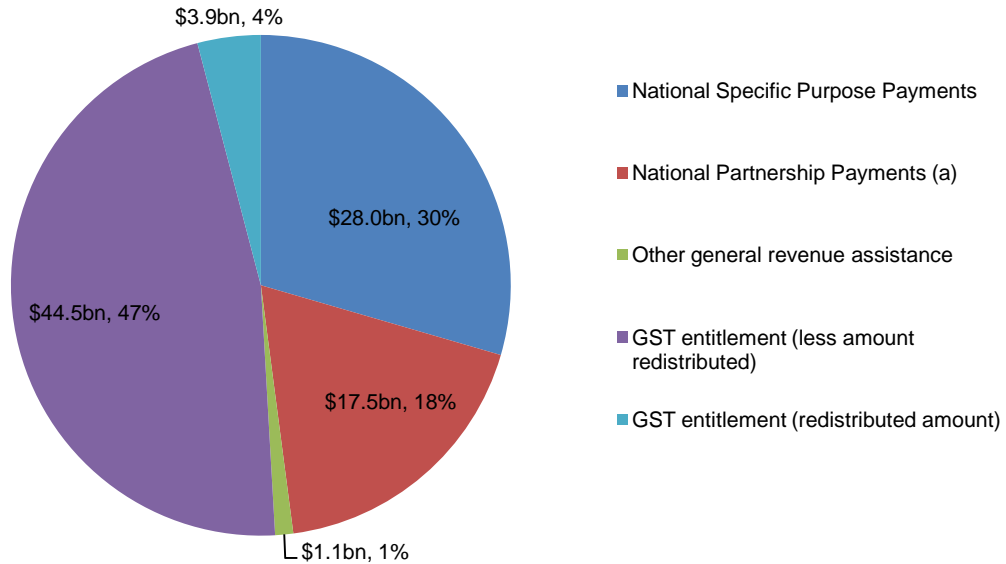
5 2011-12 Australian Government Budget – Budget Paper No. 3.

6 Commonwealth Budget Data and GST Distribution Review Issues Paper.

Distribution of all Commonwealth Payments

A State's GST relativity is not a complete measure of its share of Commonwealth funding. As **Chart 1.3** below shows, in 2011-12 payments for specific purposes will be similar in size to GST payments.⁷

Chart 1.3: Commonwealth Payments to the States — 2011-12



Source: Commonwealth Budget Papers

(a) Includes financial assistance grants for local government and payments direct to local government. The amount of GST redistributed is as compared to an EPC distribution.

Given the size of payments for specific purposes, a better measure of relative Commonwealth support for a State would include this funding. While **Chart 1.2** showed Commonwealth funding as a share of State revenues, differences in that chart primarily reflected the diversity in the relative strengths of State own source revenues. What was not captured was the total distribution of Commonwealth funding to the States.

The majority of Commonwealth payments for specific purposes are taken into account when calculating the GST relativities and hence impact on the GST distribution: this interaction is explained in further detail below. The following discussion focuses on the actual distribution of total Commonwealth funding to the States.

Table 1.2 shows the 2011-12 GST sharing relativities calculated by the CGC. **Table 1.3** shows States' implied relativities calculated by Commonwealth Treasury across the various Commonwealth payments, allowing them to be compared to the actual GST relativities. Implied relativities show the relative per capita share of each aspect of Commonwealth funding that States receive. That is, the relevant Commonwealth payment has been calculated on a per capita basis for each State and then divided by the per capita figure for Australia. This can also be expressed as:

$$\text{'Implied relativity'} = \frac{\text{(Commonwealth payments to State/State population)}}{\text{(Commonwealth payments to all States/population of Australia)}}$$

⁷ GST is projected to be larger than payments for specific purposes over the forward years, with an approximately \$13 billion difference in 2014-15.

Table 1.2: 2011-12 GST sharing relativities calculated by the CGC

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
GST Relativity	0.96	0.90	0.93	0.72	1.27	1.60	1.12	5.36

Source: CGC 2011 update

Table 1.3: 2011-12 Implied relativities for Commonwealth payments calculated by Treasury

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
Payments for specific purposes	0.97	0.91	1.03	1.00	1.17	1.06	0.90	2.35
Payments for specific purposes & GST	0.97	0.91	0.98	0.85	1.22	1.34	1.01	3.91
All Commonwealth Payments ¹	0.96	0.90	0.97	0.95	1.21	1.32	1.03	3.87

Notes 1: Including 'other general revenue assistance' which primarily flows to WA and the ACT.

2: When comparing GST relativities to implied relativities it should be noted that the former are averaged over 3 years.

Source: Treasury calculations based on Commonwealth Budget Papers.

Table 1.3 shows three sets of implied relativities calculated by Treasury. The first line illustrates the relative per capita distribution of total payments for specific purposes. The second line illustrates the relative per capita distribution of both payments for specific purposes and GST payments, but does not include 'other general revenue assistance' paid to the States. The final implied relativity shown in the table includes 'other general revenue assistance'.

These tables show that the implied relativities for payments for specific purposes are different to the GST relativities for most States, except for New South Wales and Victoria. This is expected as National SPPs are to be distributed on an EPC basis (phasing in over time).

Table 1.3 also shows the implied relativities for the combined payments for specific purposes and GST. Since payments for specific purposes are closer to an EPC share and the total funding pool is larger, the implied relativities that incorporate payments for specific purposes are closer to EPC than the GST relativities. The largest changes when comparing against the GST relativities are for Western Australia (which has a higher implied relativity) and Tasmania and the Northern Territory (which have lower implied relativities).

The calculation of the implied relativities for 'all Commonwealth payments' includes 'other general revenue assistance'. These relativities are similar to those for payments for specific purposes and GST, except in the case of Western Australia. Western Australia receives the largest component of 'other general revenue assistance' as royalties collected by the Commonwealth in respect of the North-West shelf oil and gas project off the coast of Western Australia. These royalties are shared between the Commonwealth (approximately one-third) and Western Australia (approximately two-thirds).⁸

Key point 1: Overall, although some States receive less than an EPC share of GST, if all Commonwealth payments are considered, shares of total Commonwealth funding are much closer to EPC. For example, in 2011-12 Western Australia is expected to receive 72 per cent of an equal population share of GST, however if all Commonwealth payments (including GST) are taken into account it is expected to receive 95 per cent of an equal population share.

Interaction of Commonwealth payments for specific purposes with the current form of HFE

Under the current form of HFE, the distribution of the majority of payments for specific purposes is taken into account by the CGC, including most NP payments. It does this by treating Commonwealth payments to the States as revenue and adjusting GST shares accordingly. While the extra expenditure associated with a

⁸ Royalty payments, which make up the majority of the unallocated other general revenue assistance, have been allocated to Western Australia and the Northern Territory based on historical proportions.

payment is also recognised, it is simply included in the CGC's calculation of overall expenses and hence contributes to the calculation of average expenditure policy. Therefore, broadly:

- A State that receives a payment for a schooling initiative will see the payment effectively added to the GST pool; and
- Its expenditure in the schools sector will be taken into account in the CGC's assessment of national average schooling expenditure.

This means that if a State receives a greater than EPC share of funding under a Commonwealth program, those funds will generally be included in the CGC's calculations and will be (at least partially) equalised away. A State will keep its EPC share of the payment, with the total HFE impact ultimately determined by the impact the Commonwealth payment has on the State's expenditure (and hence the average). Effectively, the CGC adjusts the distribution of Commonwealth payments for specific purposes.

It is on this basis that National SPPs are to be distributed equal per capita⁹, even though (for example) Victoria requires less funding per person to deliver health services than the Northern Territory. Because the CGC takes account of State expenditure disabilities, there is no reason for the Commonwealth to take account of State differences and provide differential funding allocations. All adjustments for different State needs are made through the GST distribution.

Clause D66 of the Intergovernmental Agreement on Federal Financial Relations (Intergovernmental Agreement) specifies that facilitation and reward type NP payments are expected to have no impact on relativities (subject to discretion given to the CGC under clause D67). That is, these payments should not be redistributed. However, the majority of NP payments are project based and are hence included in the CGC's calculations in accordance with clause D66. Under the new health reforms, it is currently proposed that the CGC should be directed to treat growth funding payments to the States (including any residual top-up payments required to meet the funding guarantee) as 'impacting on GST relativities'.

It should also be noted that, due to the in-built delays in the CGC system, a State is better off to receive the Commonwealth payment, since it will be received immediately but will not be equalised away for a number of years. The CGC does not make adjustments for the time value of money. States express mixed views as to whether HFE is a consideration in assessing the merits of Commonwealth funding proposals.

Finally, the Commonwealth occasionally directs the CGC to ensure that a particular Commonwealth payment has no direct impact on the relativities, as discussed below.

Excluded payments, and payments that do not 'impact on relativities'

There are two types of Commonwealth payment that do not impact on GST sharing relativities. The first are payments explicitly 'excluded' by direction of the Treasurer in the CGC's terms of reference. The second are payments that do not impact due to a decision by the CGC, in accordance with key principles.

The CGC provides the following guidance on its treatment of Commonwealth payments:

'In the 2010 Review, the Commission concluded that, after following any directions in the terms of reference, it should decide the treatment [impact or no impact on relativities] of each payment on the basis of equalisation principles.'¹⁰

9 The National Schools SPP is distributed on the basis of school enrolments.

10 CGC 2011. *Treatment of Commonwealth Payments in the 2011 Update*, Canberra. pp 1.

And further:

'All other payments [other than those excluded by the terms of reference and the National SPPs] should have a direct impact on the relativities unless:

- they are a purchase by the Australian Government;
- they are for programs implemented at the behest of the Australian Government and which lead to above average or unique State outcomes (such as a trial program which is not part of services delivered under average State policy);
- they are a payment to a third party that has no impact on State fiscal capacities (States act as an intermediary and the payment does not reduce or increase State needs);
- needs have not been able to be assessed for the State expenditures to which the payment relates.¹¹

While the majority of payments for specific purposes do impact on relativities, there are some significant payments that do not. In 2009-10, approximately 17 per cent of Commonwealth Payments to States¹² by value were treated by exclusion, that is, they had no impact on the calculation of the relativities. The majority of these payments were excluded due to decisions taken by the CGC based on the principles outlined above. Significant payments that had no impact include: Building the Education Revolution — Non-Government schools; the First Home Owners Boost; and Financial Assistance Grants to local government. Together, these made up approximately 11.4 per cent of total Commonwealth payments to States (excluding GST).

The ratio of Commonwealth payments that do not impact on the GST relativities has been stable over recent years. Between 2006-07 and 2009-10 the average annual value of Commonwealth payments to the States that did not affect the relativities was approximately 18 per cent.

Infrastructure payments

Commonwealth payments for specific purposes cover a range of sectors but significant attention is often paid to Commonwealth funding for infrastructure. Under the current arrangements, the CGC assesses the infrastructure funding requirements of the States and determines the appropriate treatment of all Commonwealth infrastructure payments.

Infrastructure projects are often separately identifiable and this increases the likelihood that arguments will be put forward as to whether the distribution of this funding across States is equitable and whether Commonwealth contributions for individual projects should impact on the GST relativities.

In the context of HFE, Commonwealth infrastructure payments could be considered in totality rather than on a project-by-project basis. Commonwealth infrastructure payments include funding for transport infrastructure, health infrastructure, and environment and affordable housing payments that directly contribute to the construction of assets expected to be owned by State governments. Consistent with the approach taken by the CGC, Commonwealth payments directed to local governments are not considered.

Table 1.3 shows the allocation of infrastructure payments to the States from 2010-11 to 2014-15, on both a total dollar and per capita basis. This analysis excludes payments that have not yet been allocated to individual States, including some funding through the Regional Infrastructure Fund.

11 CGC 2011. *Treatment of Commonwealth Payments in the 2011 Update*. pp 2.

12 Excluding GST

Table 1.4: Actual/Estimated Infrastructure payments to States — 2010-11 to 2014-15

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Total/Australia
Total Infrastructure payments (\$m)	7,041	5,771	4,598	2,396	1,888	696	139	433	22,963
Total Infrastructure payments (\$pc)	950	1,002	976	999	1,130	1,351	379	1,814	996

Source: Treasury calculations based on 2011-12 Commonwealth Budget Paper No. 3.

Table 1.4 shows that for the period 2010-11 to 2014-15, New South Wales, Queensland and the Australian Capital Territory are each expected to receive less than an EPC share of Commonwealth infrastructure funding with the remaining States receiving more than an EPC share.

The difference from an EPC share is largest for the Australian Capital Territory, Tasmania and the Northern Territory. In the case of the Australian Capital Territory, a major contributor to its low share of Commonwealth infrastructure payments is its low share of national network roads (relative to its population) due to its small geographic size. A major contributor to the above average share of Commonwealth infrastructure payments for Tasmania and the Northern Territory is their funding allocation from the Health and Hospitals Fund — Regional Priority Round.

The Commonwealth funding allocations outlined above cover a five year period so jurisdictions receive differing shares over individual years within this period. The allocations will also change in future years.

There is a strong rationale for including Commonwealth infrastructure payments in determining GST relativities. Infrastructure is a significant area of state general government sector expenditure and represented approximately 5 per cent of total state general government sector outlays¹³ at the time of the CGC's 2010 Methodology Review. In addition, States largely fund infrastructure from their general government sector, that is, they fund infrastructure from tax and grant revenue rather than user charges. Under the CGC's current methodology, HFE is only applied to the general government sector and therefore excludes areas predominately funded through user charges, including State-owned water and electricity infrastructure, which form part of the public non-financial corporations sector.

Continuing the current arrangements under which the CGC assesses the infrastructure funding requirements of the States and determines the appropriate treatment of all Commonwealth infrastructure payments will ensure that Commonwealth infrastructure funding is distributed equitably among jurisdictions.

¹³ State outlays are equal to total state operating expenses plus investment.

Long-Term Trends for the Australian economy

The terms of reference for the review set out ‘a number of long-term trends that are driving pronounced and challenging structural change in the economy, including:

- (a) the rise of China and India, and continuing globalisation;
- (b) the challenge of mitigating and adapting to climate change;
- (c) population growth and demographic change; and
- (d) the continuing effects of innovation and technological change.’¹⁴

This complex mix of long-term trends will have significant impacts on the structure of the Australian economy and on the wellbeing of current and future Australians.

Globalisation and the rise of Asia

Notwithstanding the disruption of the financial crisis, the global economy is continuing to become more integrated, with increasing cross border trade, more interlinked capital markets, increasing technological transfers and greater global competition. The ongoing re-emergence of China and India as global economic powers is also a driving force for global competition.

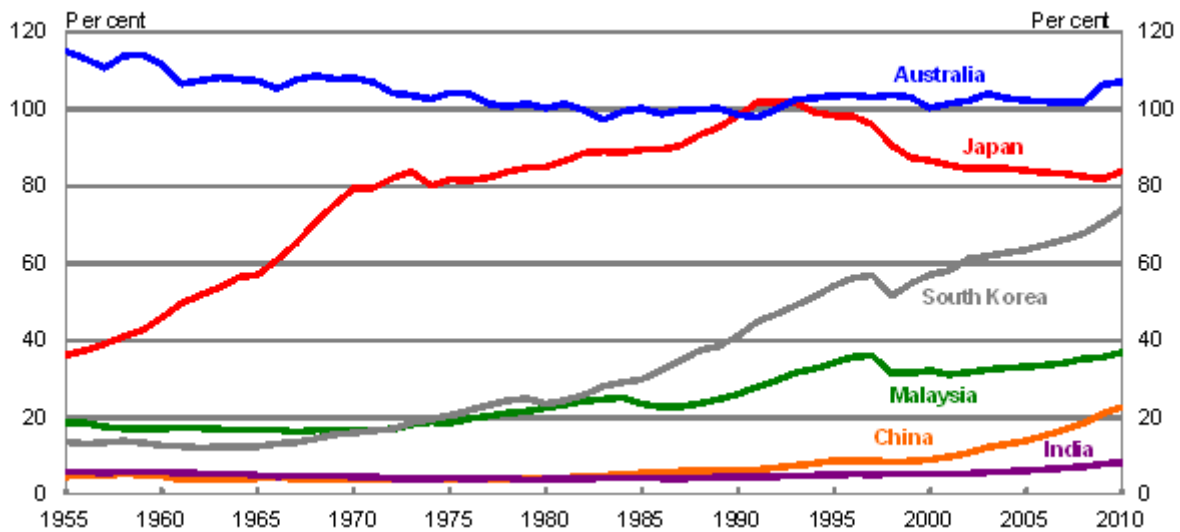
To date, the re-emergence of China and India has provided significant impetus for global growth. It will substantially alter the pattern of world GDP over coming decades and see a shift in the global balance of economic power.

Together accounting for slightly more than one-third of the people on the planet, China and India are growing rapidly and can be expected to continue to do so. China’s economy is expected to surpass the United States in size by 2020, while India is on track to surpass the United States by the middle of the century.

This transition is amongst the most significant and sustained external shocks Australia has ever experienced. With much of China and India at an early stage of catching up with the living standards of the developed world, strong growth in these countries has the potential to go on for decades (**Chart 1.3**).

14 GST Distribution Review Terms of Reference

Chart 1.4: GDP per capita (per cent of the OECD-15 average)



Note: OECD-15: Australia, Austria, Belgium, Denmark, Finland, France, Iceland, Ireland, Netherlands, Norway, Sweden, Switzerland, UK, US and Canada.

Source: The Conference Board Total Economy Database and Treasury.

To date the re-emergence of China and India has created a rapidly growing demand for energy and mineral commodities, which has resulted in the largest and longest terms of trade shock in our history. Driven by high prices for Australia's mineral and energy commodities, the terms of trade are at 140 year highs.

This boom has contributed to a strong exchange rate and has drawn labour and capital into the mining sector and related construction sectors. Both of these effects have placed significant pressure on other sectors of the economy, especially other trade-exposed sectors like tourism and manufacturing.

As China and India continue to grow, new opportunities will arise from the growing Asian middle class — a potentially very large market for our goods and services. For example, by 2020, Asia could have more people in the middle class than the rest of the world combined, while China alone could have a middle class market that surpasses the US in dollar terms. By 2030, with the continued growth of India, two thirds of the global middle class could be in the Asia-Pacific region. That is, around 3.2 billion people.

Environmental pressures

With the expected rapid growth of the global economy over coming decades, significant pressures will be placed on global resources — particularly the natural environment.

The Australian economy faces a number of environmental pressures. The projected increase in Australia's population, together with continued economic growth will mean that we need to find new ways to manage our water, energy and land resources more efficiently. The challenge ahead is getting the settings right to transform our economy and put in place the incentives for sustainable cities and infrastructure.

Climate change presents a significant challenge to Australia's environment, and there is a bipartisan consensus in Australia that we need to reduce carbon pollution by at least 5% below 2000 levels by 2020. While this will involve an economic cost, there is a strong consensus among economists that putting a price on carbon will minimise those costs. Economists also agree that early action will lower the economic cost of transforming our economy to break the link between economic growth and carbon pollution.

Treasury modelling undertaken for the *Strong Growth, Low Pollution: Modelling a Carbon Price* report found that all States will continue to grow strongly under carbon pricing while reducing their emission intensity of output over time. The impact across different States and industries will vary depending on each State's emission intensity, which in turn depends on its industry structure.

South Australia, Tasmania and Victoria face more modest carbon pricing impacts to 2050 than the national average. They are less emission intensive due to a greater concentration of industries, such as motor vehicles and parts production, textiles, clothing and footwear, and forestry, which grow somewhat faster with carbon pricing. Queensland, Western Australia and New South Wales have more emission-intensive industrial structures. For example, exports of liquefied natural gas from Western Australia and Queensland grow strongly with carbon pricing, but production growth may slow with a carbon price in the 2030s and 2040s. Similarly, while output of the black coal industry in New South Wales will continue to grow, the rate of output growth will be somewhat slower with carbon pricing.

Demographic change: ageing and population growth

Australia's population will continue to grow, albeit at slower rates than experienced over the past 40 years. By the middle of the century Australia's population is projected to rise to over 35.9 million, an increase of around 60 per cent from today.

As with all other advanced economies, and many emerging economies, Australia's population is also ageing. As highlighted in the *2010 Intergenerational Report (2010 IGR)*, the proportion of working aged people is projected to fall, with only 2.7 people of working age to support each Australian 65 years and over by 2050 — compared to 5 today.

The proportion of the population aged 65 and over has increased from just over 8 per cent in 1969 to around 13 per cent today. By 2050 the proportion of the population aged 65 and over is projected to rise to around 23 per cent (2010 IGR). Furthermore, it is projected that by 2050; around 5 per cent of the population will be aged 85 and over. This compares to around 1.8 per cent today.

As the population ages, economic growth is also expected to slow as the rate of labour force participation across the whole population is projected to fall.

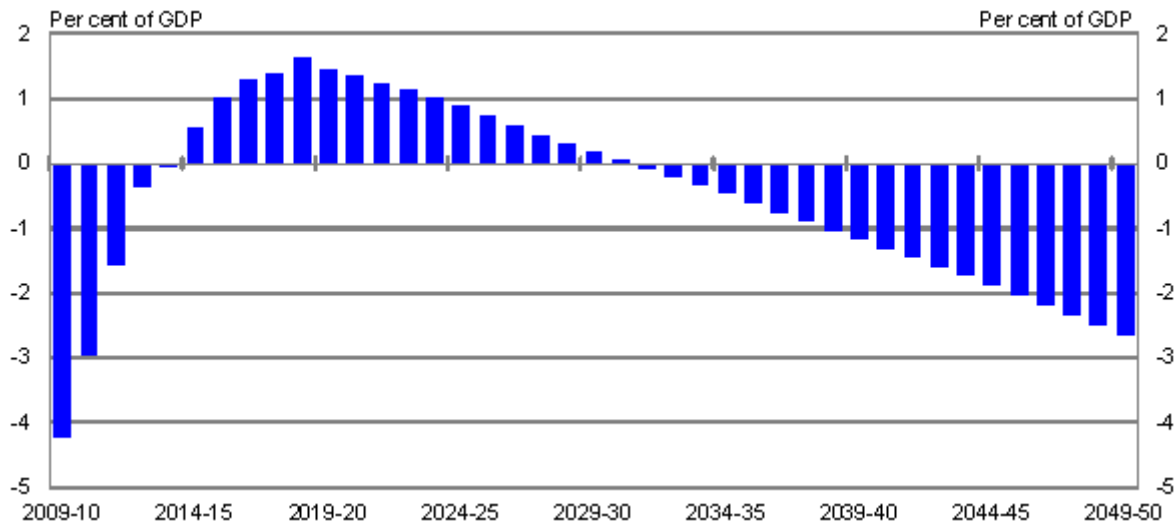
The projected increase in the population and higher proportion of older Australians will also create substantial fiscal pressures. A rising and ageing population is expected to result in increased expenditure in new infrastructure, and health and aged related payments and services. Technological advancements in health and demand for higher quality health services as incomes rise will add to these pressures.

The 2010 IGR projected that ageing and health related expenditures alone would result in an increase in total government spending of over 4 per cent of GDP by 2049-50. To put this in context, the projected increases in Australian and State government spending are equivalent to the entire revenue raised by the GST.¹⁵

The 2010 IGR projected that increased ageing and health pressures would result in an increase in total government spending from around 22.4 per cent of GDP in 2015-16 to over 27 per cent of GDP by 2049-50. As a consequence, spending was projected to exceed revenue by 2.75 per cent of GDP in 40 years time (**Chart 1.5**).

15 Australia's Future Tax System (AFTS) Secretariat 2010. *Australia's Future Tax System final report*, Canberra.

Chart 1.5: Fiscal gap as projected in the IGR 2010



Note: The fiscal gap is total Australian government receipts minus total Australian government payments (excluding interest). This chart shows the fiscal gap as projected in the 2010 IGR, and therefore does not reflect more recent Budget updates.
Source: Treasury.

The IGR 2010 highlights that fiscal pressure could be reduced by supporting stronger economic growth through higher productivity and participation. The Australia’s Future Tax System (AFTS) report, suggested that government budgets may also need to change. However as noted in the AFTS report increasing revenue collections could present particular problems for the States, whose existing taxes are relatively inefficient.

Rapid technological advancement

Rapid technological advancement will also have profound implications for the Australian economy. Information and communications technology (ICT) has already and will continue to enable new innovative tools to be developed, allow new business models to arise, facilitate the emergence of new products, industries and production processes as well as increasing competition and greater specialisation.

Improvements in ICT in particular, have the prospect of improving productivity, service delivery and networking. Technological advances have already transformed businesses and trade and played an important role in reducing Australia’s 'tyranny of distance'.

Further improvements in ICT are likely to have significant implications for the tradability of services, particularly for rural and regional Australia. The establishment of the National Broadband Network, for instance, may facilitate greater and more effective use of improved ICT by businesses, consumers and the public sector.

The ICT revolution will also have implications for the way in which government services are provided and for the way in which citizens of all ages interact with their governments. In particular, continued ICT advancement will improve the delivery of education and health services, improving human capital.

Conclusion

In light of the long-term trends outlined above, the GST Distribution Review has been asked to consider whether the current form of HFE will ensure that Australia is best placed to respond to these challenges and public confidence in the financial relationships within the Australian Federation is maintained.

2. STATE DIFFERENCES WITHIN THE AUSTRALIAN FEDERATION

The review Terms of Reference state that the review will be guided by the fact that ‘the long-standing practice of equalisation between the States has served Australia well.’¹⁶

Unless Australians are prepared to accept significant differences in State service delivery capacity across the federation, the large differences in the geography and demography of the States make a compelling case for some form HFE. In order to consider whether the current form of HFE is meeting its objectives in the best manner available and at least cost, it is first important to consider the main reasons for and drivers of the GST redistribution.

Demography

The demographic makeup and size of the States varies greatly in both absolute and relative terms. **Table 2.1** below illustrates the estimated resident populations and proportions of the total populations for each jurisdiction as at 31 December 2010.

The three largest States together make up over three quarters of the Australian population, while the three smallest States, combined, make up around one twentieth.

Table 2.1: Estimated resident population and population shares, States and Territories (as at 31 December 2010)

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Australia
Pop.	7,272,158	5,585,566	4,548,661	2,317,064	1,650,377	509,292	361,914	229,874	22,477,378
Pop. share (%)	32.4	24.8	20.2	10.3	7.3	2.3	1.6	1.0	100.0

Note: Total Australian population includes 2,472 Australian residents from ‘other territories’, including: Jervis Bay Territory, Christmas Island and Cocos (Keeling) Islands.

Source: ABS 2010, Australian Demographic Statistics

The need for services within a given State is driven not only by the size of its population, but also its makeup. There are groups of people who use public services more intensively, or are relatively more costly to deliver public services to, including:

- elderly people;
- babies and younger children;
- Indigenous people;
- people in rural and remote areas; and
- socio-economically disadvantaged people.

If the makeup of State populations were homogenous, the current form of HFE would distribute GST revenue on an EPC basis, if differences in revenue raising capacities were not adjusted for. However, the make-up of populations is quite diverse across States. The large disparity in population shares mean that it is necessary to consider these differences in per capita or proportional terms, as will be covered in the following discussion.

¹⁶ Commonwealth of Australia 2011. *GST Distribution Review Issues Paper*, Canberra. Attachment A.

Indigenous population

For a number of services provided by the States, there is a difference in the average cost of providing that service to Indigenous and non-Indigenous Australians, reflecting differing levels of intensity of need. There is also an additional cost to States in providing Indigenous specific services, particularly in remote areas. The 2010 Indigenous Expenditure Report found that 'estimated [government] expenditure per head of population was \$40,228 for Indigenous Australians, compared with \$18,351 for non-Indigenous Australians (a ratio of 2.2:1).'¹⁷

For example in 2010, government expenditure per capita on hospital services was estimated to be \$3,427 per Indigenous person and \$1,587 per non-Indigenous person. This reflected more intensive service use, and higher costs of providing services to Indigenous Australians (including the costs of mainstream and any additional Indigenous specific services).¹⁸

Charts 2.1a and 2.1b show the size of each State's Indigenous population as a proportion of the total State population. **Chart 2.1a** excludes the Northern Territory to allow for meaningful comparisons to be made between other jurisdictions, while **Chart 2.1b** shows the extent to which the Northern Territory is a large outlier.

Chart 2.1a: Indigenous population as a proportion of total State population (excluding NT), 2009-10

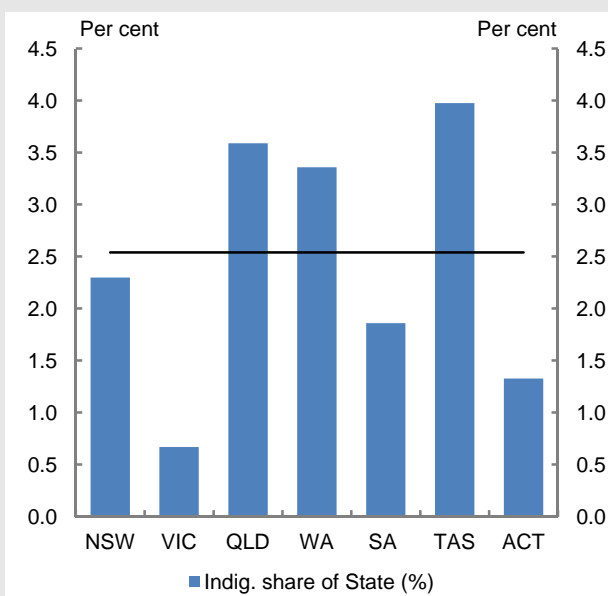
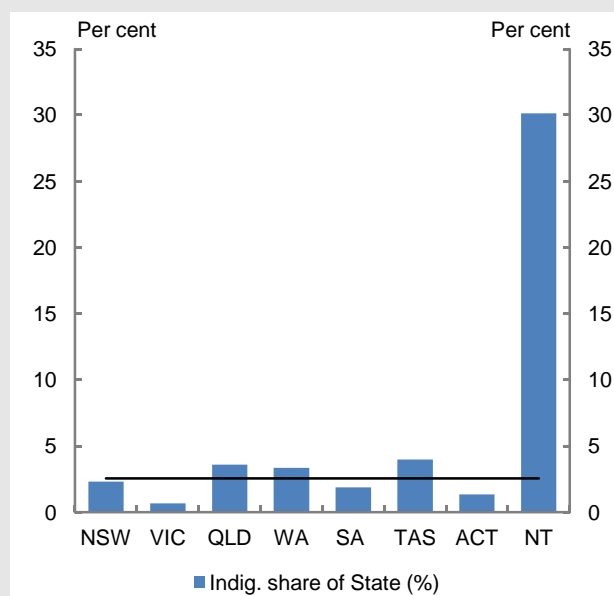


Chart 2.1b: Indigenous population as a proportion of total State population (including NT), 2009-10



Source: CGC 2011 Update, State of the States report

Since GST sharing relativities are driven by a State's proximity to the average, the relative size of the Northern Territory's Indigenous population is a key driver of its large relativity. However, in absolute terms, New South Wales has the largest Indigenous population. **Table 2.2** shows the 2010 distribution of the Indigenous population across States.

Table 2.2: Indigenous population estimates by State, 2009-10

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Australia
Indig. Pop.	165,190	36,734	160,514	76,218	30,382	20,086	4,709	68,599	562,432
Indig. Pop. (%)	29.4	6.5	28.5	13.6	5.4	3.6	0.8	12.2	100.0

Source: CGC 2011 Update, State of the States report

17 IERSC (Indigenous Expenditure Report Steering Committee) 2010. *Indigenous Expenditure Report*, Productivity Commission, Canberra.

18 IERSC 2010. pp. 118-120

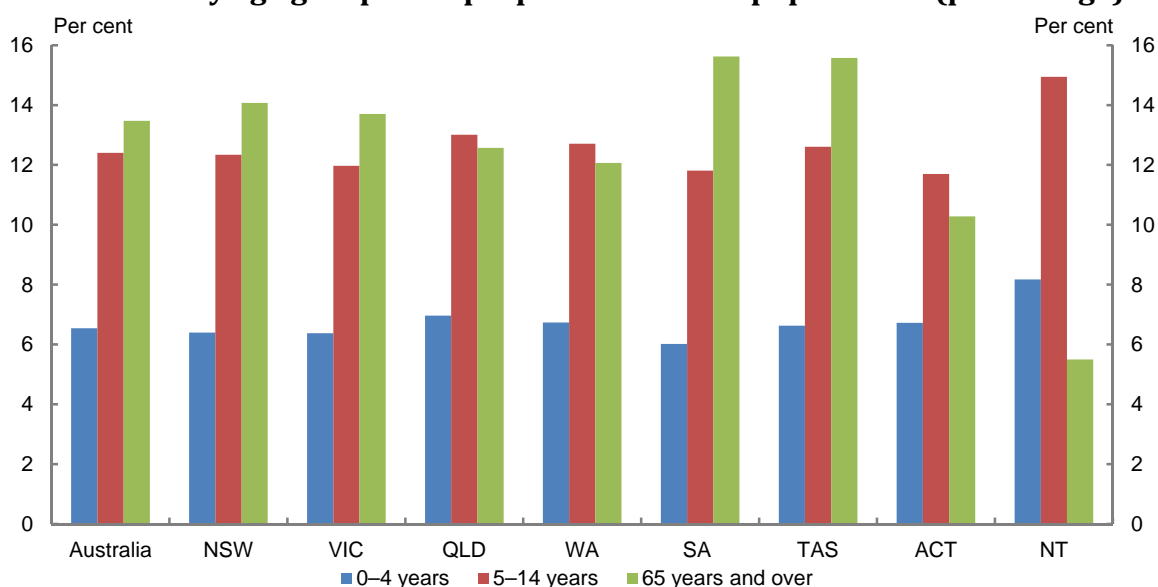
This illustrates that, while the Northern Territory’s relativity is most heavily influenced by Indigeneity, New South Wales and Queensland are the main drivers of average policy with respect to Indigenous people.

Age profile of State populations

The age profile of different States will have a bearing on the intensity of use of services. For example, ‘elderly’ people are much more likely to use hospital services than ‘working age’ people,¹⁹ while a key driver of schools expenditure is the size of a State’s school age population.

Chart 2.2 below illustrates that, for 0-4 year olds, almost all jurisdictions sit around the national average of 6.5 per cent of the population, with the only exception being the Northern Territory, whose proportion of 0-4 year olds is 8.2 per cent of the population, reflecting the inverse age profile of the Indigenous population.²⁰ Likewise for 5-14 year olds — only the Northern Territory (14.9 per cent) is significantly above the national average of 12.4 per cent. As for the elderly population, both South Australia and Tasmania are above the average while the Australian Capital Territory and especially the Northern Territory are significantly below the national average.

Chart 2.2: Key age groups as a proportion of State populations (percentage)



Source: ABS 2010, Australian Demographic Statistics

Population dispersion

Intuitively, we expect the cost of delivering State services to smaller, more remote communities to be greater, in ‘per service’ terms than in metropolitan areas. Leaving aside economies of scale (or indeed any counter arguments around diseconomies), CGC analysis has found that: higher wages are needed to entice people to work in remote areas, longer travel distances increase staff travel and goods freight costs, and additional and/or more expensive inputs may be required.²¹

Charts 2.3a and 2.3b illustrate that there are large differences in the proportion of State populations that live in remote areas. **Chart 2.3a** excludes the Northern Territory to allow for meaningful comparisons of all

19 Australian Institute of Health and Welfare 2011. *Australian hospital statistics 2009-10*, pp. 142

20 As shown in Chart 2.1b, the Northern Territory’s Indigenous population share is far above the national average. On average the Indigenous population is younger and growing at a faster rate than the total Australian population.

21 CGC 2010. *Report on GST Revenue Sharing Relativities – 2010 Review*, Canberra.

other jurisdictions, while **Chart 2.3b** illustrates the extent to which the Northern Territory is a large outlier. Of the comparable States, Western Australia's remote population share is more than triple the State average of 2 per cent, with both Queensland and South Australia above the State average. For Victoria, Tasmania and the Australian Capital Territory, less than 1 per cent of their total population resides in remote areas.²²

Chart 2.3a: Proportion of population residing in remote areas, by State (excluding NT), 2009

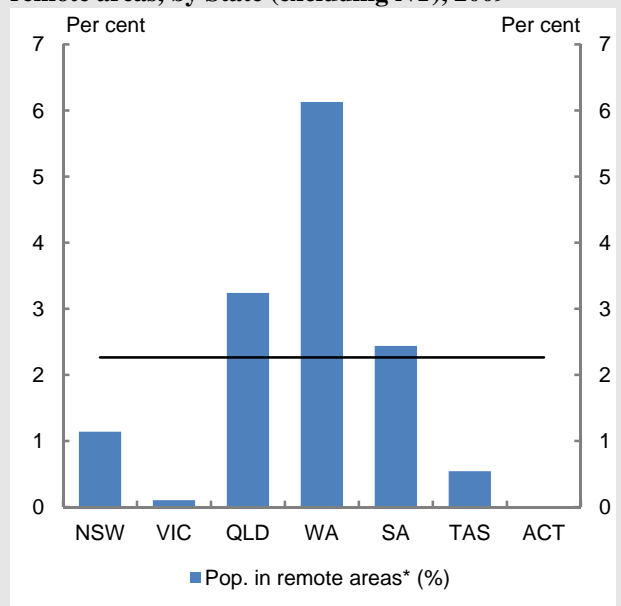
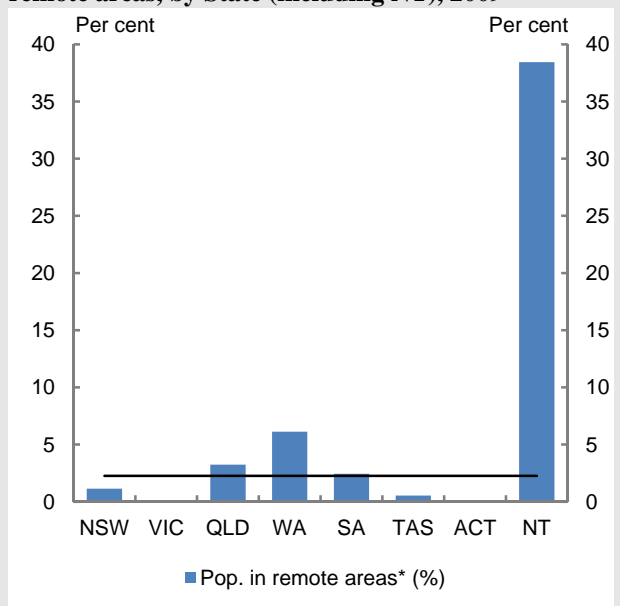


Chart 2.3b: Proportion of population residing in remote areas, by State (including NT), 2009

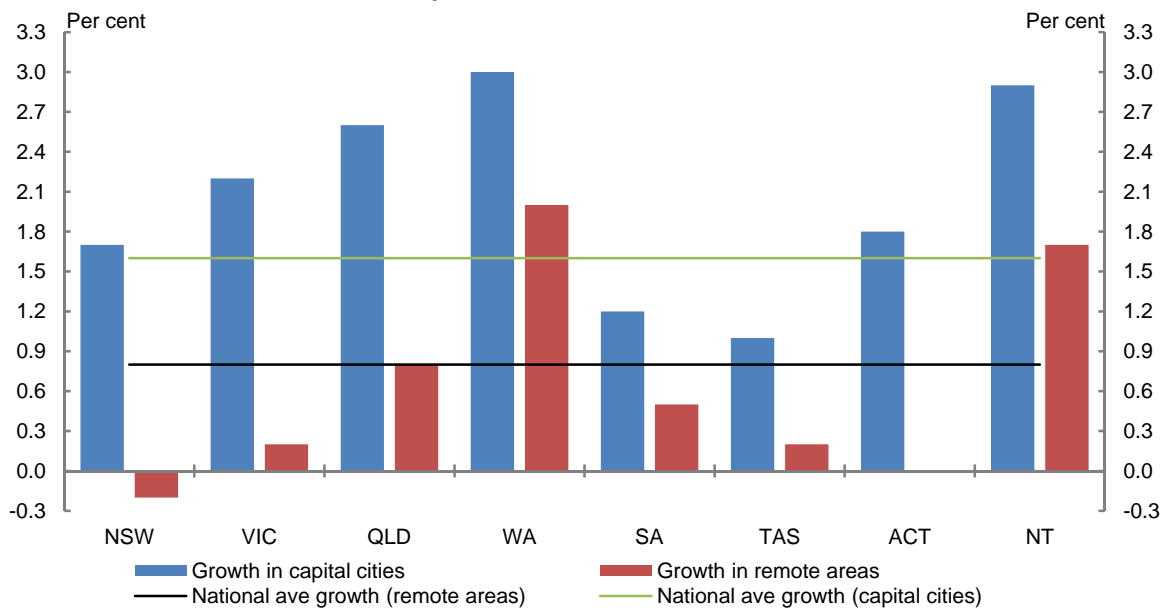


Source: CGC 2011, State of the States

Not only do greater proportions of the Northern Territory and Western Australian population reside in remote areas, but they are the only jurisdictions that are experiencing above average growth in those areas, particularly due to the effect of having a higher proportion of Indigenous people residing in remote areas. In aggregate, average annual growth in capital cities far outweighs average growth in remote areas, leading to increasing urbanisation of the population. However growth in remote areas in Western Australia outweighs the average growth in capital cities; while remote population growth in the Northern Territory is on par with the average growth in capital cities. This is shown in **chart 2.4**.

22 Remote areas refer to both 'remote' and 'very remote' categories as defined by the Australian Standard Geographical Classification (ASGC) Remoteness Structure. Remote categories have very restricted access to goods and services (with an ARIA+ score of greater than 5.92 and less than or equal to 10.53); while very remote categories have very little accessibility to goods and services (with an ARIA+ score of greater than 10.53 and less than or equal to 15).

Chart 2.4: Average annual rate of population growth, capital cities compared to remote areas, by State, 2005-06 to 2009-10



* There is no data for population growth in remote areas in the ACT.
 Source: CGC 2011, State of the States

Resource endowment

The resource endowment of the Australian Federation is shared very unevenly across State borders.

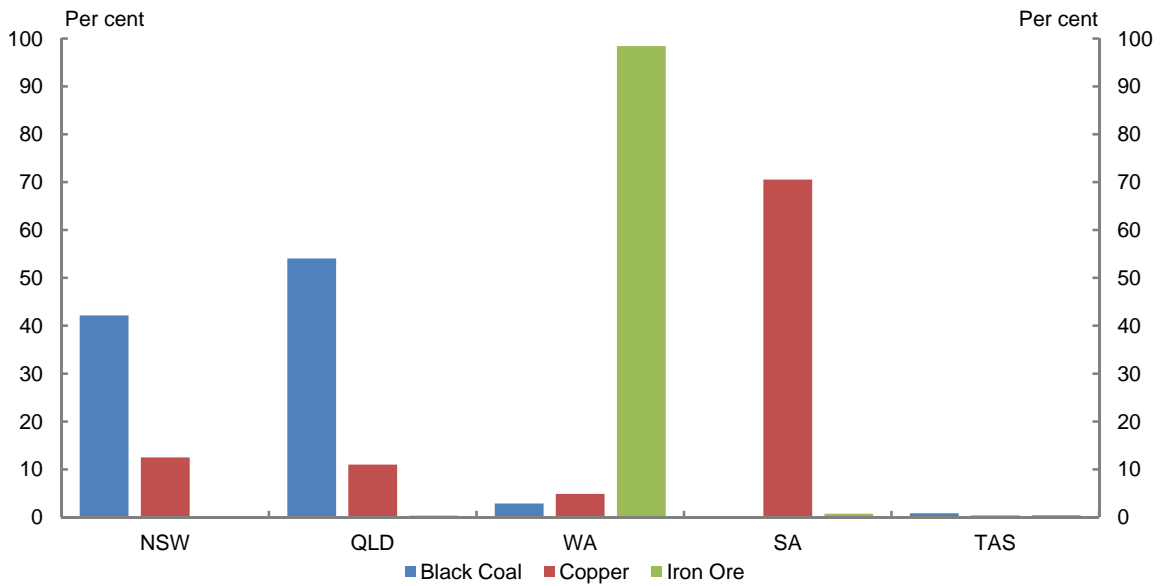
State shares of natural resources are an important indicator of their actual and potential revenue raising capacity, especially during the current resources boom.

Chart 2.5 illustrates the level of Economic Demonstrated Resources (EDR)²³ of black coal, iron ore and copper that is available in each State as a percentage of each commodity's total Australian EDR. Excluding petroleum minerals, these three commodities made up around two thirds of the total gross value of Australian mineral production in 2007-08. In gross value terms, black coal and iron ore are easily Australia's predominant non-petroleum minerals produced, with copper a distant third.²⁴ Production shares of these minerals across States broadly match with these levels of endowment, with the exception of South Australia, which has not yet converted its endowment of copper into an equivalent share of production.

²³ EDR refers to a concentration of a naturally occurring commodity for which extraction is currently or potentially (within a 20-25 year timeframe) economically viable.

²⁴ ABARES 2010. *Australian Commodity Statistics*, Canberra. pp. 35

Chart 2.5: Australian Economic Demonstrated Resources, by State, 2009



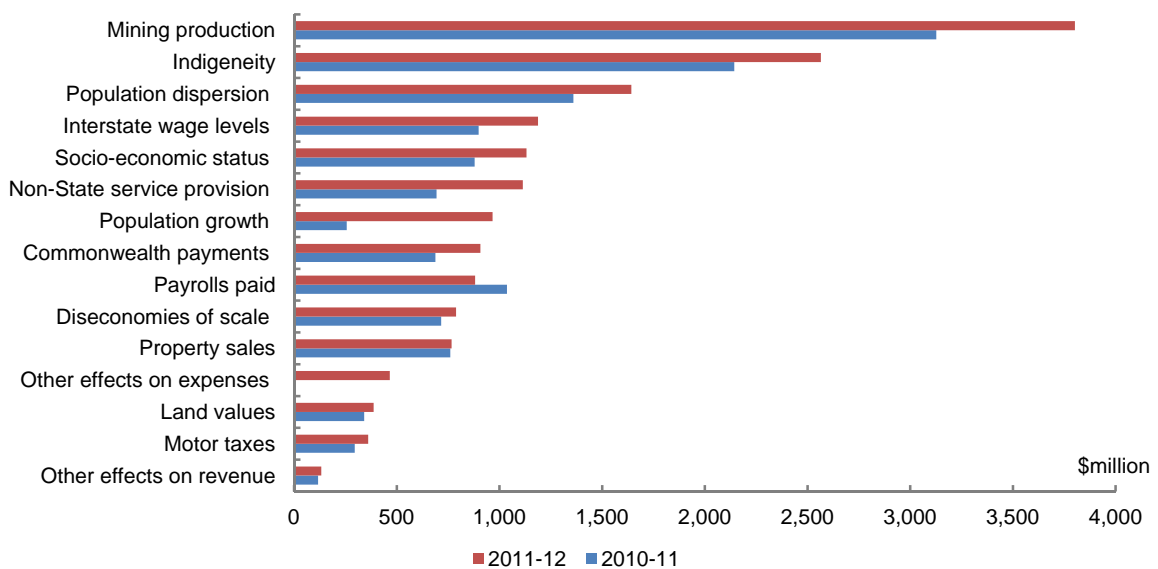
* Note: VIC, NT and the ACT are excluded from the data as they hold less than 0.5 per cent of Australia's EDR for the three commodities.
 Source: Geosciences Australia 2010, Australia's Identified Mineral Resources

Drivers of GST redistribution

These State differences have a significant impact on State's capacity to provide comparable services and as such, have been among the largest influences driving the redistribution of GST (relative to an EPC distribution) in recent years.

Chart 2.6 shows the main influences of redistribution of the GST in recent years. The categories with the largest influence result in the greatest reallocation of GST between States.

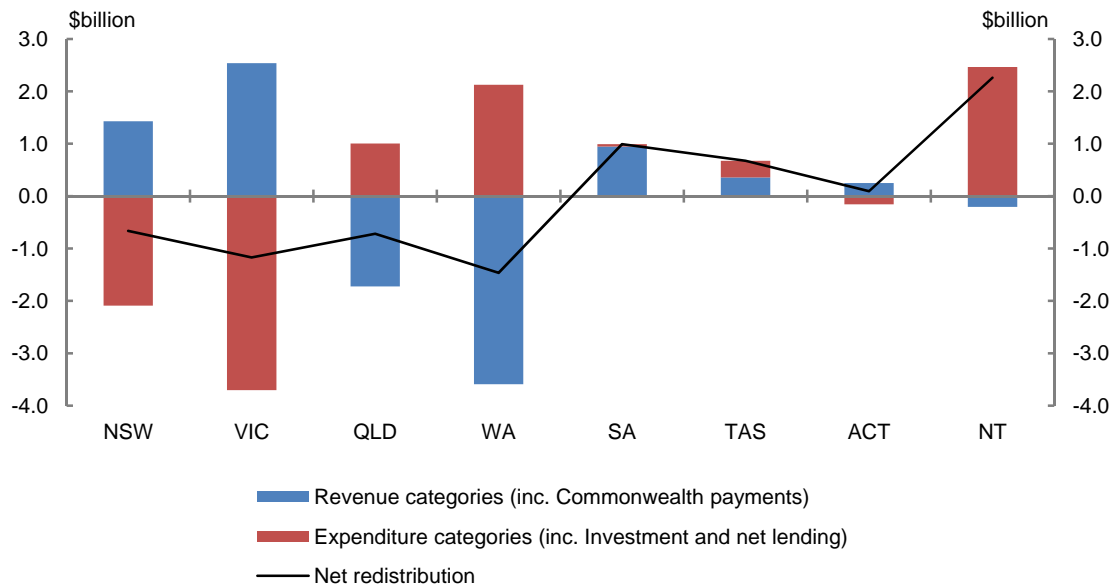
Chart 2.6: Main influences on GST redistribution (all States) 2010-11 and 2011-12



Source: CGC Reports on GST Revenue Sharing Relativities: 2010 and 2011

It must be noted that the total amount of funding redistributed is substantially less than the sum of these values, since funding flows relating to different State differences can ‘net out’ against one another. For example, GST is redistributed away from Western Australia in recognition of above average mining production, but towards it in recognition of an above average Indigenous population share, and several other expenditure factors. **Chart 2.7** shows how the different States are affected by the aggregate expenditure and revenue assessments.

Chart 2.7: Estimated redistribution of GST: expenditure and revenue assessment effects on individual States, 2011-12



Source: CGC 2011 Update report

Expected future trends

Part one set out the expected long-term trends facing the Australia economy. In particular, high prices for Australia’s mineral and energy commodities have pushed the terms of trade to 140 year highs and Budget assumptions indicate that they may come off slowly, falling by around 20 per cent over a 15 year period.

These high mineral and energy commodity prices will continue to drive a boom in the mining sector and related activities like construction, resulting in stronger growth in the mining states — Western Australia and Queensland. The current commodities boom (among other factors) has also led to a higher Australian dollar than would otherwise have been the case. While the benefits of the commodities boom are most obviously seen in jurisdictions that have a large share of the nation’s mineral wealth, the impacts of rising incomes and their flow on benefits are felt nationwide.

States more reliant on manufacturing however, such as Victoria and New South Wales, are expected to grow more slowly in the mediumterm. These States face additional pressure from the gravitation of skilled labour across States to growth sectors such as mining and construction in Queensland and Western Australia. Current Treasury projections are that the Western Australian and Queensland economies will grow by 51 and 42 per cent respectively to 2020, while Victoria and New South Wales are projected to grow by 30 and 28 per cent respectively.

Predominant non-mining industries across Australia that are especially exposed to a relatively high Australian dollar, by State are:

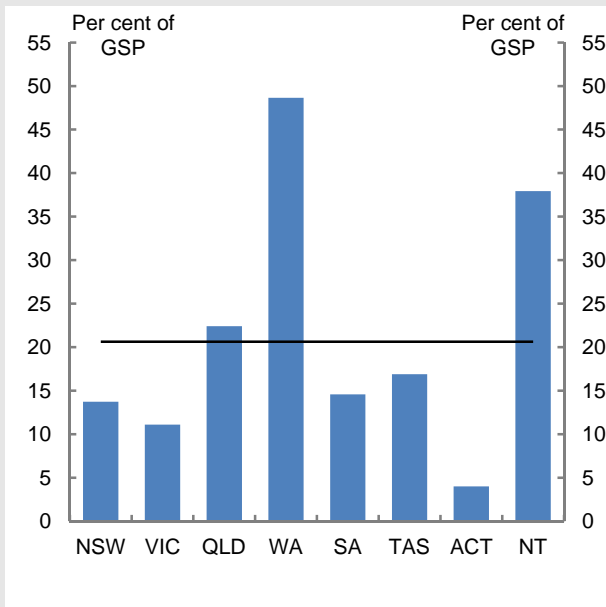
- **New South Wales:** the manufacturing, tourism and education sectors.
- **Victoria:** the manufacturing, tourism and education sectors.
- **Queensland:** the tourism sector.
- **Tasmania:** the manufacturing and forestry sectors.

Notwithstanding this, as discussed in section one, longer-term opportunities will flow from sustained growth in Asia more broadly. The transition to higher incomes in Asia is likely to generate demand for a variety of goods and services. To make the most of the opportunities arising from a burgeoning Asian middle-class, Australia will need to pursue a broad-based agenda to increase productivity, innovation and both labour and management skills.

It must be noted that while the economies, and hence relative fiscal capacities of Western Australia and Queensland are expected to grow faster than the average over the medium-term, this outlook will be influenced by external factors. While the demand for Australia’s non-rural commodity exports is expected to remain strong, the Western Australian economy in particular would be impacted by any sharp deterioration in global demand (Western Australia was a recipient State as recently as 2006-07).

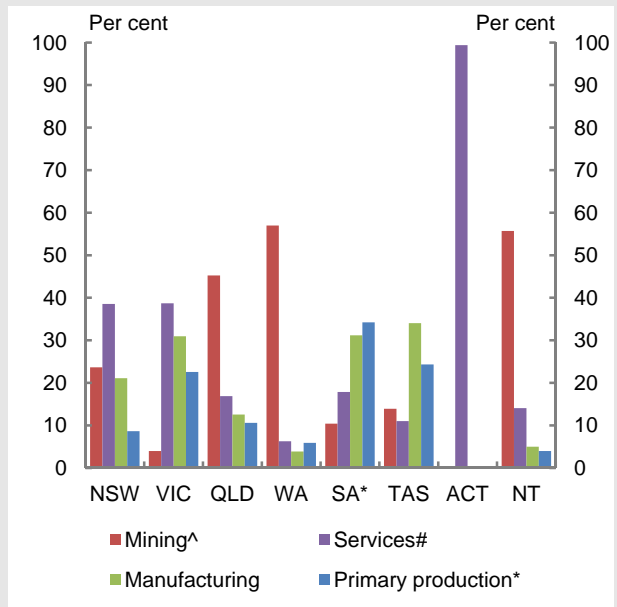
One measure of the States’ differing exposure to external factors is the importance of exports to each State’s Gross State Product (GSP). **Chart 2.8a** illustrates the relative importance of international exports to GSP, by State, while **Chart 2.8b** illustrates the differing exposure of State export sectors to a relatively high Australian dollar.²⁵

Chart 2.8a: Exports as a proportion of Nominal GSP, States and Territories, 3-year average from 2007-08 to 2009-10



Source: Department of Foreign Affairs and Trade (DFAT) 2011. *Australia's Trade by State and Territory 2009-10*

Chart 2.8b: Industry breakdown of exports, States and Territories, 3-year average 2007-08 to 2009-10



* Food and 'other primary'

^ Fuels and Minerals # Transport, travel and other.

Source: DFAT 2011. *Australia's Trade by State and Territory 2009-10*

25 Import competing industries will also be affected by an appreciating exchange rate, therefore these charts underplay the differences in State exposure to the terms of trade boom, since some States are also more exposed than others to relatively cheaper imports.

Key point 2: HFE shares the benefits of the resources boom with States that do not benefit as directly from the boom as those States with large natural resource endowments. HFE also acts as a form of insurance (albeit with a lag) for States that are benefiting from the strong demand for Australia's non-rural commodities, but that are relatively more exposed if those conditions change rapidly or unexpectedly.

3. THE IMPACTS OF THE CURRENT EQUALISATION SYSTEM

The terms of reference for the GST Distribution Review state that, in considering possible changes to the HFE system, the review should have regard to efficiency, equity, simplicity and predictability and stability. Treasury has conducted an initial analysis of the current system against these criteria.

Efficiency

This submission considers efficiency effects in two parts:

- there are general, theoretical effects of engaging or not engaging in HFE within a federation; and
- there are particular efficiency effects of Australia’s current HFE system and the way the GST sharing relativities are calculated.

Broadly, it must be noted that a significant amount of HFE occurs outside the formal HFE system as a result of Commonwealth transfers, such as progressive income tax scales and social welfare payments to individuals. On this basis, any distortionary effects of the formal HFE system are likely to be marginal in comparison to the entirety of the wealth transfers undertaken by Australian governments.

Considering that a guiding principle for the review is that ‘...equalisation between the States has served Australia well’, more weight is given to discussing specific issues with the current system. The main theoretical effects that have been the subject of debate and analysis for some time are summarised in **Table 3.1**.

Table 3.1: General arguments regarding the efficiency of HFE

	Effects that may increase economic efficiency	Effects that may decrease economic efficiency
Location decisions	HFE may reduce the incentives for individuals to relocate to higher income regions to receive better services, or lower taxes, funded through location specific rents, rather than due to productivity gains.	HFE may encourage labour and capital to remain in relatively high cost regions, or blunt the incentive to re-locate to areas where they will enjoy higher income based on productivity gains.
Government Spending	HFE provides for investment in human resources nationwide. Arguably, this could reduce the risk of an equity-reducing ‘vicious cycle’.	HFE transfers result in a larger public sector in recipient States relative to donor States, and the public sector in recipient States is larger than its citizens preferences.
State policy		States may not suffer the full consequences of poor economic policy decisions if they are compensated through the HFE system, to the extent that their poor performance affects their assessed revenues relative to the average.

Location decisions

Issue

In considering whether HFE is likely to have an impact on an individual’s migration decisions, it is first worth considering the reasons people move. Individuals will have an incentive to move to areas where the net present value (NPV) of their expected future income stream is higher than at their current location (net of migration costs).²⁶ A higher NPV income stream could result from a higher marginal product of labour (jobs with higher wages), lower taxes, or a higher probability of employment. Individuals may also benefit from a

²⁶ Biddle, N. & Hunter, B. 2005. *Factors associated with internal migration: A comparison between Indigenous and non-Indigenous, Australians* Centre for Aboriginal Economic Policy Research, ANU, Canberra.

higher 'effective' income stream if they move to an area where costs of living are lower, or levels of public service provision are higher.

Any decision to migrate will be balanced against other drivers of location decisions such as cultural factors friends and family, and climate. A truly economically rational person will take account of these often less tangible benefits by considering the 'psychic income' (or costs) associated with any decision to migrate.

The absence of HFE can be efficiency enhancing for a federation if it encourages individuals to move to an area where they will be more productive, or areas where it is more cost effective to provide services. For example, during a resources boom a worker may move to a mineral resource-rich area where wages are higher, in recognition of a relatively high marginal product of labour.

The absence of HFE can be efficiency reducing if it encourages people to move to an area where they are less productive or where the effects of their increased productivity are outweighed by externalities (such as increased congestion). For example, a worker may move to an area where their marginal product of labour is lower than their point of origin, drawn by relatively low taxes or high service levels (say, funded by mining revenues) that lead to a higher level of disposable income in net terms.

Literature

Since HFE effectively results in a transfer of income from one region to another, it will be interfering, to a greater or lesser extent, in this mix of incentives that individuals face. The efficiency effects of HFE on locations decisions have been modelled in academic literature with varying results. Some studies have found that HFE is efficiency enhancing, and others that it is efficiency reducing. Much of the work reviewed on location decisions has been done in reference to the Canadian system, but is relevant to Australia as both countries have large mineral resources which are unevenly distributed across regions.

The majority of the more recent literature on HFE appears to suggest a net negative efficiency impact, although arguments are made in both directions. As recently as 2010, David Albouy conducted modelling published by the National Bureau of Economic Research showing that the Canadian HFE system is efficiency reducing in net terms.^{27 28} Jonathan Pincus also recently found that the Australian HFE system should be reformed, on both efficiency and equity grounds.²⁹ However, a 2003 paper by L.S. Wilson brought together much earlier academic work by Boadway and Flatters³⁰, and Watson³¹, showing that there may have been efficiency gains resulting from the Canadian equalisation program.³²

The largest factor currently affecting the GST distribution is mining revenue. It is therefore worth highlighting the views expressed in the literature on this specific point. There is an argument that source-based taxes in particular should be redistributed on the basis of efficient location decisions. This is based on the theory that redistributing source based revenues discourages inefficient migration to resource rich areas.^{33 34}

While States have policy control over the extent to which their natural resources are exploited, a key determinant of fiscal capacity, resource endowment, is a product of circumstances beyond their control. On

27 Albouy, D. 2010. *Evaluating the Efficiency and Equity of Federal Fiscal Equalization*, National Bureau of Economic Research, Cambridge.

28 Albouy also found that HFE may not improve equity.

29 Pincus, J. 2011. *Examining Horizontal Fiscal Equalisation in Australia*, Research Paper No. 2011-25, University of Adelaide, Adelaide.

30 Boadway, R. & Flatters, F. 1982. *Efficiency and Equalization payments in a federal system of government: a synthesis and extension of recent results*, Canadian Journal of Economics, Vol 15, Issue 4, 1982 pp. 613-33

31 Watson, W. 1986. *An estimate of the welfare gain from Fiscal Equalization*, Canadian Journal of Economics, Vol. 19, No. 2, May 1986 pp. 298-308

32 Wilson, L. S. 2003. *Equalization, Efficiency and Migration: Watson Revisited* Canadian Public Policy, Vol. 29, Issue 4.

33 Albouy, D. 2010. pp. 1-2

34 The caveat is that, to the extent that source-based taxes are used to provide local services to the local factors that are being taxed, they should not be redistributed.

this basis, it is difficult to argue that residents of Perth should benefit more from the proceeds of the sale of iron ore deposits in the Pilbara than residents of Darwin (after allowing for any associated costs of exploitation). One could imagine a scenario in which the Pilbara region sat within the borders of the Northern Territory. Albouy sums up the argument as follows:

'...there is no compelling economic reason why a migrant should be entitled to revenues from taxes on local oil production, such as the Alaska Permanent Fund, just for moving across a border to an oil rich region. Instead, this policy wastes resources by paying people to suffer in the cold.'³⁵

A counter view set out by Pincus in 2011 is that differences in natural endowments other than mining are not equalised. This could mean that HFE is distorting movement decisions that make it harder for Western Australia to attract labour during the mining boom. Pincus makes the point as follows:

*'What is the argument for taxing WA for having mines in horrible places and not taxing NSW for being blessed with a beautiful setting for its capital city...in the absence of HFE, WA would have superior public services, and people would trade those off against the terrible heat.'*³⁶

Analysis

The modelling and analysis in the literature is useful for testing the economic theories that underpin location decisions and their interaction with fiscal policy. However there is a difference between proving theoretically that an effect exists (and the magnitude of the theoretical impact), and finding practical evidence of the effects in the context of the Australian system. As such, there is still a need for careful analysis of the options for reform of the current system.

In the case of individuals, it would seem that the amount of funding redistributed by the current system, and therefore the differences in government services, infrastructure and taxes resulting from the redistributed funds, are likely to have a small impact on their decision to migrate. Since 2000-01, less than \$650 per capita, per year has been redistributed away from or towards any given State with the exception of Tasmania (never more than \$1400 per capita in any year), and the Northern Territory. The Northern Territory is a clear outlier, with over \$9000 per capita expected to be redistributed towards it in 2011-12.³⁷

In 2009-10, the average amount of per capita funding redistributed amongst States represented about 0.4 per cent of gross household disposable income per capita for Australia (\$37,714).³⁸ For Tasmania, the amount redistributed towards it in that year represented about 3.3 per cent of Australian per capita income, and for the Northern Territory, 22.4 per cent.³⁹

It is also worth considering the effect on donor States, especially in the context of the mining boom and the associated labour demand it generates. For Western Australia (the largest per capita donor), the amount redistributed away from it in 2009-10 represented 1.1 per cent of Australian per capita income (or 1.0 per cent of Western Australia's per capita income). In the same year, the ratio of Western Australia's per capita income to Australia's per capita income was around 1.11. If we take account of the HFE effect by subtracting the per capita amount redistributed away from Western Australia from per capita income, this ratio drops to around 1.10.⁴⁰ In the context of all of the other factors at play, the influence of HFE on a potential worker's decision whether or not to move to Western Australia to take advantage of the mining boom is likely to be small.

35 Albouy, D. 2010. pp. 1

36 Pincus, J. 2011. pp. 16

37 GST Distribution Review Issues Paper

38 Referred to as 'Australian per capita income' hereafter for brevity

39 Treasury calculations based on: Issues Paper & ABS 2010 *Australian National Accounts 2009-10*, ABS Cat. No. 5220.0

40 Treasury calculations based on: Issues Paper & ABS 2010 *Australian National Accounts 2009-10*, ABS Cat. No. 5220.0

HFE could be providing Northern Territory with a per capita income boost that has a larger effect on location decisions than for other States, however the effect is unquantifiable, and based on the diverse drivers of location decisions, could still be assumed to have a small overall impact.

Furthermore, there is evidence to suggest that the choices of Indigenous Australians, who are the key driver of the redistribution of funding towards the Northern Territory, are less likely to be influenced by economic factors (and HFE effects) in making location decisions. In work for the Centre for Aboriginal Economic Policy Research; Biddle and Hunter have found: 'Indigenous Australians are less responsive to local economic factors than other Australians, with social and cultural factors appearing to play a particularly significant role in their decision making.'⁴¹ They suggest that this may also be partly attributable to the fact that there are differences in employment probabilities for Indigenous compared to non-indigenous people in metropolitan areas as well as remote regions.

In summary, based on the above analysis, there does not appear to be a need for reform of the system on the basis of location decisions.

Government spending

Issue

It has been argued that HFE results in an inefficiently large public sector in recipient States, due to the 'flypaper' effect. Proponents of this effect argue that grants from a federal to a state government typically stimulate state government spending by a large proportion (often close to 100 per cent) of the value of the grant. They argue that this must be efficiency reducing, since the residents of the state would never choose to spend such a high proportion of an equivalent rise in income on public services if they received it directly.⁴² This implicitly assumes HFE is largely funding the variable costs of service provision, rather than compensating smaller jurisdictions for fixed costs.

A contrary argument is that additional government spending as a result of HFE transfers could contribute to efficiency, for example by boosting investment in health and education leading to efficiency enhancing increases in human capital. To the extent that divergences in outcomes can be explained by differences in spending, a below average fiscal capacity could lead to below average education and or health outcomes. This could then lead to below average economic performance, reduced revenues, and consequently, services (and outcomes) that are further below average.

Literature

If it is accepted that an unequal distribution of grants in recognition of different fiscal capacities is efficiency reducing, it follows that a move to an EPC distribution (or some other non-equalising system) of GST revenue may enhance national welfare. Previous work has been done to model the efficiency impacts of the Australian HFE system and compare it with a move to an EPC distribution. For example, Dixon, Picton and Rimmer undertook computable general equilibrium analysis in 2005, and broadly found: 'that the welfare gain from a change to equal per capita funding would be small, no more than \$150m or about 0.3 per cent of the amount distributed from the Commonwealth to the States.'⁴³

Similar results drawing on earlier work by Dixon et al are referenced in the Garnaut-Fitzgerald review of 2002, which reported efficiency gains of moving to an EPC or similar system would be in the region of \$150 to \$300 million.⁴⁴ In both cases, most of the efficiency gains are attributed to the 'flypaper' effect which, in

41 Biddle, N & Hunter, B. 2005. pp. i.

42 Hines, J.R. and Thaler, R. *The Flypaper Effect* Journal of Economic Perspectives – Volume 9, Number 4, Fall 1995

43 Dixon, P. Picton, M. & Rimmer, M. 2005. *Efficiency Effects of Changes in Commonwealth Grants to the States: A CGE Analysis*, Monash University, 2005 pp. 101

44 Garnaut. R & Fitzgerald, P. 2005. *Review of Commonwealth-State Funding*, Melbourne, pp. 143

the case of the 2005 study, was an effect imposed on the modelling by assumption. Specifically, the model assumes that ‘when a State government receives an increase in its per capita grant from the Commonwealth government, it reacts as if its preference for public goods...increases relative to the preference of its citizens...’⁴⁵

While the economic theory behind this effect is clear, unpacking the effects in the context of the Australian system is difficult. Garnaut and Fitzgerald pointed to the smaller proportion of full-time private sector employment in Tasmania as evidence of this effect, however this may be the result of a number of factors (including demographics), discussed further under ‘analysis’.⁴⁶

On the other hand, the economic case for linking educational and health outcomes with productivity is well established, particularly the link between levels of education and employment outcomes. For example, a 2010 Productivity Commission working paper found that hourly wages are greater for individuals with higher educational attainment levels. It also found small hourly wage reductions result where people suffer from particular chronic health conditions.⁴⁷ An earlier study also showed that increases in educational attainment, and/or averting or successfully treating particular health conditions will have a positive impact on labour force participation.⁴⁸ Ensuring that State governments have the capacity to deliver comparable services, particularly education services, reduces the risk that some jurisdictions fall behind others permanently, to the extent that better education and health outcomes can be linked to the standard of service provision provided in those sectors.

Analysis

It is worth investigating whether the HFE appears to be ‘bloating’ the public sector in recipient States. One simple approach is to look at the number of public sector employees as a proportion of the population (or the working age population), which seems a proxy measure of public sector size. The results of this comparison are shown in **Chart 3.1**.

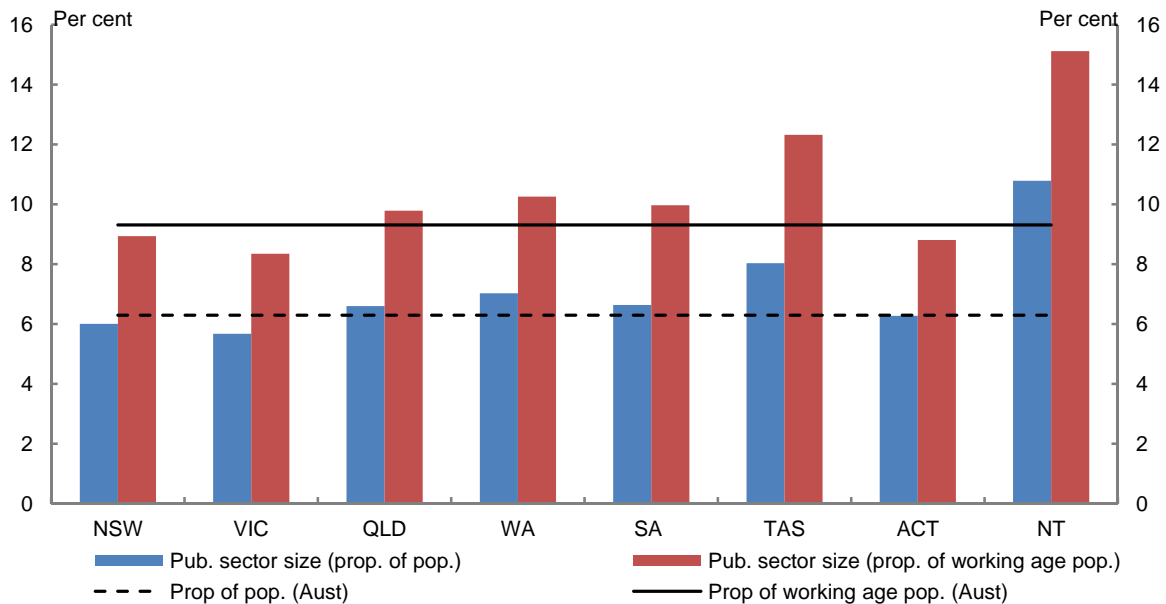
45 Dixon, P. Picton, M. & Rimmer, M. 2005. pp. 91

46 Garnaut, R. Fitzgerald, P. 2002. pp. 145

47 Forbes, M. Barker, A. and Turner, S. 2010. *The Effects of Education and Health on Wages and Productivity*, Productivity Commission Staff Working Paper, Melbourne, pp. 25-27.

48 Laplagne, P. Glover, M. & Shomos, A. 2007, *Effects of Health and Education on Labour Force Participation*, Staff Working Paper, Melbourne.

Chart 3.1: State government public sector employees as a percentage of the population, and the working age population, 2010



Source: Treasury calculation based on ABS: 3101.0 Australian Demographic statistics, 2010 and 6248.0.55.002 — Employment and Earnings, Public Sector, Australia, 2009-10

Notwithstanding any dynamic effects that might not be captured in this static analysis, there does appear to be a pattern showing recipient States have larger public sectors than donor States. However Western Australia (the main per capita donor) has an above average share of public sector employees while the Australian Capital Territory, a recipient State, has a below average share.

Given this, it may be that the necessary size of the State public sector is not influenced by whether the State is a donor or recipient, as much as it is influenced by expenditure disabilities. New South Wales, Victoria and the Australian Capital Territory are the only donor States on the expenditure side (shown in **chart 2.7**), and are the only States to have a below average share of public sector workers.

States that are net recipients on the expenditure side could be expected to need a larger public sector to overcome the difficulties (such as remoteness) that the HFE system seeks to compensate States for. This is what makes it so difficult to determine whether or not the HFE system is resulting in an inefficiently large public sector: some States will require more resources to deliver average services than others.

State policy

Issue

Some States and academics have argued that incentives for States to pursue growth enhancing policies are blunted by the effects of the HFE system. For example, if a State adopts business friendly policies that result in large firms moving to that State, its payroll tax base will grow. In turn, the CGC will assess that State as having a higher capacity to raise payroll tax revenue, and it will see some benefits of the larger tax base equalised away.

Analysis

One aspect of this argument is the assertion that the CGC does not adequately account for the costs of economic development in its expenditure assessments. Garnaut and Fitzgerald argue that the CGC equalises revenues and hence the benefits of economic development, but does not adequately equalise costs. Garnaut

and Fitzgerald also find that the efficiency losses due to this effect could be very large, if it is accepted that State government policies have a significant bearing on economic growth.

On the expenses side, the CGC does take account of some of the costs associated with economic development through its assessments. For example, Western Australia loses GST revenue as a result of the mining boom due to its strong capacity to raise mineral royalties; however the CGC recognises the resulting wage pressures and population growth, and compensates Western Australia accordingly.

As with other potential efficiency arguments in the literature, this effect is difficult to quantify. This effect should only impact on State decisions under the following hypothetical scenario:

- An economic reform is available to a State government, but pursuing the reform entails a cost;
- The fiscal benefits from the reform include additional revenue and/or lower expenses which, without HFE, are large enough that the government would proceed with the reform;
- The net reduction in fiscal benefits associated with HFE is large enough, at the margin, to dissuade a State government from pursuing the reform.

This highlights the fact that the strength of any disincentive for economic reform will depend on the relative importance that individual State governments place on direct fiscal benefits in comparison to other considerations. It is also worth noting that there is a difference between co-operative and unilateral reform. If all States pursue co-ordinated reform, all things being equal, this effect is likely to disappear.

It seems unlikely that there are a large number of unambiguously efficiency enhancing reforms available for which HFE is the marginal factor that is dissuading governments from pursuing reform.

This review provides an opportunity for governments and other participants to identify any efficiency enhancing reforms which have not proceeded due to HFE.

As will be demonstrated by a few indicative examples, the HFE redistribution effects tend to be small compared to the total cost or benefit of the policy. In fact, the total benefits of pursuing growth enhancing policies are likely to be very diverse and outweigh any HFE effects, such as higher State GSP, and more and/or higher paying jobs being made available in that State. Furthermore, a large driver of the current redistribution is the difference in resource endowments, which is largely independent of State government policies.

In the event that a State does make poor policy decisions impacting on economic growth, the current form of HFE will reduce the impact that these policy choices have on that State's fiscal capacity, to the extent that there are not 'spill over effects' of that poor performance that reduce the assessed revenues of other States.

Efficiency effects of Australia's current System

The submission now turns to the particular efficiency effects of Australia's current form of HFE. These efficiency effects are examined in relation to:

- state service provision;
- state tax policy; and
- the overhead costs of managing the system.

Efficiency of State service provision

Issue

The current HFE system redistributes GST on the basis of what the States collectively do, rather than what the most efficient State does. As such, there is no explicit driver of efficiency built into the HFE system (beyond the fact that funding is untied and hence, wherever it can be saved through efficiency in one sector, that funding can be re-directed towards any priority the State chooses).

The CGC has previously acknowledged that there would be conceptual merit in basing service delivery assessment needs on the highest level of observed efficiency, rather than the average, however concluded that this could not be reliably determined.⁴⁹ In the longer term, experience gained from measuring the efficiency of hospital services as a result of the recent health reforms, and the work of the Independent Hospital Pricing Authority (IHPA), may warrant revisiting this issue. The IHPA will determine the national efficient price for services provided on an activity and block funded basis in public hospitals, through empirical analysis of data on actual activity and costs in public hospitals. In the interim, a move to this form of equalisation is not feasible.

It has been argued by some States and other commentators that CGC assessments based on average costs, rather than the 'best practice' or 'most efficient' cost, reduce the incentives for States to:

1. address disabilities (i.e. make long-term policy gains that reduce the need for increased expenditure in the sector); and/or
2. pursue cost-reducing reforms in areas where they have an expenditure disability.

Since the CGC makes assessments based on the average of what States do, both of these incentive effects can be considered equivalently. That is, an increase in efficiency in a particular area would, all things being equal, reduce a given State's expenditure in that area. Similarly, if a State was able to 'solve' the difficulty that was creating the disability over the long term, it would presumably be able to divert funds away from that area of expenditure to another area. This means that we can consider both of these effects by looking at what happens to a State's GST share, when it is able to reduce actual expenses in a particular area.

Analysis

The following discussion is based on a simple and highly stylised model that simulates an expenditure assessment for which there is only one disability. To make the simulation as reflective of the system as possible, actual expenditure data for the 2010 admitted patients' assessment has been used, with actual expenditures re-based to ensure that total assessed expenditure per capita is \$100.

The expenditure disability incorporated into the model reflects the higher costs of providing admitted patients' services to Indigenous Australians (these costs are reflected using the actual expenditure ratios included in the 2010 Indigenous Expenditure Report). For the purposes of the discussion, the model is considered in the abstract, and States are grouped into 'donor' and 'recipient' States in respect of this single assessment only.

The efficiency impacts could depend on:

- whether or not the State has a large impact on the average (mostly, but not always driven by whether or not that State is a 'large' State); and
- whether or not the State is a 'recipient' or 'donor' for that expenditure assessment.

⁴⁹ CGC Report on GST Revenue Sharing Relativities – 2010 Review, pp. 36

Table 3.2 shows the base scenario of the simulation, with one disability factor redistributing \$150.15 in total. The disability expenses are driven by the weighted average of what States do. As set out above, the mechanics of this broadly reflect the operation of the Indigenous assessment (in a simplified way).

Table 3.2: Redistribution of the GST — Treasury simulation

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Aust
Assessed expenses (\$pc)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>plus disability expenses (\$pc)</i>	5.63	1.64	8.80	8.23	4.56	9.75	3.25	73.88	
Total assessed expenses (\$pc)	105.61	101.62	108.78	108.22	104.54	109.73	103.24	173.86	106.21
Cost of service provision ratio	0.99	0.96	1.02	1.02	0.98	1.03	0.97	1.64	1.00
Redistribution (\$pc)	-0.59	-4.59	2.58	2.01	-1.67	3.52	-2.97	67.66	
Redistribution (\$)	-19.31	-113.80	52.00	20.58	-12.28	8.03	-4.76	69.54	150.15

Note: These figures are based on a stylised Treasury simulation of the efficiency effects of the system. They are not comparable to CGC relativities.

Source: Treasury calculation

For this assessment, Victoria has well below average assessed expenditure, and is the main donor State, while the Northern Territory has well above average assessed expenditure, and is the main recipient State. Based on this status quo, the model was used to investigate the effects of one State making a 20 per cent efficiency gain (i.e. actual expenditure falls by 20 per cent in the disability category) under four separate scenarios in which the State is:

1. a large⁵⁰ donor State (NSW);
2. a large recipient State (QLD);
3. a small donor State (SA); or
4. a small recipient State (NT).

The results of these scenarios are shown in **Table 3.3** below.

Table 3.3: Redistribution changes as a result of a 20 per cent efficiency gain — Scenarios 1 to 4

Redistribution changes (\$)	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Aust
Scenario 1 (NSW)	0.61	3.57	-1.63	-0.65	0.39	-0.25	0.15	-2.18	4.71
Scenario 2 (QLD)	1.01	5.95	-2.72	-1.08	0.64	-0.42	0.25	-3.64	7.85
Scenario 3 (SA)	0.30	1.77	-0.81	-0.32	0.19	-0.12	0.07	-1.08	2.34
Scenario 4 (NT)	1.12	6.60	-3.02	-1.19	0.71	-0.47	0.28	-4.03	8.71

Note: These figures are based on a stylised Treasury simulation of the efficiency effects of the system. They are not comparable to CGC relativities.

Source: Treasury calculation

For example, under the baseline scenario \$113.80 is redistributed away from Victoria. After a State makes an efficiency gain Victoria will gain between \$1.77 and \$6.60 in GST. At most, under scenario four, this will mean that Victoria would regain around 6 per cent of the amount initially being redistributed away. It should be noted that a change of this magnitude, in the context of the full assessment actually conducted by the CGC is unlikely to result in a noticeable change in Victoria's overall GST relativity.

The results of this simulation are in line with expectations. States have an incentive not to reduce expenditure if they gain GST for a category, and the more influence a State has on the average, the stronger the incentive. In this case, the Northern Territory has a large bearing on the average, so it loses GST revenue when it makes an efficiency saving (scenario four). Conversely, if a State loses GST in a category, it has an

⁵⁰ In this context, 'large and small' refers to a State's population, rather than the magnitude of the redistribution.

incentive to reduce expenses that is commensurate with its size. This is illustrated by scenario 1: when New South Wales makes a saving in expenditure, it also gains GST.

It should be noted that, of the four scenarios modelled, the Northern Territory has the greatest effect on the average, even though it is a small State. This is because the data that was used yielded a very high ‘actual’ expenditure figure for the Northern Territory. When reduced by 20 per cent, this large expenditure difference had a disproportionate effect on the weighted average of all State expenditure. This means that the model is likely to be simulating a ‘worst case’ scenario — where the largest recipient also has the largest influence on the average. In general, the four largest States will have the greatest effect on the average.

Having confirmed that there is potential distortion generated by HFE, this needs to be measured relative to the underlying incentive for States to realise efficiency gains. **Table 3.4** shows the actual dollar impact on a State that makes a 20 per cent efficiency gain, the GST impact, and the gain/loss of GST (in dollar terms) per dollar saved.

Table 3.4: Net impacts of simulated 20 per cent efficiency gain, under Scenarios 1 to 4, by State

	Scenario 1 NSW	Scenario 2 QLD	Scenario 3 SA	Scenario 4 NT
Amount saved (20 per cent of actual expenditure) (\$)	19.54	32.55	9.68	36.12
GST impact (\$)	0.61	-2.72	0.19	-4.03
Gain/loss per dollar saved (%)	3.10	-8.35	1.97	-11.17

Note: These figures are based on a stylised Treasury simulation of the efficiency effects of the system. They are not comparable to CGC relativities.

Source: Treasury calculation

The outcomes of this (highly stylised) simulation suggest that the efficiency impacts of HFE on State service provision are modest, since the averaging effect of the CGC process significantly blunts the influence a State can have on its own GST share. Under scenario four, where the State has a large expenditure disability and a large bearing on the average, for every dollar it saves in expenditure it retains about 89 cents, with the HFE assessment redistributing 11 cents.

It seems unlikely that a State would be dissuaded from pursuing cost savings in the vast majority of cases, since the distortion generated by HFE is relatively small. These results are broadly in line with the results of CGC modelling contained in its submission to the review, although this stylised version has found a stronger efficiency effect.

It should be acknowledged that any given reform option will carry a probability of an efficiency gain, rather than a certainty. It could be argued that the incentive effects of the HFE system add to an already complex mix of risks, incentives, and expected gains, and as such could have a disproportionate effect on decision making. If this were the case, it must also be noted that the HFE system is structured such that the HFE effects will only be felt if efficiency gains are actually realised.

Key point 3: The averaging approach currently adopted by the CGC results in relatively small impacts on States that realise efficiency gains in government expenditure, and in some cases, there is an added incentive to improve efficiency.

Revenue efficiency — influences of the HFE system on State tax policy

Tax reform incentives

Issue

The States rely on transaction taxes, such as stamp duties on insurance and conveyances and have many exemptions to payroll and land taxes. These taxes and exemptions are generally acknowledged to be inefficient and many reviews have called for their reform, including the Australia's Future Tax System (AFTS) review and the Independent Pricing and Regulatory Tribunal's Review of State Taxation for New South Wales.

While there are many factors that influence individual State's choices of tax policy, some States and academics have argued that the GST distribution process reduces incentives, or acts as a disincentive to reform, perpetuating reliance on inefficient taxes. This submission discusses the incentive effects in general terms, and looks at a specific reform example relating to insurance taxes. Two effects on State policy choices are at play: the 'rate effect' and the 'base effect', both of which are discussed in detail and measured in a 2003 paper by Dahlby and Warren.⁵¹

If a State's capacity for a given tax base is lower than the average then it will gain GST revenue in that revenue category, and will thus have an incentive to have a high tax rate (and drive up the average tax rate for that base). Conversely if a State's capacity is above average for a given base, then it will be losing GST in that category and will have an incentive to have a low tax rate (driving down the average). In simpler terms, States have an incentive to ensure that the relative importance of a given revenue assessment is high if they are gaining GST, and low if they are losing GST. As with other incentive effects of HFE, it is one of many issues influencing state behaviour and should be viewed within this environment.

The base effect arises through the CGC's method of calculating assessed revenues by applying the national average tax rate to a State's tax base. The base effect provides a State with the incentive to reduce the size of its tax bases by raising taxes, which 'lowers the perceived cost of raising tax revenues.'⁵² For example, economic theory suggests that land tax rates reduce the value of land as it is a fixed resource. To the extent that this holds, a State with a higher than average land tax would have relatively lower land values.

An additional potential effect is the interaction between HFE and tax competition. Boadway (and others) have noted that while HFE encourages States to set tax rates that are above optimal levels, this counteracts the natural tendency for tax competition between jurisdictions to set taxes at below optimal levels for more mobile tax bases.⁵³

It is difficult, if not impossible to measure any potential HFE efficiency effects as an optimal state tax system would need to be identified. There are a large number of factors that influence a State's choice of tax mix and tax policy (e.g. local preferences). Any approach would need to allow for such relevant factors before attributing efficiency costs to HFE.

51 Dahlby, B & Warren, N. 2003. *Fiscal Incentive Effects of the Australian Equalisation System* The Economic Record, Vol. 79, No. 247, December, University of New South Wales, Sydney.

52 Dahlby, B & Warren, N. pp. 435

53 Boadway, R. 2007 *The Theory and Practice of Equalisation*, Queen's University Economics Department Working Paper No. 1016, Ontario. pp. 25

Analysis: insurance taxes case study

A more tractable issue is to consider whether, accepting that current State taxes are not economically efficient⁵⁴, what influence the current form of HFE has on potential State tax reforms. One way to consider the rate effect is to look at the incentives States face in reforming taxes, such as by abolishing an inefficient tax (i.e. setting the tax rate at zero) and replacing the revenue with additional payroll tax. The additional payroll tax is assumed to be levied on existing payers of payroll tax, rather than broadening the base, to simplify the analysis. The following example suggests that if all States abolished insurance taxes under the existing system, it is likely that the GST distribution would add to the cost of reform for some States. This cost would need to be weighed against the efficiency gains, such as potentially higher GSP, that the reform could bring.

Table 3.5 shows the CGC's assessment of each State's capacity to raise revenue from insurance and payroll taxes. New South Wales is the only State assessed as having an above average capacity for insurance tax while New South Wales, Victoria, Western Australia and the Australian Capital Territory are assessed as having an above average capacity for payroll tax.

Table 3.5: Assessed revenue per capita from insurance and payroll taxes, 2009-10

	\$	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Average
Insurance tax		159	133	135	137	140	111	131	113	142
Payroll tax		799	766	679	929	590	547	807	634	757

Source: CGC 2011 Update.

Based on these assessments, the following examples show the impact of this tax reform on the GST distribution.

Example 1: Coordinated State tax reform

Table 3.6 illustrates the impact on the GST distribution if all States abolished insurance taxes and replaced the revenue with additional payroll tax.

Table 3.6 Coordinated state tax reform and change in GST allocation

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
Change in insurance tax (\$m)	-880	-865	-508	-428	-347	-47	-43	-29
Change in payroll tax (\$m)	880	865	508	428	347	47	43	29
Actual dollar impact (\$m)	0	0	0	0	0	0	0	0
GST impact (\$m)	52	-46	32	-78	40	4	-5	-1
Gain/loss per dollar of revenue transferred between tax bases (%)	6	-5	6	-18	12	10	-12	-2

Note: Figures from Treasury calculation based upon CGC data from the 2011 Update.

In this scenario, the GST impact on individual states represents the combined effect of two factors — the removal of the insurance tax assessment and an increase in the GST redistributed as a result by the payroll tax assessment.

- New South Wales receives more GST as a result of the removal of the insurance tax assessment but this is partially offset by a decrease in the GST as a result of the payroll tax changes.
- Both effects reduce the GST share of Victoria, Western Australia and the Australian Capital Territory.

⁵⁴ Modelling prepared by KPMG Econtech for AFTS indicated that state taxes, with the exception of land taxes, have high excess burdens. See: KPMG Econtech. 2010. *CGE Analysis of the Current Australian Tax System*

- The remaining jurisdictions experience a reduction in their GST share as a result of the removal of the insurance tax assessment but this is offset by an increase in GST as a result of the payroll tax changes. The net effect is an increase in the GST share of Queensland, South Australia and Tasmania and a reduction in the GST share of the Northern Territory.

In this case, half of the States receive additional GST as a result of the reform and the other half receive less. The size of the relative impacts range from a loss of approximately 18 cents for every dollar of revenue transferred in the case of Western Australia to a gain of approximately 12 cents for every dollar transferred for South Australia.

Under this scenario, Western Australia would have the strongest incentive not to pursue the reform. However, if the majority of the other States were to pursue the reform, most of the GST impact on Western Australia would still occur. This is because the majority of States would no longer levy insurance taxes and would instead levy higher payroll taxes, making this the average policy. Therefore the CGC would cease making an assessment for the insurance tax category and make a larger assessment for the payroll tax category.

Example 2: Individual State tax reform

Similar to the effects of identifying efficiencies in expenditure, the relative contribution to the average of the State engaging in reform matters. In most cases this is correlated with population and economic size.⁵⁵ We would expect both New South Wales and Tasmania to gain GST, regardless of which State enacted the reform, because of their assessments in relation to the average, however the magnitude of the effects will be commensurate with their differing influence on the average. This is illustrated in **Table 3.7**, which shows the impact on both States, under two scenarios in which one State unilaterally abolishes insurance taxes and replaces the revenue with additional payroll tax.

Table 3.7: Individual State tax reform and change in GST allocation

	Scenario 1: NSW abolishes tax		Scenario 2: TAS abolishes tax	
	NSW	TAS	NSW	TAS
Change in insurance tax (\$m)	-880	0	0	-47
Change in payroll tax (\$m)	880	0	0	47
Actual dollar impact (\$m)	0	0	0	0
GST impact (\$m)	15	1	1	0
Gain/loss per dollar of revenue transferred between tax bases (%)	2	N/A	N/A	0

Note: Figures from Treasury calculation based upon CGC data from the 2011 Update. These numbers are intended to be indicative of the general intuition behind the CGC methodology.

Since it is a zero-sum distribution, any reform will result in some States gaining a greater share of the GST and some States being allocated a smaller share. When revenue from a category of taxes is reduced:

- States that receive GST in that category (i.e. whose assessed revenue is lower than the average) will receive a smaller share; and consequently
- States that lose GST in that category (i.e. whose assessed revenue is higher than the average) will receive a larger share.

Put another way, when revenue falls in a given category, the importance of that category is reduced. This is good for States that lose GST through that category, and bad for States that gain GST for that category. This argument holds in reverse when revenue increases in a given category.

⁵⁵ Mining royalties are an exception, with Queensland and Western Australia, the third and fourth largest States by population and Gross State Product, accounting for 79 per cent of total mining royalties in 2008-09 according to the CGC 2010 review.

The direction (positive or negative) of the impact will be the same no matter which State engages in reform. The size of the impact will depend on the relative contribution to the average of the State that implements reform. Nevertheless, this example shows the incentive effects to be small.

It should be noted that this example will underestimate the total impact, due to the 'base effect.' Where a State abolishes insurance taxes, assessed revenues could be expected to grow as the removal of the tax stimulates growth in insurance take-up, which is the revenue base assessed by the CGC. This effect could potentially be significant. A 2007 study commissioned by the Insurance Council of Australia found that, were New South Wales to abolish insurance taxes, around 130,000 additional households may elect to take out contents insurance.⁵⁶

More complicated reforms

In other examples it is less clear what the impact of coordinated or individual state tax reform would be. For example, reforms to payroll and land tax may involve base as well as rate changes. Changes to the base may affect whether a State is assessed to have above or below average capacity to raise revenue from a tax.

Key point 4: HFE is one of many issues influencing state tax reform, and should be viewed within this environment. The averaging approach currently adopted by the CGC results in relatively small impacts on States that engage in tax reform. Additionally, efficiency gains associated with the reforms flow to the reforming States.

Overhead costs of managing the system

Issue

The final source of potential efficiency loss is the overhead cost associated with the current form of HFE. The total cost is made up of:

- Direct costs of financing the activities of the CGC;
- Costs incurred by the Commonwealth and State Treasuries in working with the CGC on methodology issues and maintaining an understanding of CGC issues; and
- Costs associated with providing data to the CGC.

Analysis

The 2011-12 Budget allocates around \$6.3 million for resourcing the CGC.⁵⁷ In terms of costs for Treasuries, Treasury has assumed an allowance of five full-time staff per jurisdiction, costing an average of \$100,000 per annum per staff member in remuneration and other costs. This is expected to overstate the true level of resourcing on this issue.

This yields an estimate of approximately \$11 million annually in direct costs of administering the system, over half of which is borne by the Commonwealth and the rest by individual State Treasuries. These overhead costs of managing the distribution of the GST are reasonable relative to the amount of funding distributed and the importance of achieving a robust outcome. Based on the Budget 2011-12 figures, these costs equate to around 0.02 per cent of the GST pool, or around 0.3 per cent of the amount redistributed by the system.

56 Tooth, R. 2007. An analysis of the demand for home and contents insurance in Australia: A report for the Insurance Council of Australia, Centre for Law and Economics, Sydney.

57 Not including a similar amount carried forward from the previous financial year.

The costs incurred by the States in providing data are not taken into account here, but it should be noted that the CGC relies on data from available sources to feed into its calculations. That is, it mostly uses data already being collected by the States or other data agencies.

Efficiency: conclusion

Key point 5: Overall, there are some HFE effects that discourage efficiency to a greater or lesser extent, and therefore there may be a case for modest reforms in order to mitigate those effects. However, there does not seem to be an efficiency case for radical reform of the HFE system. Further, impacts for individual States are generally situation-dependent.

Equity

The 2011 Update terms of reference for the CGC require it to 'provide relativities for determining the distribution of GST payments [reflecting] the underlying principle of horizontal fiscal equalisation.'⁵⁸ This reflects clause D63 of the Intergovernmental Agreement, which states that: 'The Commonwealth will distribute GST payments among the States and Territories in accordance with the principle of horizontal fiscal equalisation.'⁵⁹ HFE is not defined in the Intergovernmental Agreement, rather it is defined by the CGC as follows:

State governments should receive funding from the pool of goods and services tax revenue such that, after allowing for material factors affecting revenues and expenditures, each would **have the fiscal capacity to provide services and the associated infrastructure at the same standard**, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency (emphasis added).⁶⁰

Together, the Intergovernmental Agreement and the CGC definition place equity of State fiscal capacity at the centre of the system. While the CGC seeks to perform HFE in the most efficient, simplest and most predictable manner possible within the bounds of its terms of reference, it does so in pursuit of full equity of State fiscal capacity.

Literature

The equity objective of HFE has been the subject of considerable debate. The HFE system in Australia seeks to achieve aggregate, inter-state equity, but does not seek to achieve equity at a lower level (such as inter-regional equity, or equity between individuals).

The equity argument in support of the current form of HFE is that it allows respective State governments to treat like residents equally, while providing the subsidiarity advantages of the federal system. This rationale is explained by Boadway (who does not seem to take a strong position either way):

'In this form [achieving fiscal equity], the role of equalisation transfers is to provide regions with the resources that would enable them to meet national standards of redistributive equity if they so choose...regions are able to enact standards of vertical equity within their jurisdictions that best suit their preferences or the consensus of their constituents.'⁶¹

Boadway notes that this means that strict horizontal equity across the federation will not necessarily be achieved, and that the degree of horizontal equity will depend on the relative influences of the State and Federal governments.⁶²

On the other hand, it has been argued that the equity case for Australia's current form of HFE is weak, as equalisation of state fiscal capacities is not a meaningful objective. The public is ultimately interested in outcomes for individual citizens and equalisation of state fiscal capacity should only be considered as a means to achieve equity between individuals. Garnaut and Fitzgerald found that equity is best achieved through the Commonwealth's progressive income tax rates and social security system that directly target individuals. They found that the HFE system:

58 CGC Report on GST Revenue Sharing Relativities – 2011 Update

59 COAG. 2008. *Intergovernmental Agreement on Federal Financial Relations*

60 CGC Report on GST Revenue Sharing Relativities – 2011 Update

61 Boadway, R. 2007. pp 20

62 Boadway, R. 2007. pp 20

'fails to ensure the equal treatment of people in similar fiscal positions (horizontal equity). This is because it focuses on States rather than households or individuals, and because untied funds are not required to be spent on areas for which they are allocated.'⁶³

There are two issues here: whether or not HFE promotes individual equity (even though that is not its objective), and whether or not the fact that GST assistance is untied undermines the equity case. A number of academics have made similar points, including Pincus, who recently observed that:

'Equity is a criterion that usually applies to people, not governments. If the ultimate goal of HFE is equal treatment of otherwise-equal individuals, reflection suggests that the equity argument for fiscal equalisation must depend primarily on the claim that jurisdictionally immobile sections of populations may otherwise be unreasonably disadvantaged by the operation of the fiscal system.'⁶⁴

Pincus finds that 'no great differences can persist in the ways in which otherwise similar people are treated in the various states and territories, unless they are immobile between jurisdictions,' and further that, in aggregate the Australian population is highly mobile.⁶⁵ In acknowledging that there may be sub-populations in particular jurisdictions that could be disadvantaged in the absence of HFE, due to their lower mobility, one of Pincus' main concerns mirrors that of Garnaut and Fitzgerald: 'there is no guarantee that the grants will benefit those elements of population...'⁶⁶

Implicit in the objective of equalising State fiscal capacity is that there will be some expectation of equalising service delivery outcomes for individuals, after allowing for factors affecting service delivery (such as preferences of citizens of individual States and the costs of delivering services). If the HFE system is not achieving equity between like individuals, the argument for equalising State fiscal capacity is weakened. Whether or not HFE is achieving individual equity is only part of the story however: it can still be argued that by equalising fiscal capacities, HFE takes the pressure off other policy levers aimed specifically at improving individual equity.

Equity of service provision

As set out above, the HFE system equalises fiscal capacity which allows States to deliver comparable services if they choose: it does not guarantee that they will. Nevertheless, it seems likely that the equalisation of service delivery standards would have a material impact on individual equity. It is therefore worth investigating the extent to which equalisation of fiscal capacity is leading to equalisation of service delivery. This is done in two parts:

- Examining overall State expenditure levels; and
- Examining differences in outcomes across States.

State expenditure levels: CGC observed level of service ratios

In 2004, Hull and Searle⁶⁷ analysed CGC 'level of service provision' data to assess the relative effort of the States in providing services across the key sectors. The level of service provision is defined by the CGC in their 2011 Update:

63 Garnaut, R. & Fitzgerald, V. 2002. pp 123

64 Pincus, J. 2011. pp 3

65 Pincus, J. 2011.

66 Pincus, J. 2011. pp 5-6.

67 Hull, C. and Searle, B. 2004. *The impact of equalization on service delivery*, Canberra.

'The assessed level of service ratio of a State is the ratio of the State's estimated expenses per capita to its assessed expenses per capita. A ratio greater than 100 indicates the State was providing services at levels above the average. A ratio below 100 indicates below average levels of service.'⁶⁸

In other words, the CGC:

- determines the average level of services provided by the States for a given sector (what States do);
- investigates the expenditure disabilities faced by individual States; and
- based on these disabilities, determines what each State would need to spend to provide the average level of services (so States facing higher expenditure disabilities will need to spend more in a given sector).

The CGC warns that:

'considerable caution is needed in interpreting these ratios. Firstly, actual revenues, expenses, investment or net lending for each State used to derive these ratios may not be strictly comparable between States because States sometimes classify similar revenues, expenses, investment or net lending differently. Specifically, for the ACT, its expenses in some categories include municipal transactions, making its level of service ratios not directly comparable with those of other States.'

Since GST funding is untied, it is appropriate that States will devote funds to varying priorities in accordance with the preferences of their citizens. Despite this, the assessed level of service ratios for some States may explain concerns that HFE provides the resourcing to address disadvantage, but may not provide the incentives to ensure that disadvantage is addressed.

A five year average of assessed level of service ratios is illustrated in **Table 3.8**. For some States and in some key service delivery sectors, there are significant divergences from the average. If a ratio for a given sector is below 100, it could mean that the State is spending less than would be required to deliver the average level of service (as assessed by the CGC). If a ratio for a given sector is above 100, it could indicate that a State is spending more than would be required to deliver the average level of service. To some extent, these ratios will illustrate the trade-offs that States choose to make between sectors.⁶⁹

It must be noted that the limitations of the CGC estimation process, rather than under or over expenditure by the States could be leading to assessed level of service ratios that diverge significantly from 100.

68 CGC. 2011. *Report on GST Revenue Sharing Relativities – 2011 Update Supporting information: Revenue and expense ratios*, Canberra

69 Since Commonwealth payments are (for the most part) included in the CGC's assessment of needs, the results will only be affected where the Commonwealth is making payments that have 'no impact' on the relativities. Where the Commonwealth makes payments that have 'no impact', actual expenditure will be boosted while assessed need will be unaffected. All things being equal, excluded payments should push up the assessed level of service ratio.

Table 3.8: Assessed level of service ratios, all States, 2005-06 to 2009-10 average

Service sector	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Average
	%	%	%	%	%	%	%	%	%
Schools education	99	100	96	107	106	98	112	99	100
Post-secondary education	94	136	66	80	119	114	99	133	100
Admitted patients services	94	101	106	95	109	119	101	91	100
Community and other health services	101	89	106	106	111	68	149	89	100
Welfare and housing	110	111	83	91	99	77	150	72	100
Services to communities	61	105	97	167	137	69	111	101	100
Justice services	101	101	90	120	107	86	106	73	100
Roads	118	119	93	81	48	77	80	90	100
Transport services	133	63	113	89	81	44	55	51	100
Services to industry	79	51	175	129	86	123	51	220	100
Other expenses	90	106	104	71	113	124	171	181	100
Depreciation	102	85	125	81	87	108	187	83	100
Total expenses	98	99	102	98	104	99	126	102	100

Note: Ratios for the ACT may not be comparable to the other States, as expenses in some categories include municipal transactions. Figures are rounded to the nearest whole percentage.

Source: CGC Report on GST Revenue Sharing Relativities — 2011 Update — supporting information

Leaving aside individual sectors, the ‘total expenses’ line in the table suggests that the CGC is meeting its objective of recommending relativities that equalise State fiscal capacity with a high degree of accuracy. In aggregate, the assessments of State needs seem to be lining up closely with what States actually spend. It must be noted however that it is possible that there is a systematic underestimation for some States and overestimation for others, and that States whose needs are underestimated ‘make do’, and States whose needs are overestimated simply spend what they are given.

The fact that HFE does not appear to result in comparable expenditure on services is not surprising, nor necessarily a bad result: it is a policy choice for State Government whether to deliver average levels of service in a given sector. The alternative, direct provision of Commonwealth support to individuals needing greater (or more expensive) government services is beyond the scope of this review.

Key point 6: In aggregate, the CGC assessment of State needs appear to closely mirror State expenses, suggesting that the objective of equalising State fiscal capacity is being met to a high degree of accuracy on the expenditure side. However, there are differences between actual State expenditure in service delivery sectors, and the amount of funding provided for those sectors through the HFE process. This is a design feature of the current form of HFE and reflects the role of State governments in setting policy.

Outcomes across States

A second measure of the extent to which equalisation of fiscal capacity is leading to improved equity for individuals is to examine outcomes for individuals.

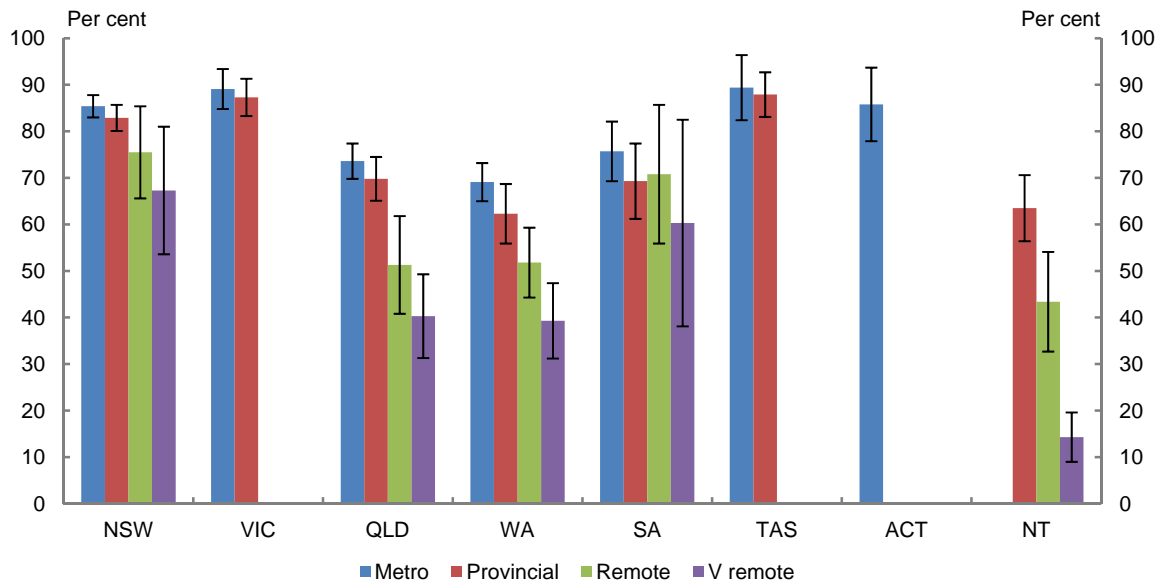
Analysis of Report on Government Services (RoGs) data shows that there are clear differences in State’s performance against key outcomes measures across key service delivery sectors including: health and hospital services; schools; vocational education and training and police services. It also shows a degree of correlation between the incidence of poor performance outcomes and the size of a State’s relativity. This is unsurprising: States that face a disadvantage in delivering services as assessed by the CGC will face difficulties in lifting outcomes in comparison to the more advantaged States.

The sharp difference in outcomes across States is shown by a case study of RoGs data for reading outcomes. The analysis did not take account of why outcomes might be different across States,

Case study of Productivity commission data: Proportion of year 3, 5, 7 and 9 students who achieved at or above the national minimum standard for reading, by Indigenous status and geolocation, 2008 and 2009 (per cent)

RoGs data for 2008 and 2009 shows the disparities in the reading ability of ‘like’ students across States. It should be noted that the Productivity Commission urges caution in comparing results, however the example is intended to be illustrative only. **Chart 3.2** shows the proportion of year 3 Indigenous students who achieved at or above the national minimum standard for reading in 2008, with results disaggregated by remoteness.

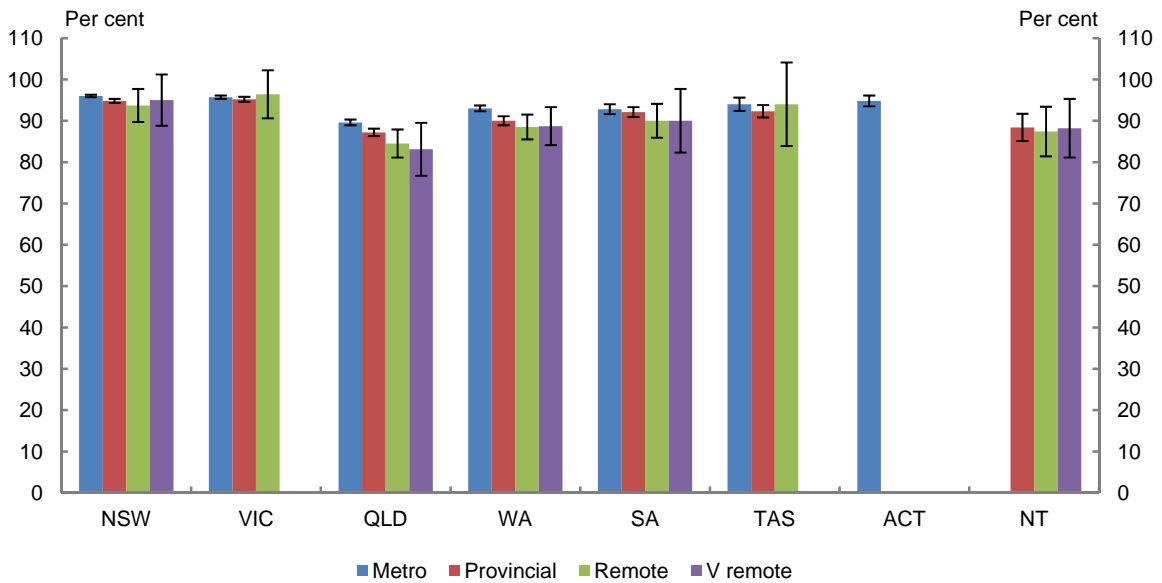
Chart 3.2: Proportion of year 3 Indigenous students who achieved at or above the national minimum standard for reading, by geolocation, 2008



Note 1: Error bars represent the 95 per cent confidence interval associated with each point estimate.
 Note 2: Insufficient or no students in an area of geographic classification were not published and appear as zero.
 Source: RoGs 2011, Table 4A.48

There are still differences in outcomes when comparing ‘like’ non-indigenous students, as shown in **Chart 3.3**, however they are far less pronounced.

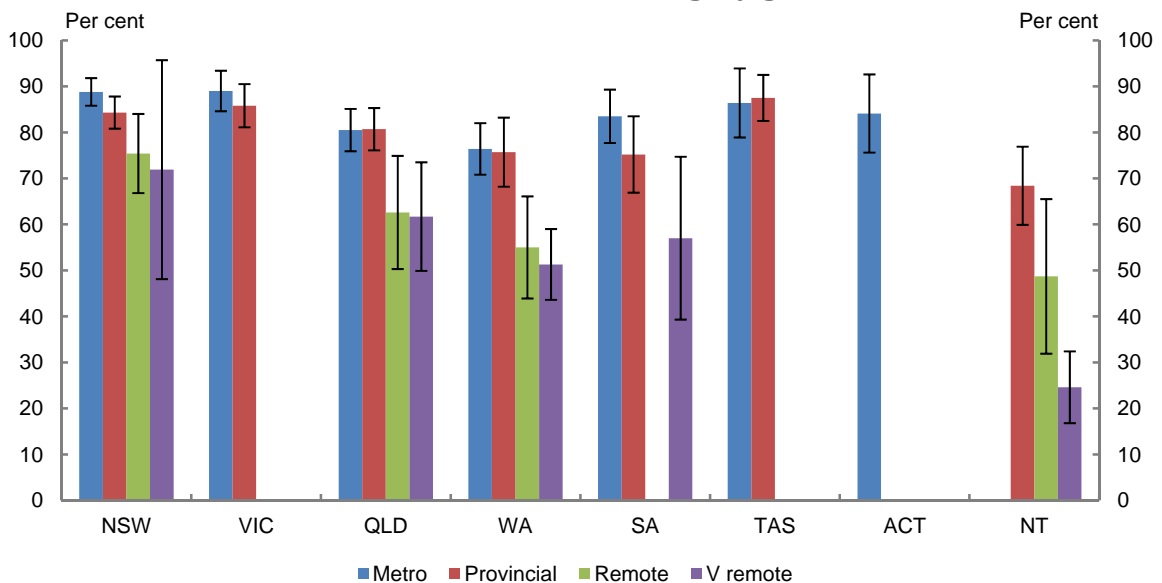
Chart 3.3: Proportion of year 3 non-Indigenous students who achieved at or above the national minimum standard for reading, by geolocation, 2008



Note 1: Error bars represent the 95 per cent confidence interval associated with each point estimate.
 Note 2: Insufficient or no students in an area of geographic classification were not published and appear as zero.
 Source: RoGs 2011, Table 4A.48

The disparity between States in outcomes for Indigenous students had closed somewhat by 2009. However **Chart 3.4** shows that there were still large differences across the States.

Chart 3.4: Proportion of year 3 Indigenous students who achieved at or above the national minimum standard for reading, by geolocation, 2009



Note 1: Error bars represent the 95 per cent confidence interval associated with each point estimate.
 Note 2: Insufficient or no students in an area of geographic classification were not published and appear as zero.
 Source: RoGs 2011, Table 4A.48

Despite full equalisation of State fiscal capacities, we are a long way from achieving equity amongst like individuals across State borders. Whether this disparity in outcomes would be worse in the absence of HFE, and whether or not HFE is going too far or not going far enough in compensating for State differences is unknown. There is no suggestion that these differences in outcomes are directly attributable to the failing of

particular governments to deliver like or 'average' services: there is a myriad of factors that could be contributing to these differences.

Entrenched disadvantage

Where there is entrenched disadvantage resulting in wide divergence in outcomes across States, it raises the question as to whether the pursuit of full equity of fiscal capacity benchmarked to the average is the best possible HFE system. Alternatively, this analysis may simply emphasise that HFE is not an appropriate policy tool to address entrenched disadvantage.

Determining the appropriate role for HFE in addressing entrenched disadvantage depends on an assessment of the reasons why divergences in outcomes have persisted. One plausible reason that divergences in outcomes have persisted is that States have their fiscal capacity equalised to the benchmark which is determined by the average, even though they may have circumstances that are vastly different from the average.

For example, the case study demonstrated that outcomes in the Northern Territory for reading, for that cohort of Indigenous remote children, were below all other States in 2009. Under HFE, the Northern Territory is provided with the average fiscal capacity to deliver school services (taking into account its above average Indigenous population) under the schooling assessment.

As a small jurisdiction, the Northern Territory has a relatively small influence on the Australian average level of expenditure: the average will be largely determined by more populous States that have a greater absolute expenditure share. Assuming that the Northern Territory requires additional funding to lift outcomes for Indigenous people, then it follows that the resourcing being provided to the Northern Territory under HFE will not be sufficient to allow it to 'catch up.'

This means that the current HFE system is not a tool for addressing pre-existing gaps that require above average levels of service to address them.⁷⁰ States are never provided with 'catch-up' fiscal capacity to allow them to close outcome gaps. States can prioritise some service delivery areas over others with a view to lifting outcomes in particular sectors, but will face resourcing difficulties if the outcome gaps are widespread. If a State seeks to lift its average level of service in isolation, but has little effect on average policy, it will not see its GST share catch up with its increased spending.

The Commonwealth can provide assistance that is excluded from the system with the aim of closing outcomes gaps, and has committed substantial new investments to Closing the Gap, particularly in the Northern Territory. However, in the context of this review which will make recommendations about the GST distribution, it is worth considering whether a system that has equity as a central objective should have the capacity to address entrenched disadvantage in a systematic way.

Finally, the existence of entrenched disadvantage suggests that there are less mobile population groups that (due to distance from capital cities for example) may continue to experience more limited access to government services that may help them to achieve better outcomes.

Key point 7: Equalising State fiscal capacity does not, and is unlikely to lead to, equalisation of individual outcomes. This raises the question as to what role, if any, HFE should play in addressing entrenched disadvantage.

⁷⁰ To the extent that outcomes are dependent on service delivery standards.

Equity of revenue assessments

Issue

At the broadest level, it could be expected that an equitable system of HFE would match a State's assessed revenue raising capacity closely to the capacity of like individuals to finance government services and the capacity for government services to be funded by taxes on other endowments in that State (e.g. land and natural resources). Such an approach would ensure that, everything else being equal, HFE redistributed revenue from wealthier States to poorer States.

The current form of HFE departs from this approach in that the CGC separately assesses a number of individual revenue categories based on actual policies implemented by the States. In other words, the CGC bases its revenue assessments on what States actually do, subject to materiality thresholds, rather than on a measure representing overall revenue raising capacity.

Analysis

Some of the key factors favouring an approach which examines taxes actually implemented by the States are that:

- Some industries are more highly taxed by State governments than others, and these industries are unevenly distributed between the States. The largest example of this in Australia is mining revenue.
- There are constraints on the taxing powers of States and these constraints have uneven effects across states. For example, the inability of States to levy payroll taxes on the Australian Government which has a significant negative effect on the revenue raising capacity of the Australian Capital Territory and to a lesser extent the Northern Territory.

Due to the complexity of measuring the incidence of State taxes on individuals, equity is proxied by aggregates of economic performance such as Gross State Product per capita or Gross State Income per capita.

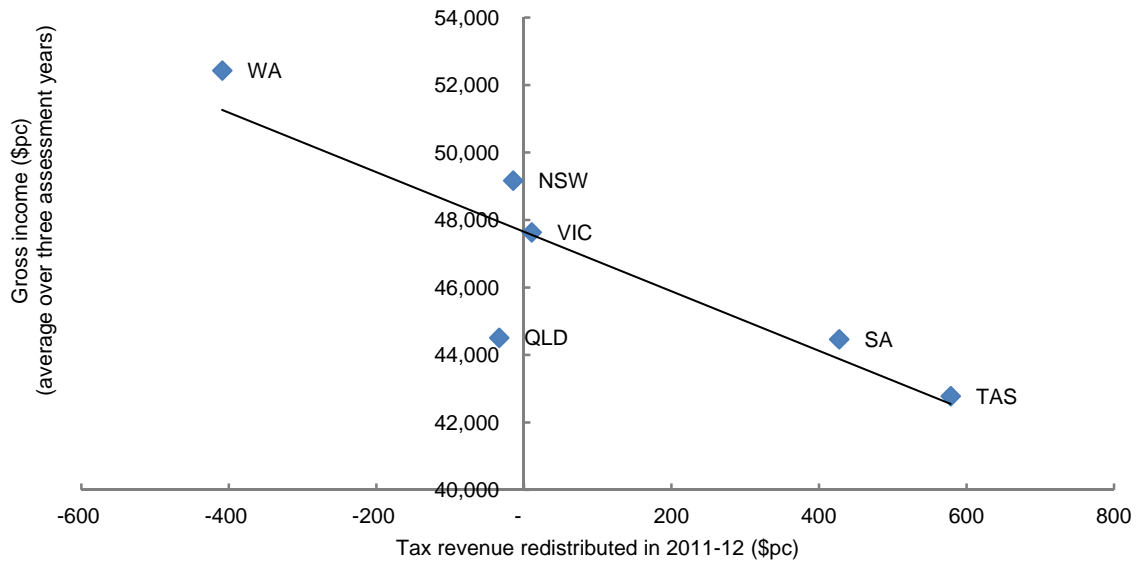
A measure of the equity of the current revenue assessment is the extent to which the tax revenue assessments redistribute GST revenue from wealthier States to poorer States.⁷¹ This data is readily available as the methodology utilised by the CGC separately assess each revenue category.

Given the issues identified above, this analysis is conducted by excluding mining revenues and excluding the Australian Capital Territory and the Northern Territory. These States are excluded due to their significantly above average share of public sector employees whose remuneration is not subject to payroll tax, given payroll tax accounts for approximately 30 per cent of state own-source tax revenue in aggregate across all States.

Chart 3.5 below shows that the relationship between the amounts redistributed per capita by taxation assessments in the CGC's 2011-12 Update Report relative to gross household income per capita as at June 2010.

⁷¹ Mineral royalties are classified as non-tax revenue and are therefore excluded from this analysis.

Chart 3.5 — Relationship between state gross income per capita and the tax revenue assessments



A simple linear regression indicates that, in 2011-12, for every \$1 a State’s gross income per capita is expected to be above the national average⁷², the State’s GST share will be reduced by between 2 and 15 cents per capita.⁷³ The largest outlier is Queensland, which is partially attributable to Queensland’s relatively strong property market in two of the three assessment years (2007-08 and 2008-09).

This analysis indicates that the taxation assessments in the current form of HFE are operating in the right direction, consistent with the equity objective. However, the limitation is that the scale of the effects cannot be readily assessed. The analysis reflects differences in State income only and one component of the revenue assessments conducted by the CGC. It does not account for other assessments that may redistribute funding in a different direction, and is not intended to be reflective of the overall redistribution of the GST, which is illustrated in chart 2.7.

Equity: Conclusion

Key point 8: The current system places a premium on inter-state equity, and seeks comprehensive HFE to that end. HFE does not necessarily result in improved individual equity, and therefore there may be room for reform of the system that seeks to balance equity more evenly against other policy priorities.

⁷² As at June 30 averaged over the three assessment years, 2007-08 to 2009-10.

⁷³ Results are reported at the 95% confidence interval. The regression has an R² of 0.76.

Simplicity

2010 CGC methodology review simplifications

Issue

The terms of reference for the 2010 Methodology Review of State Revenue Sharing Relativities directed the CGC to simplify its assessments by:

- (a) aggregating existing assessment categories, components and factors, in whole or in part;
- (b) eliminating category assessments found unreliable because of unsatisfactory data or methodology; and
- (c) applying a materiality threshold to current and future assessments.

To simplify the assessment process the CGC took a clean-slate, top down approach, starting with very broad categories and introducing detail only where it would improve equity. Stronger assessment guidelines, including the application of materiality thresholds and criteria for judging the reliability of data, were applied as part of this approach. **Table 3.9** shows the results.

Table 3.9: Comparison of ‘simplicity’: 2004 Review compared to 2010 Review

	2004 Review	2010 Review
Revenue assessments	13 categories of taxes and other revenues and 8 categories of user charges, some of which were sub-divided and each sub-division had a revenue base measure. In total, there were 29 sub-categories.	7 categories of taxes and other revenues, some of which are sub-divided and each sub-division has a revenue base measure, plus Commonwealth payments (8 categories in total). In total, there are 13 sub-categories (a).
Expenditure assessments	39 expense categories most of which were divided into components and multiple disabilities were assessed for each component. In total, there were 171 components and 344 disabilities.	12 expense categories, which are divided into components and multiple disabilities are assessed for each component, plus an Investment and Net lending category (14 categories in total). In total, there are 43 components and 93 disabilities.

(a) There are no categories of user charges because they are mostly included in the other revenue category.

Source: CGC Report on GST Revenue Sharing Relativities — 2010 Review — Volume 1

While the 2010 review reduced the number of categories, it also introduced materiality thresholds as follows:

- the minimum average revenue or expense required for a separate category — \$50 per capita;
- the minimum effect on GST distribution of disaggregating a category — \$30 per capita for at least one State;
- the minimum effect on GST distribution of including a disability or recognising an extra population characteristics — \$10 per capita across all relevant categories for at least one State; and
- adjustments aimed at improving comparability of data — \$3 per capita for at least one State.

Analysis

Table 3.10 below shows the proportion of assessments that meet the second of these materiality thresholds. Generally speaking, more assessments are relevant for smaller states, while for New South Wales, the

largest State, only around one quarter of assessments are above the materiality threshold. For a large State, Victoria has a relatively high number of assessments which are above the threshold, due to the advantages it has in cost of service delivery and the effect this has on its relativity. This means that there is likely minimal scope to rationalise the assessment categories, without having a meaningful effect on the GST distribution.

Victoria's strong fiscal capacity is due to its below average assessed costs of providing services and infrastructure requirements (partially offset by its below average revenue raising capacity and below average share of Commonwealth payments). Since there are more expense assessment categories, it would be expected that Victoria would have higher proportion of assessments above the materiality threshold.

Table 3.10: Proportion of assessments which are above or below the materiality threshold for individual states

(per cent)	NSW	VIC(b)	QLD	WA	SA	TAS	ACT	NT
Above	24	57	33	62	48	76	67	90
Below	76	43	67	38	52	24	33	10
Relativity(a)	0.95	0.94	0.91	0.68	1.28	1.62	1.15	5.07

(a) Recommended for 2010-11 from the 2010 Methodology Review.

(b) A further two assessment categories are within \$3.50 of meeting the threshold which would result in 67 per cent of assessments for Victoria being above the materiality threshold.

Although they meet the CGC's materiality thresholds, there are a number of separate revenue assessment categories for which there is arguably a common base. There may therefore be room to consolidate revenue assessments where separate categories have a similar economic incidence. This reform option is considered in further detail in section 4.2.

Issue: Calculation of the relativities

A persistent criticism levelled at the system of HFE is that it is a 'black box' that is poorly understood, and if it could be simplified, there would be greater public understanding and hence acceptance of the outcome. It is worth investigating whether, without changing the underlying methodology, the calculation of relativities could be presented in a more straightforward manner. A more specific discussion of what inputs are driving the GST distribution could help the public better understand the HFE process, and clarify that all States are treated equally (however their individual circumstances differ).

For example, it should be clear from a summary reading of the CGC's report how much funding is redistributed per Indigenous school student. While the current methodology does this to an extent, a basic understanding of what is happening gets lost in the complex calculation of cost weighted school enrolments and category factors. If the presentation could be simplified to demonstrate that all States receive an equal amount of additional GST funding per Indigenous student, it may serve to enhance understanding of what is driving the relativities.

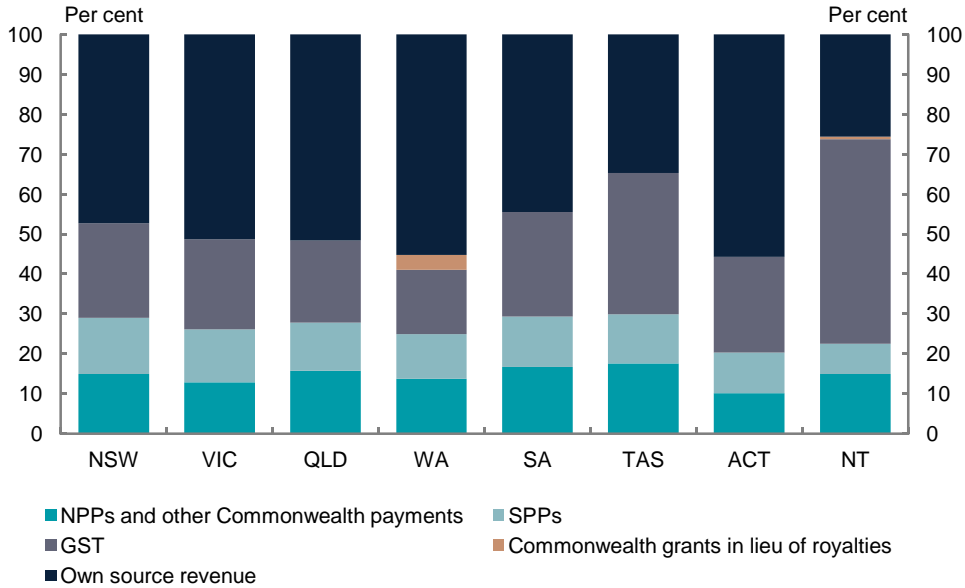
Simplicity: conclusion

Key point 9: Within the bounds of the current system, the CGC appears to have found a good balance between simplicity and accuracy, at least in terms of the number of assessments performed. The majority of assessments are material for most States, with the exception of New South Wales and Queensland, which have amongst the largest influence on the average. For revenue assessments, there is likely to be room for further simplification.

Predictability and stability

The predictability and stability of GST revenue is important as it forms a significant part of total state revenue. In 2009-10 GST Revenue was over 20 per cent of total State Revenue.⁷⁴

Chart 3.6: Revenue sources as a per cent of total State Revenue 2009-10



Source: GST Distribution Review Issues Paper, p.10.

Comparison of stability in GST Payments to state own-source tax revenues

Issue

The GST was introduced as part of the Australian Government’s implementation of *The New Tax System* from 1 July 2000. Since that time, GST payments have been made to the States, whilst they have gradually abolished or planned to abolish certain State taxes.

At a high level, the GST distribution differs from year to year due to changes in the size of the GST pool, changes in population and changes in GST relativities. The following section considers the variance in GST relativities as compared to changes in the GST pool or populations, as well as the overall variance in GST payments.

Analysis: total GST payments compared to total State revenues

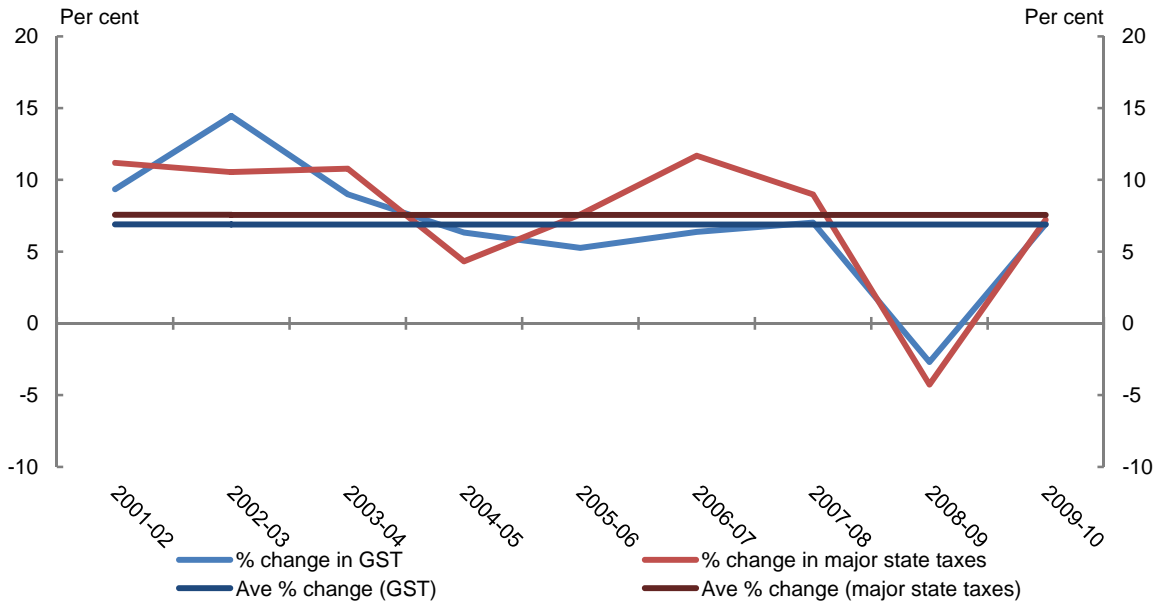
In general, GST payments to the States have increased each year since its introduction. There has been a degree of variability in these payments though, with the average yearly percentage change being around 6.9 per cent. This compares to an average yearly percentage change in States’ major own-source tax revenues of 7.6 per cent. Major State taxes comprise payroll tax, land tax, stamp duty on conveyances, insurance taxes, gambling taxes and motor vehicle taxes.⁷⁵ **Chart 3.7** compares the yearly percentage variation in the total of States’ own-source major tax revenue against the yearly percentage variation in total

⁷⁴ Review of GST Distribution – Issues Paper, p.10

⁷⁵ From 2001-02 to 2009-10 these major state taxes comprised over 90 per cent of total State own-source tax revenue.

GST payments. It should be kept in mind that the tax bases for the GST and State taxes may not be directly comparable.

Chart 3.7: Yearly variation (% change) between GST and state major tax revenue — 2000-01 to 2009-10



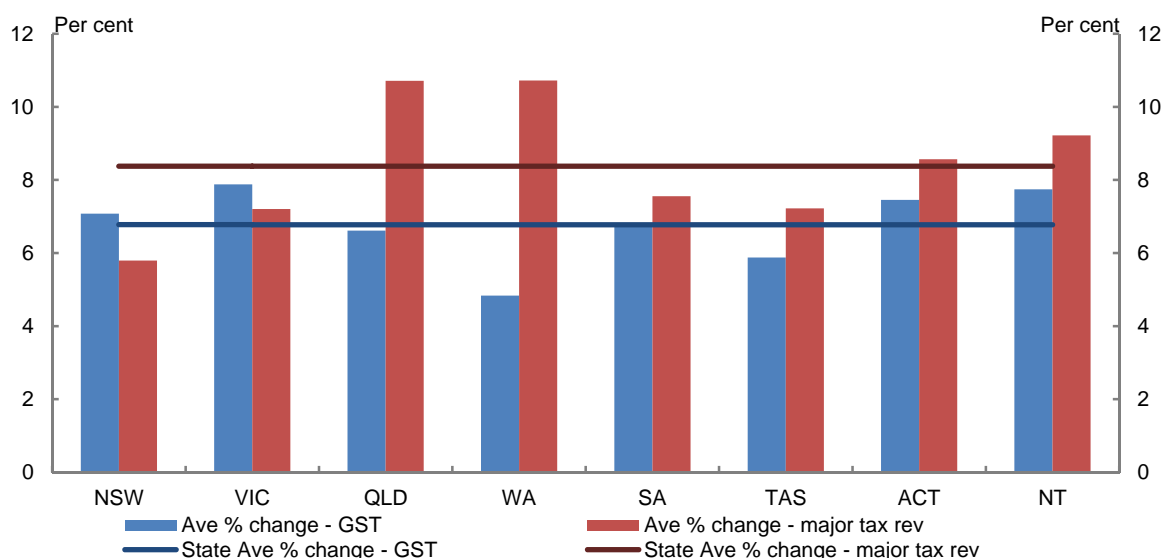
Source: GST Distribution Review Issues Paper, ABS GFS

This chart shows State revenues and GST exhibit similar variance. Although in general the average percentage change in major State taxes is higher than that for GST payments, the difference is not substantial and there have been points in time when GST payments have varied more than major State taxes.

Comparison of variance in GST Payments and major State Taxes at the State level

One way of comparing the variance of GST payments relative to other revenue sources, such as the major State taxes, is to look at the year on year percentage changes for those revenue sources. **Chart 3.8** shows the average yearly changes in GST payments for each State, compared to the average yearly changes for major State taxes.

Chart 3.8: Average yearly percentage changes in GST and state major tax revenue: 2000-01 to 2009-10



Source: GST Distribution Review Issues Paper, ABS GFS

The analysis shows that as expected, there is a degree of correlation between the percentage change each year of GST and state tax revenues (given that there is a common link to economic conditions). This is more pronounced for some States than others. Further, it shows the average yearly percentage change in GST payments tends to be lower than the change in major state tax revenue. On average it is lower in all States except for New South Wales and Victoria.

Stability of relativities and resulting GST payments to individual states

An individual State's GST share is also driven by its GST relativity. **Table 3.11** illustrates the movement in the relativities, by State since 2001-02. It shows that on average the relativities change by 2.4 per cent year on year. The State with the largest changes in percentage terms is Western Australia with an average change of 5 per cent, reflecting the strong downward trend in its relativity.

Table 3.11: Absolute percentage variation in GST sharing relativities, 2001-02 to 2011-12

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	State Average
2001-02	1.5%	0.8%	1.8%	1.1%	0.4%	0.3%	3.5%	3.7%	1.6%
2002-03	2.0%	1.1%	1.0%	0.0%	1.5%	4.8%	1.2%	6.5%	2.3%
2003-04	2.1%	0.0%	0.8%	1.2%	1.9%	4.2%	0.7%	4.4%	1.9%
2004-05	3.5%	0.7%	4.4%	7.6%	0.8%	2.2%	1.6%	2.6%	2.9%
2005-06	0.1%	1.5%	1.2%	0.5%	0.3%	0.6%	1.2%	0.0%	0.7%
2006-07	0.7%	3.0%	2.3%	2.4%	1.5%	0.5%	0.1%	1.2%	1.5%
2007-08	2.6%	0.9%	2.1%	7.1%	1.9%	0.6%	1.5%	0.6%	2.1%
2008-09	2.7%	3.6%	4.9%	8.4%	0.0%	1.4%	0.7%	3.2%	3.1%
2009-10	5.0%	0.6%	4.8%	8.5%	1.2%	2.6%	1.2%	0.1%	3.0%
2010-11	2.2%	2.3%	0.3%	13.0%	3.0%	0.0%	9.3%	3.4%	4.2%
2011-12	0.6%	3.7%	1.7%	5.0%	1.1%	1.3%	3.2%	5.6%	2.8%
Average	2.1%	1.7%	2.3%	5.0%	1.2%	1.7%	2.2%	2.9%	2.4%

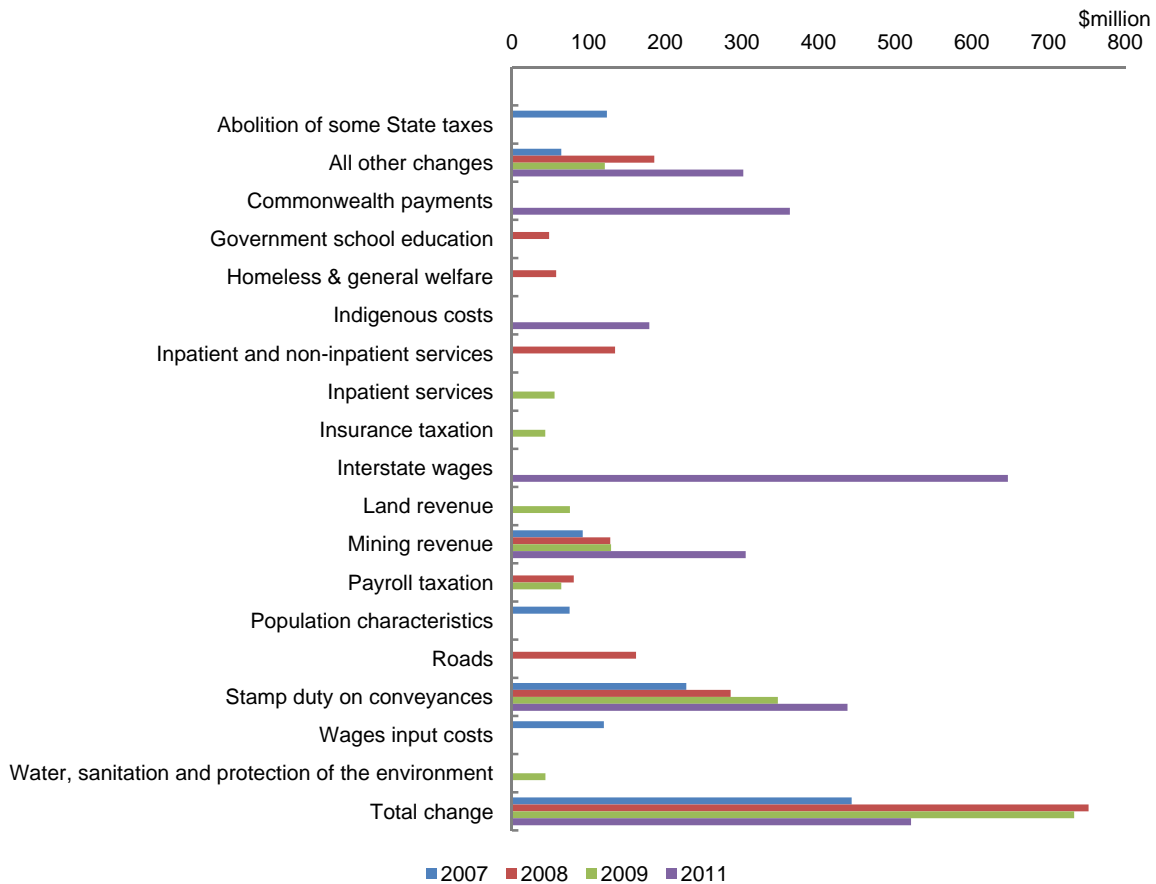
Source: Treasury calculations

The data for 2008-09 to 2011-12 shows that in recent years the average change in absolute relativities has been higher than the average over the whole period. This may indicate that we are in a period of increased variance, although in the most recent year (2011-12) the average change in relativities is closer to the long-term average. To an extent, there is a trade-off between contemporaneous and stable relativities.

Following the CGC decision to move from a five to three year averaging calculation of the relativities in its 2010 methodology review, we can expect relativities to be more responsive and contemporaneous, but also less stable in the future.

The CGC provides analysis of why distributions have changed. **Chart 3.9** illustrates the key drivers of changing GST relativities in recent years. It should be interpreted with caution, as it is not clear if the CGC is always categorising items the same way (especially with a Methodological Review in 2010). However, the key point from this chart is that in all four CGC Updates investigated, stamp duty on conveyances and mining revenue were among the main influences on changes in the GST distribution. These results are indicative of the volatility that the current mining boom has introduced to the HFE system. Interstate wages had the largest impact in 2011; however this was driven by major data revisions.

Chart 3.9: Main influences on changes in GST distribution (all States) by CGC Update



Source: CGC Updates

This increasing volatility is a consequence of the diverging fiscal capacities of the individual States, primarily driven by differences in resource endowments presented in part two. While the mining boom has introduced more volatility, it has also demonstrated that the current HFE system is able to respond well to changing State circumstances. Further, there is evidence to suggest that any volatility introduced via the HFE process is outweighed by pool effects, such that the variance in GST payments for individual States is not dissimilar to variance in State own-source tax revenues.

Additional stability and predictability introduced by National Specific Purpose Payments

A key point of the Garnaut-Fitzgerald Review was that, at the time it was published, there was significant uncertainty about future funding levels of payments for specific purposes from the Commonwealth, and ‘an

associated requirement of endless negotiation.⁷⁶ As part of the 2008 reforms to federal financial relations, the Commonwealth made the majority of NSPPs permanent and ongoing by agreeing the amount to be paid to each State and the indexation methodology through the Intergovernmental Agreement. This means that a significant share of Commonwealth funding to the States is guaranteed, unqualified by movements in Commonwealth revenue.⁷⁷

Furthermore, the recent health reforms mean that in the health sector, the Commonwealth will fund a fixed share of the growth in the efficient cost of public hospital services provided by the States. This will provide the States with a secure source of revenue that will keep pace with rising expenditures in the hospital sector.

Predictability and stability: Conclusion

Key point 10: Analysis of GST payments to the States suggests that as a source of revenue, GST payments exhibit similar variability to State own-source tax revenues; including when changes in GST relativities are taken into account. Further, reforms to Commonwealth-State financial relations over the past several years have provided the States with significant additional certainty regarding future Commonwealth funding.

76 Garnaut, R. & Fitzgerald, P. 2002. p. 15

77 The National SPPs have varying indexation methodologies which incorporate economic parameters, such as inflation and wage cost indicators. Therefore there is a tangential link between the Commonwealth Budget position and the amount of funding provided.

4. REFORM OPTIONS

This section examines potential reform options that could be implemented if the Review Panel considers that the analysis in part three supports the need to change the form of HFE. These do not represent Treasury recommendations, but rather serve to offer possible alternative approaches to the current form of HFE.

The key conclusion from part three is that there are efficiency arguments both for and against HFE. For example, redistributing location specific rents such as mineral royalties is expected to improve economic efficiency, while compensating States for the consequences of poor economic policy decisions may decrease economic efficiency.

Where potentially efficiency reducing distortions are brought about by the HFE system, they are likely to have a small overall effect, and therefore do not provide a basis for radical reform. Nevertheless, potentially efficiency reducing distortions do exist, and so there may be room for reform of the system that seeks to ameliorate the potential effects of these efficiency reducing distortions.

The review's Terms of Reference indicate that, in considering any possible changes to the form of HFE, the review will have regard to **efficiency, equity, simplicity** and **predictability and stability**. Reform options are likely to have trade-offs between these criteria, and the review panel may wish to consider a combination of these reform options.

This part is structured in three sections. In the first section, reform options are classified into categories depending on the level to which they depart from the current arrangements. Reform options in these categories are assessed having regard to the four criteria identified above.

The remaining sections provide preliminary analysis of how some of the potential reform options identified could be implemented. Further analysis would be required to identify and address potential barriers to implementing these potential alternate forms of HFE.

Section 4.1: Categories of reform options

The following discussion of reform options is not exhaustive. Rather it is meant to reflect the potential scope for reform, which can be broadly grouped into the following categories:

- A: Changes within the current system
- B: A movement towards partial equalisation
- C: Changing the definition of equalisation

A. Changes within the current system

Changes within the current system could be considered to address specific areas where the current methodology potentially introduces efficiency reducing distortions.

An example of changes within the current system would be to simplify the revenue assessments by aggregating State revenue sources into broader tax bases. Preliminary analysis of how this potential change could be implemented is outlined in section 4.2.

Impact on efficiency and equity

Changes within the current system would seek to improve efficiency without compromising the equity objectives of the current form of HFE. For example, simplifying the revenue assessments may reduce the potential efficiency cost of equalisation by removing disincentives for States to switch between taxes with the same incidence (for example, between stamp duties on conveyances and land taxes on similar properties).

Impact on simplicity and predictability and stability

There is scope for these changes to improve simplicity and predictability and stability. For example, predictability may be improved by reducing the importance of volatile revenue bases like stamp duties on conveyances by aggregating this revenue base into a broader category.

B. A movement towards partial equalisation

Moving to partial equalisation would recognise that full equalisation is not achieving, and cannot achieve full equity for like individuals across Australia, and would seek to place a greater weight on other objectives. Examples of a movement towards partial equalisation include:

- Limiting the application of CGC outcomes through relativity floors.
- Equalising the causes of differences in fiscal capacities to 80 per cent of the average (this could be applied to all categories or limited to particular assessment items).
- Equalising revenues and only those expenditure categories with stronger cases for equity.
 - The expenditures that would be fully equalised would require detailed consultation but would be expected to be limited to areas such as health and education where the CGC currently assesses a disability for socio-demographic characteristics.

Impact on efficiency

The impact on efficiency of moving toward partial equalisation would be mixed.

Part three showed that HFE is likely to have a marginal effect on State tax mix choices. Limiting the application of the revenue assessment (to 80 per cent of the average) would mean that States are guaranteed to keep at least 20 per cent of all revenue raising categories, and would reduce this marginal impact.

Equalising all expense categories to 80 per cent of the average or removing some expense categories would reward states that have relatively lower expense requirements. These lower expense requirements may be driven by the state delivering services at a lower cost due to factors outside its control (such as its demographic characteristics) and/or the state delivering services more efficiently. In some circumstances, states would have more incentive to provide services more efficiently at a lower average cost.

As discussed in part three, the current system of redistributing mineral royalties may be expected to improve economic efficiency. Options which reduce the redistribution of location specific rents would therefore reduce efficiency to the extent that this holds.

Impact on equity

Moving to partial equalisation would seek to place a greater weight on other objectives and therefore would reduce equity, as measured by the full equalisation of State fiscal capacities.

Impact on simplicity

Partial equalisation would be expected to improve simplicity if it reduces the number of categories assessed by the CGC.

Some partial equalisation options reduce the number of categories assessed by the CGC through the design of the system. In other cases, such as equalising to 80 per cent of the average, some categories may no longer be assessed if the existing materiality thresholds adopted by the CGC are maintained.

Application of a relativity floor would reduce simplicity because no categories would be removed, but additional calculations would need to be applied in order to implement the relativity floor.

Impact on predictability and stability

Some options, such as imposing a relativity floor, are expected to reduce overall predictability. Although States breaching the floor would benefit from increased predictability, this would be outweighed by reduced predictability for States unaffected by the floor. States unaffected by the floor will have to account for the general assessment as well as the additional redistribution brought about by the floor.

C. Changing the definition of equalisation

While the current system is designed to ensure all States have the fiscal capacity to provide services at similar standards, this was not always the case. The Issues Paper explained that historically, equalisation payments were only used to provide assistance to States that were in particular need. No attempt was made to provide States with the capacity to provide the 'same' level of services.

If the Review Panel considers that equalisation payments should only provide assistance to those States below the national average, then one option to implement this change in definition is to move to a model in which the 'donor' States would not be fully equalised.

Donor States are those that receive less GST than an EPC share of GST (or where GST is redistributed away from the State as a net result of the CGC process). Multiple approaches to determining which States are donors could be adopted. For example: States could be irrevocably characterised as donors, or donor States could be assessed periodically by the CGC based on a measure of relative fiscal capacity.

The needs of the recipient States would continue to be calculated by the CGC. This would ensure that these States would receive the funding required to meet the benchmark level of fiscal capacity.

If this option was pursued, the obvious question then is how would the burden of supporting the weaker recipient States be shared among the donor States. Preliminary analysis of options to distribute the requirement to support recipient States amongst the donors is outlined in section 4.3.

Impact on efficiency

The impact of moving toward a donor and recipient model on efficiency would be mixed.

Donor States would have a greater incentive to pursue revenue raising policies that generate economically efficient growth. In some circumstances, donor States would also have more incentive to adjust their tax bases towards more efficient taxes and provide services more efficiently at a lower average cost.

On the other hand, the redistribution of location specific rents between donor States would be reduced. As discussed in part three, the current system of redistributing mineral royalties may be expected to improve economic efficiency, so this option would reduce efficiency to the extent that this holds.

Impact on equity

This form of HFE would be less equitable as it moves away from full equalisation of donor States. However, it maintains current levels of equity for the recipient States who will continue to be provided with the average fiscal capacity.

Impact on simplicity

Grouping States into donors and recipients would reduce simplicity, since as for a relativity floor, an additional layer would be added to the current system. The current analysis by the CGC would still need to be performed in order to assess the amount of funding required to support the recipient States. A further set of calculations would then be required to calculate how to distribute this funding requirement between the donor States.

Under this option, States could potentially move between the donor and recipient categories. This adds a layer of complexity and creates a potential new source of controversy/criticism.

Impact on predictability and stability

Grouping States into donors and recipients is likely to improve predictability provided States do not move between donor and recipient categories. The contributions of the donor States are likely to be easier to calculate and are likely to remain relatively stable between years.

Other impacts

Given this category represents the largest shift away from the current form of HFE, there are a number other factors the Review Panel could consider.

Any change of this magnitude would require appropriate transition arrangements. Based on current fiscal capacities, Western Australia is the only clear beneficiary from these types of reforms so it is unclear whether this approach would receive much support from other States.

In addition, this approach may result in increased risk to state government budgets. Credit ratings agencies currently rank HFE as an important institutional factor when considering a State's credit worthiness, because HFE is seen to act as a form of insurance for the States, as outlined in key point 2. Changing the definition of equalisation would mean that donor States would not be able to rely upon this mechanism to the same extent if their fiscal capacity weakened.

Section 4.2: Simplifying the revenue assessments

This section provides a preliminary analysis of a potential reform option to improve the efficiency and simplicity of the current revenue assessment. Further analysis would be required to identify and address potential barriers to implementing this option.

As previously described, the CGC currently assesses disabilities in five different tax revenue categories: payroll tax, land tax, stamp duty on conveyances, insurance tax and motor taxes. It also assesses disabilities for mining revenue.

An alternative approach would be to aggregate state revenue sources according to their ultimate incidence and measure these new categories against a broad base. This would mean that States could make revenue neutral adjustments within one tax base without affecting their GST relativity, reducing the likelihood that HFE effects would distort State tax mix choices.

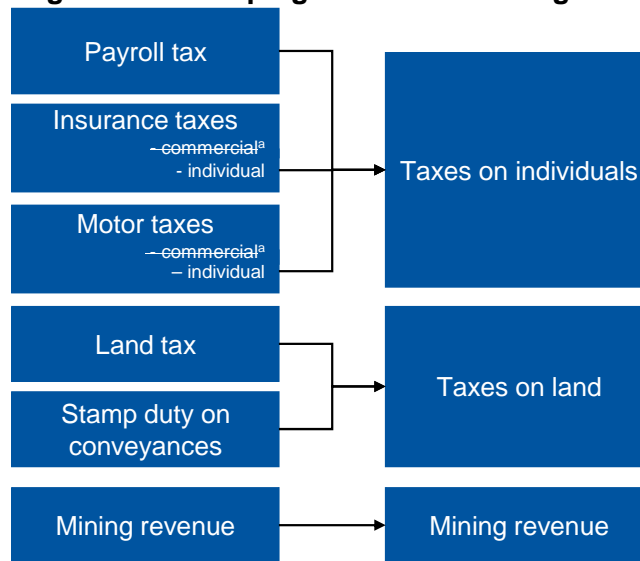
Methodology

To determine a simpler way to aggregate the existing tax revenue assessments together, a distinction between the legal and economic incidence needs to be made i.e. those who pay the tax and those who bear the burden of the tax.

- For example, insurance taxes are levied on insurance companies, but they are expected to largely pass the impost on to consumers of insurance through higher insurance premiums (prices). In this case, the legal incidence is on insurance companies but the economic incidence is on insurance policy holders.

Based on this assessment, the current state taxes assessed by the CGC can be grouped in the following broader categories based upon their economic incidence.

Figure 4.1: Grouping assessment categories



(a) Components of some existing assessments are expected to no longer meet the CGC's materiality thresholds.

Using the example of the 'taxes on individuals' category, this category could be calculated by following the normal CGC approach to estimating revenue assessments.

This includes:

1. Establishing a revenue base for the tax.

- The ABS National Accounts measure of household gross income could be used. Adjustments to household gross income could be made, for example to remove the effect of Commonwealth transfer payments.

2. Adjusting the revenue base for any policy factors outside of the control of the States.

- For example, an adjustment can be made for the inability of States to tax Commonwealth Government wages and salaries (this will be of particular importance to the Australian Capital Territory).

3. Establishing average state policy

- In this case, the estimate of total revenue collected from taxes on households is divided by the measure of household income to give a national tax rate.

4. Generating assessed revenue for each State by applying the average tax rate to its tax base

- The calculations of assessed revenue could then be substituted into the current system which would then provide the basis of a revised redistribution of GST revenue.

Transitional arrangements could also be considered if the change had a relatively large impact on a particular State.

With regard to the other potential broader categories, the land tax category could give rise to short-term winners and losers due to the expectation that the broader measure would move away from a reliance on the volatile level of property sales. The mining category would be expected to be similar to the current assessment.

Section 4.3: Potential options for a donor and recipient system

This section provides preliminary analysis of options to distribute the funding requirement of recipient States under a donor and recipient model. Further analysis would be required to identify and address potential barriers to implementing this potential alternate form of HFE.

In order to illustrate the effect of these options, the current needs of the recipient States as assessed by the CGC are used as the basis for calculating the total funding required that would be shared among the donor States.

This section outlines three different scenarios that allocate the share of the burden among the donor States, including:

- sharing the burden EPC among the donor States;
- using a hybrid method of the current system and EPC; and
- using a method based on the assessed fiscal capacities of the donor States.

The total funding redistributed to the recipient States in 2011-12 was approximately \$3.9 billion, and this year is used as the baseline to examine alternate scenarios. **Table 4.1** illustrates the share of the funding burden according to each of the above scenarios for the donor States.

Table 4.1: Share of the funding burden (per cent), 2011-12

	NSW	VIC	QLD	WA
Current system	16.5	29.2	17.8	36.4
EPC	36.7	28.3	23.2	11.8
Hybrid	26.6	28.8	20.5	24.1
GSP per capita	35.9	26.3	21.2	16.6

Source: Treasury calculations.

Equal per capita distribution

If the Review Panel considers that the funding of the burden among the donor States should be driven by simplicity, an option would be to distribute the burden according to population shares. This would mean that the burden would be distributed EPC among the donor States.

Western Australia is a clear beneficiary from the move to an EPC method with its share falling to 11.8 per cent from the current 36.4 per cent. This is because its strong fiscal capacity no longer has a bearing on the distribution. For New South Wales, the losses are the result of its relatively weaker fiscal capacity no

longer affecting the distribution: its share is now determined only by its relatively large population (share moves from 16.5 to 36.7 per cent).

Hybrid method

If the Review Panel considers that the redistribution among the donor States should partially account for their fiscal capacity, then a combination of the EPC option and the current system could be used. This option would involve retaining a fixed proportion of the distribution as assessed by the current system, with the remaining proportion distributed EPC.

Table 4.1 provides the results from this hybrid method, assuming 50 per cent is assessed by the current system and 50 per cent is distributed EPC. Again, Western Australia is a beneficiary from this reform compared to the current system; however the benefits are not as large as they were under the sole EPC method (its share drops to 24.1 per cent). Similarly, New South Wales shoulders most of the losses with this hybrid method (its share increases to 26.6 per cent).

Distributing the burden based on the assessed fiscal capacities of the donors

If the Review Panel considers that it is inequitable for donor States to make their contribution based on an EPC share, key indicators could be used to 'weight' the contribution to reflect the relative economic performance of the donor States. One such indicator is GSP per capita.

This method attempts to capture the differences in economic performance of the donor States as measured by GSP per capita. The results in **Table 4.1** show that the share of the funding is generally similar to the EPC distribution, although Western Australia contributes slightly more, reflecting its higher GSP per capita compared to the other donor States.

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APPENDIX A — COMMONWEALTH PAYMENTS FOR SPECIFIC PURPOSES

The Commonwealth currently makes payments under five National SPPs for five key service delivery sectors.⁷⁸ The States are required to spend each National SPP in the relevant sector. The National SPPs are distributed among the States in accordance with population shares based on the Australian Statistician's determination of States' population shares as at 31 December of that year.⁷⁹

The Commonwealth will provide National Health Reform funding from 1 July 2012 to fund its increased responsibilities under the new National Health Reform Agreement. This funding will include base funding equivalent to the current National Healthcare Specific Purpose Payment (SPP) and efficient growth funding to be provided from 1 July 2014. The national efficient price to be used in the calculation of efficient growth will be determined annually by the new Independent Hospital Pricing Authority.

The Commonwealth has guaranteed that its contribution for efficient growth will be at least \$16.4 billion greater than the States would have received from the National Healthcare SPP alone between 2014-15 and 2019-20.

National Partnership payments to the States are the key vehicle to support the delivery of specified projects, facilitate reforms, or reward those jurisdictions that deliver on nationally significant reforms. There are three types of NP payments: project; facilitation; and reward.

National Partnership project payments are a financial contribution to the States to deliver specific projects, including to improve the quality or quantity of service delivery, or projects which support national objectives. When an area emerges as a national priority, National Partnership facilitation payments may be paid in advance of the States implementing reforms, in recognition of the administrative and other costs associated with undertaking reform, however payments should generally be based on the achievement of performance milestones or benchmarks. National Partnership reward payments can be used to reward those States that deliver on nationally significant reform or continuous improvement in service delivery.

78 Health, Education, Skills and Workforce Development, Disability Services and Affordable Housing

79 In recognition that an immediate shift to equal per capita shares may have implications for State allocations, an equal per capita distribution is being phased in over five years from 2009-10. The National schools SPP is distributed on the basis of school enrolments.