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THIRD VICTORIAN SUBMISSION TO THE GST DISTRIBUTION REVIEW

I am pleased to provide you with Victoria's third submission to the GST Distribution Review. This submission complements Victoria's previous two submissions, and responds to the Review's two Interim Reports, released in April and June 2012.

Victoria looks forward to a bold, reform-oriented final report that focuses on improving Australia's productivity and that in the interim improves the efficiency, equity, simplicity and transparency of the current redistribution system.

Regards

Ted Baillieu MLA
Premier and Minister for the Arts

Kim Wells MP
Treasurer

The GST Distribution Review
Victorian Submission

Submission in response to the first and second Interim Reports
August 2012

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Foreword by Premier and Treasurer

The current system of horizontal fiscal equalisation (HFE) needs fundamental reform. Times have changed since the original concepts of HFE were introduced in the 1930s.

We welcome the Panel's conclusion that full equalisation is no longer necessary. The Australian federation is now mature, and income disparities between States have narrowed. Tied funding and welfare payments do much of the work originally envisaged for HFE.

Despite the diminishing rationale for full HFE, the size of the pool subject to equalisation increased significantly with the introduction of the GST in 1999-2000. The underlying methodological framework has also progressively become more complex. The resulting system is unpredictable and unwieldy, requiring increasing amounts of data, much of which is of questionable quality.

Few can understand either how the system works or the basis for the results that it is producing. For example, despite the mining boom – causing the biggest economic transition in recent Australian history – Victoria's GST share is the second lowest of all the States. The main driver of this result appears to be that Victoria has more efficient service delivery. This is hardly an incentive for greater efficiency.

States share a commitment to many of the core principles necessary to achieve substantive reform to HFE. Most importantly, it is paramount to the federation that the GST continues to be returned to States in full as untied revenue. The purpose of the GST Review is to improve the GST distribution, not to increase Commonwealth influence over State policy. Tying the GST according to potentially arbitrary Commonwealth views would only add to the complexity that currently plagues the system.

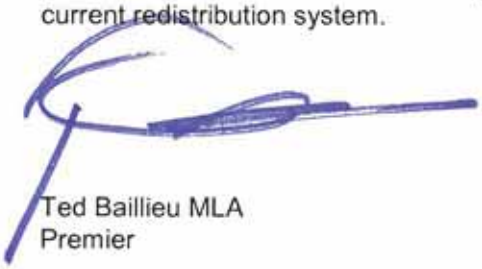
Similarly, States support greater certainty and consistency in the distribution of funding. Yet the ad hoc treatment of particular revenues or expenses would increase the arbitrary nature of the current system and not address fundamental problems.

Victoria believes that a medium term commitment to equal per capita (EPC) sharing of GST revenue is the best way to deliver fairness, predictability and efficiency. Nationally significant policy challenges should be addressed through tied funding. The benefit of tied funding is its transparency against specific outcomes, and its focus on *actual* rather than relative disadvantage. While donor States may see a fall in their tied funds, their share of untied GST would increase. This approach would also address the current anomaly where States with fewer specific disabilities receive relatively more of their revenue from the Commonwealth as tied funding.

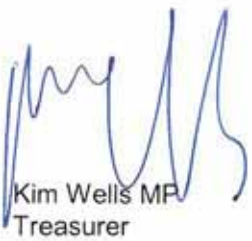
Partial equalisation is a good first step towards EPC. This could apply relativities to 60 per cent of the GST pool, with the remainder distributed on the basis of population. Another option could be a system that provides all States with minimum (not equal) fiscal capacity.

Methodological reform of that part of the GST pool that continues to be subject to equalisation is also vital. This should include consistent treatment of Commonwealth funding, applying an efficiency discount to equalisation, removing the distortionary investment and net lending assessments, and adopting broad-based indicators.

Victoria looks forward to a bold, reform-oriented final report that focuses on improving Australia's productivity and that in the interim improves the efficiency, equity, simplicity and transparency of the current redistribution system.



Ted Baillieu MLA
Premier



Kim Wells MP
Treasurer

Executive Summary

The current system of distributing the GST is no longer fit for purpose and is producing counterintuitive outcomes. The Panel has a historic opportunity to propose meaningful reform, based on sound policy principles, to deliver the best system for Australia's modern federation.

The GST must remain untied and transferred in full

It is imperative that the GST remains untied and transferred in full each year. The GST is the largest share of untied revenue for all States and Territories (hereafter, 'States'). The Commonwealth provides untied grants to States in recognition of Australia's extreme vertical fiscal imbalance (VFI). Transferring the GST in full provides States with the flexibility to deliver policies and programs best suited to local needs and preferences, in a fiscally responsible manner. This principle of subsidiarity underpins effective federalism.

The purpose of the GST Review is to reform the existing horizontal fiscal equalisation (HFE) arrangements, not to increase Commonwealth influence over State policy through the GST distribution system. Proposals to reserve, quarantine or withhold any portion of the GST pool would run counter to the Review's original terms of reference, which state that the GST must continue to be distributed on an 'untied' basis. If the Commonwealth wishes to create financial incentives for States to carry out particular reforms, it should do so through the existing system of National Partnership (NP) payments.

National tax reform would benefit from cooperation of the Commonwealth and States. This was recognised by the *Australia's Future Tax System* Review, which noted that improving the efficiency and equity of the tax system as a whole requires a cooperative approach to examine taxes at all levels of government.

The best way to distribute the GST is on an equal per capita (EPC) basis

An EPC distribution would be simple, fair, and more predictable, and would encourage reform.

Much has changed since equalisation of untied grants began. The equity rationale for providing the same fiscal capacity to States to deliver specified services to individuals has weakened; income disparities between States have narrowed, and the Commonwealth Government now provides a substantial social security safety net. Moreover, equity is already substantially achieved through tied funding.

Despite this, the inclusion of the Territories and the introduction of the GST (which significantly increased the pool of funds equalised) have expanded the scope of HFE far beyond what was originally envisaged. Australia is now the only known federation that endeavours to comprehensively equalise the fiscal capacities of sub-national governments. This is not equitable.

The current system is generating counterintuitive outcomes. For instance, despite the mining boom – causing the biggest economic transition in recent Australian history – Victoria's GST share is the second lowest of all the States.

Greater use of tied grants to facilitate a shift towards an EPC distribution

Significant, unpredictable changes to revenue pose challenges for all jurisdictions. This could be avoided for both the Commonwealth and States by using only tied grants (NP payments) to address inherent disabilities and policy challenges of national significance. While donor States would likely see a fall in their tied grants, there would be a corresponding increase in their (untied) GST. This would partially address the current anomaly whereby States with fewer specific disabilities receive relatively more of their revenue from the Commonwealth as tied funding.

Tied grants are the best way to compensate States for disability factors such as low socio-economic status, Indigeneity and remoteness, and they are already used for this purpose**.** Their benefit (compared with untied funding) is their transparency against specific outcomes, and their focus on actual rather than relative disadvantage.

The best way forward

Transition to EPC with greater use of tied funding to treat particular challenges could take time to implement. Two features of the current system that can and must be addressed in transition are:

- the volume of GST redistributed to recipient States. This increases as the GST pool grows, rather than with actual costs associated with increased needs. The provision of relatively more funding to recipient States when interstate income disparities are narrowing is unwarranted; and
- compensation to average rather than comparable needs. This removes incentives for States to improve their fiscal self-sufficiency.

There are substantive and methodological reforms that address both of these undesirable features, and would improve the efficiency, equity, simplicity and transparency of the HFE system.

A first step would be to move to a partial equalisation model that, over time, applied relativities to 60 per cent of the GST pool, with the remainder distributed EPC. These shares reflect the scope of HFE prior to 1999-2000, when the GST replaced Financial Assistance Grants (including revenue replacement payments) from the Commonwealth, as well as certain State taxes. Over time, the proportion of the pool distributed on an EPC basis would increase. This model would progressively reduce the scope of HFE and is an effective and simple model of comparable (or something less than 'full') equalisation.

Methodological and data reforms are also necessary to reduce perverse incentives, encourage reform and provide greater simplicity, efficiency and transparency. These reforms should include:

- applying a cross-category, policy neutral 'efficiency discount' on overall equalisation;
- removing the investment and net lending assessments;
- adopting broad-based indicators, especially on the expenses side; and
- delaying data revisions.

Setting compensation to less than average cost levels would encourage reform. A cross category, policy neutral efficiency discount of around five per cent should be applied, so that States are compensated to the level necessary to deliver a comparable, rather than 'average', level of service. A similar approach was used prior to 1975, when compensation was made to the 'average less eight per cent'.

The investment and net lending assessments should be removed. The inclusion of the investment and net lending categories following the CGC's *2010 Review* has introduced more complexity and volatility. The source of infrastructure funding in one State results in different and inconsistent relativity outcomes in other jurisdictions. Further, the assessment treats jointly funded road and rail investments differently, which penalises States that invest relatively more in rail. The investment and net lending categories should be removed. Depreciation would continue to be included as an expense associated with service delivery.

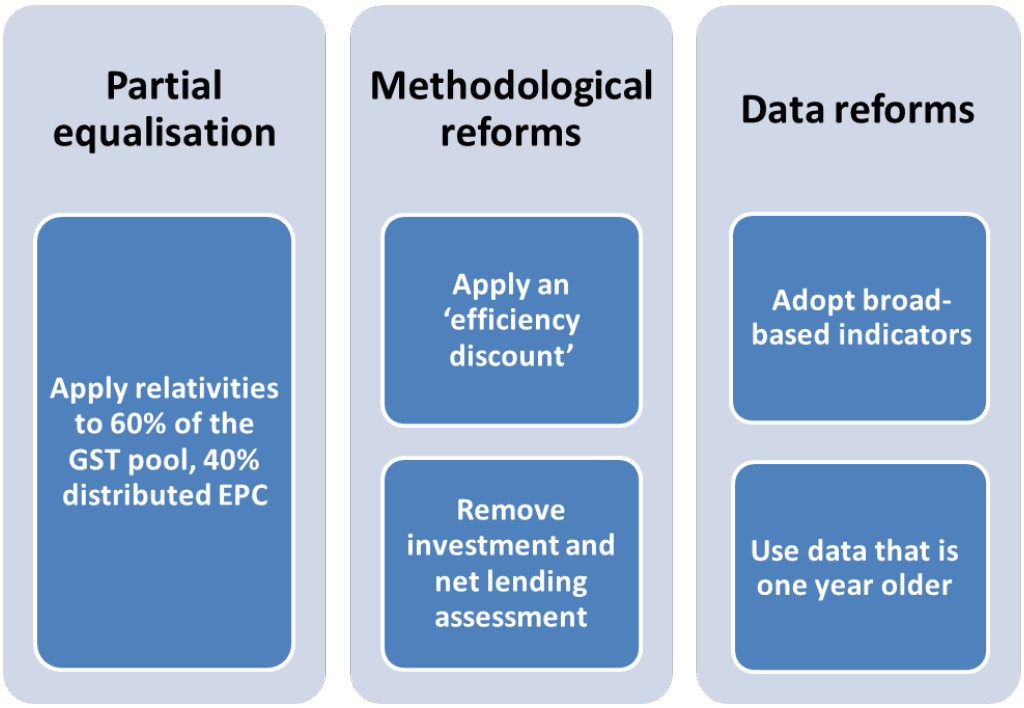
There should also be consistent and transparent treatment of Commonwealth funding. Any assistance provided in the form of tied grants must be included in the HFE assessment, to avoid double compensation. The consistent treatment of capital payments is even more important. Because these are usually large, their treatment (by inclusion or exclusion) can significantly affect GST relativities over several years. While consistency is Victoria's main objective, on balance it may be preferable to treat all Commonwealth payments by inclusion.

Adopting broad-based indicators would reduce not only the complexity of both the revenue and expenses assessments, but also reliance on poor quality data. Currently, there are eight revenue categories with 13 sub-categories. There are 14 expense categories divided into 43 sub-categories, for which 93 disability adjustments are applied, requiring over 1,000 data items. Each major revenue and expense category could be replaced by broad-based indicators drawn from a readily available and more reliable public data series (for example, Australian National Accounts data). Additional adjustments may be required to capture disabilities related to Indigeneity, remoteness and diseconomies of scale, but the overall HFE methodology would be much simpler, more transparent and more predictable.

Predictability would be increased if the current methodology only used revised data after it has stabilised. Data from the most recent financial year has often required subsequent revisions. It is preferable to delay application of new data for one year, which would strike an appropriate balance between predictability and accuracy, and allow for material data errors to be corrected.

Victoria's preferred reform package comprises these methodological and data reforms (including a policy neutral efficiency discount on overall equalisation of around five per cent), together with a 60/40 partial equalisation model. The package would replace the current model of 'full' equalisation with a more efficient model of 'comparable' equalisation. It would be a considerable improvement to the current distribution system on efficiency, equity, simplicity and predictability grounds.

Summary of Victoria's preferred package of reforms



At a bare minimum, Victoria's proposed methodological and data reforms should be implemented.

The Review should recommend coherent reforms

The GST Distribution Review is an opportunity to propose fundamental reform rather than make ad hoc changes that respond to current circumstances.

The mining industry is not a special case, on either the expenses or revenue sides. The private sector is generally the appropriate sponsor for mining-related infrastructure.

The case for an expanded recognition of non-infrastructure related expenses associated with the mining industry has previously been considered and rejected: the CGC's *2010 Review* found that a material need could not be demonstrated or objectively assessed. Expenses related to mining should be treated like all other expenses in an HFE system. Special recognition of mining related expenses that fail the tests applied to other States' expenditure needs would be highly inequitable.

Australia's HFE system is designed to equalise States' capacity to provide services to individuals, not to support the prospective development of industries. Using the distribution of the GST as an industry assistance measure would inappropriately expand HFE beyond its focus on individuals.

Revenues raised from mining are no different to any other revenues available to States. Taxes on mining resources are a major source of revenue for mining States and should be included in full as part of any HFE system. Increasing royalties, and other own-source revenues generated by booming economies, more than compensate for the associated reduction in GST funding.

Regardless of how mineral resources are taxed, all associated State revenues must be included in the HFE system, as long as one remains. This includes any future Commonwealth-State revenue transfers, and will ensure equitable treatment of all revenues and States.

Other comments

The Review should resist recommending further artificial and short-term adjustments to the system. There is no justification for freezing or setting floors on relativities. Setting floors would result in jurisdictions above the floor subsidising those below, even if total revenues for those below the floor were increasing (or costs decreasing). This would be inequitable and inefficient.

Governance reforms would strengthen and sustain the integrity of the HFE system. There are strong arguments to separate the role of setting the HFE methodology from its implementation. It is also good practice to undertake regular and independent reviews of a system that distributes approximately half of Commonwealth-State funding transfers.

The current three year averaging period is appropriate as long as some form of HFE remains. It is the best compromise between contemporaneity, data availability and the need to restrict volatility.

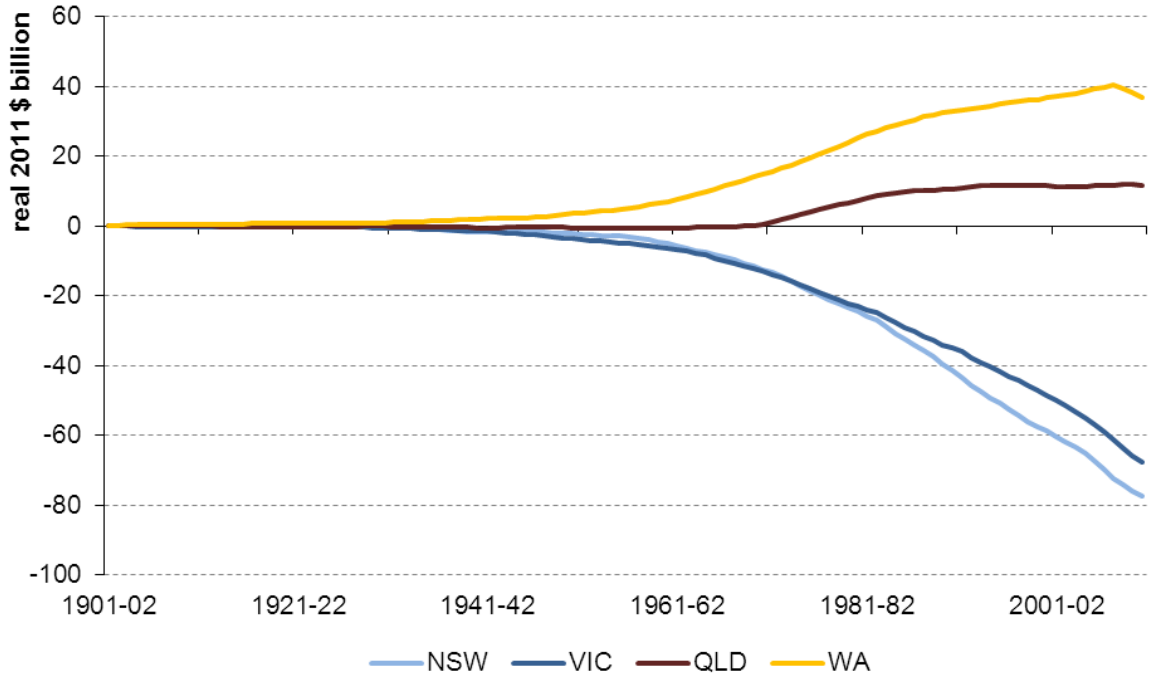
The time is right to reform the GST distribution to make it more efficient, equitable, transparent and simple. The Panel should resist merely recommending changes that create a 'quick fix' or increase complexity by adding additional expense categories. The opportunity for fundamental reform should not be missed.

1. Introduction

The Review is the first independent review of the equalisation system since the introduction of the GST. It is a rare opportunity to make substantial, long-lasting reform, appropriate for Australia's modern federation.

Since equalisation began, Victoria has been a donor State. In this way, Victoria and New South Wales have invested heavily in the development of Western Australia (WA) and Queensland, States which now enjoy booming economies and mineral wealth. Reform proposals should recognise past benefits that have been provided to various jurisdictions.

Chart 1.1 – Cumulative redistribution of tied and untied Commonwealth grants since federation, 1901-02 to 2010-11



An equal per capita (EPC) distribution is the most efficient, equitable, simple and transparent way to distribute the GST, but there are challenges associated with moving too quickly to this outcome.

This submission expands on arguments in Victoria's first two submissions and provides more evidence on proposed ways forward, including how to implement some important methodological changes. It also responds to some of the questions posed by the Panel in its two Interim Reports.

Victoria's reform proposals reflect the principles outlined in the terms of reference: efficiency, equity, transparency, predictability and simplicity.

Key arguments and their associated rationale are presented in the body of this submission. Key technical analyses to support the proposed packages of reform are provided in the Appendices. Victoria welcomes further engagement by the Panel, including with regard to specific proposals and supporting analysis.

2. All the GST must remain untied

Key points

- The GST must continue to be transferred to States each year in full and without conditions – this is essential to maintain the fiscal security, flexibility and policy autonomy of States.
- Anything less would undermine the 1999 Intergovernmental Agreement under which States gave up significant own-source revenues in exchange for the full amount of the GST as untied revenue. To do so would render the IGA, which underpins modern federal financial relations ineffective.
- Withholding, quarantining or otherwise applying conditions to any part of the GST is inconsistent with the key objectives and terms of reference of the Review, making the system *less* efficient, *less* equitable, *less* transparent and *more* complex, while undermining policy neutrality.
- The purpose of the Review is to improve the GST distribution, not to increase Commonwealth influence over State policy.
- Significant national tax reform requires cooperation between the Commonwealth and States, and consideration of taxes at both levels of Government. It is not possible to reform inefficient State taxes in a revenue-neutral manner via the GST pool.

2.1. Federations perform more strongly

Federations perform strongly compared to unitary nations because decision-making reflects local needs and priorities. Australia has prospered as a federation: it is estimated that each Australian was $4,507 better off on average in 2006 as a consequence of federalism.[1]

Federal systems cannot operate effectively unless sub-national governments have significant policy autonomy. The effective operation of Australia's federation is jeopardised by the extreme *vertical fiscal imbalance* (VFI) between the revenue raising capacity of the Commonwealth and State governments and their respective service delivery responsibilities. The transfer of untied GST revenue serves to partially bridge this gap.

The system of federal financial relations, including the GST distribution, must recognise the primary responsibility of States for provision of core services and infrastructure. It must also enable States to tailor services to local needs and reward innovation. Reducing States' fiscal flexibility by tying any part of the GST would fundamentally compromise this framework. As well as directly contravening the *Intergovernmental Agreement on Federal-Financial Relations* reached in 2008 (2008 IGA), it would be inconsistent with the purpose of the GST Review. **The purpose of the GST Review is to improve the GST distribution, not to increase Commonwealth influence over State policy**.

Using the GST distribution to influence specific State tax reform would necessarily add complexity and subjectivity to the application of HFE. The nature of required reforms, the relative capacity and effort of States in pursuing them, and the associated decision to provide or withhold payments would all need to be determined, and all would require subjective judgement. The potentially arbitrary nature of some of these decisions could undermine trust in the system.

In light of the demonstrated benefits of Australia's federation, and its extreme VFI, Victoria does not support the Panel's assertion that because the Commonwealth provides funding to the States it is "*reasonable to expect [it] to have some involvement in State tax reform directions".*

[1] Anne Twomey and Glenn Withers (2007), *Federalist Paper 1: Australia's Federal Future: Delivering Growth and Prosperity*, A report for the Council for the Australian Federation.

2.2. Adhering to the GST Agreement is paramount

The *Intergovernmental Agreement on the Reform of Commonwealth-State Financial Relations* (1999 IGA) provided for GST revenue to be paid in full to the States as untied revenue.[2] This assurance was a matter of fundamental importance for the States, which were sacrificing significant own-source revenues in exchange. The administrative arrangements embedded in the 1999 IGA, under which the full cost of administering the GST is paid by the States, reiterated the mutual agreement that all of the GST belonged to the States. Proposals to use the GST as an incentive for State tax reform would be incompatible with the fundamental terms of the 1999 IGA and subsequent 2008 IGA.

Victoria rejects the Panel's assessment that *"making some GST payments 'conditional' on certain actions",* such as State tax reform milestones, is not equivalent to tying GST payments.[3] Converting any part of the GST revenue into a payment for specific purposes is quite obviously equivalent to tying the revenue. Likewise, delaying or withholding GST payments effectively ties the revenue by linking States' funding to particular policy outcomes. This interpretation is supported by the Commonwealth Government's own definition of tied payments:

> *"The Commonwealth provides payments to the States for specific purposes to pursue important national policy objectives in areas administered by the States……"*[4]

Making GST payments conditional on reform would also conflict with the Panel's Terms of Reference, which specify that the GST will continue to be distributed on an untied basis.

Victoria urges the Panel not to recommend options that would undermine this fundamental element of Australia's federal financial relations.

2.3. Upholding the rationale for the GST reforms

The GST was introduced to achieve a more efficient national tax system, while improving the financial sustainability of States. Certain inefficient State taxes and other untied Commonwealth grants were replaced by the untied GST, a revenue source that was intended to be more stable and grow over time. Recognising that the GST exacerbated VFI, it was agreed that it would be returned in full to States as untied revenue. On 1 January 2007, Victoria became the first State to abolish all agreed taxes under the 1999 IGA.

Fiscal security, flexibility and autonomy were fundamental to the States agreeing to the GST reforms. Tying any part of the GST would diminish State fiscal and policy autonomy, which has already been adversely affected by the higher proportion of tied funding to Victoria over the last decade (see Chart 2.1). Since the GST was introduced in 2000, tied grants to Victoria have grown from 17 per cent of total Victorian revenue in 1998-99 to 23 per cent in 2012-13. Based on Victoria's 2012-13 Budget, this is equivalent to tying an additional $3 billion per annum.

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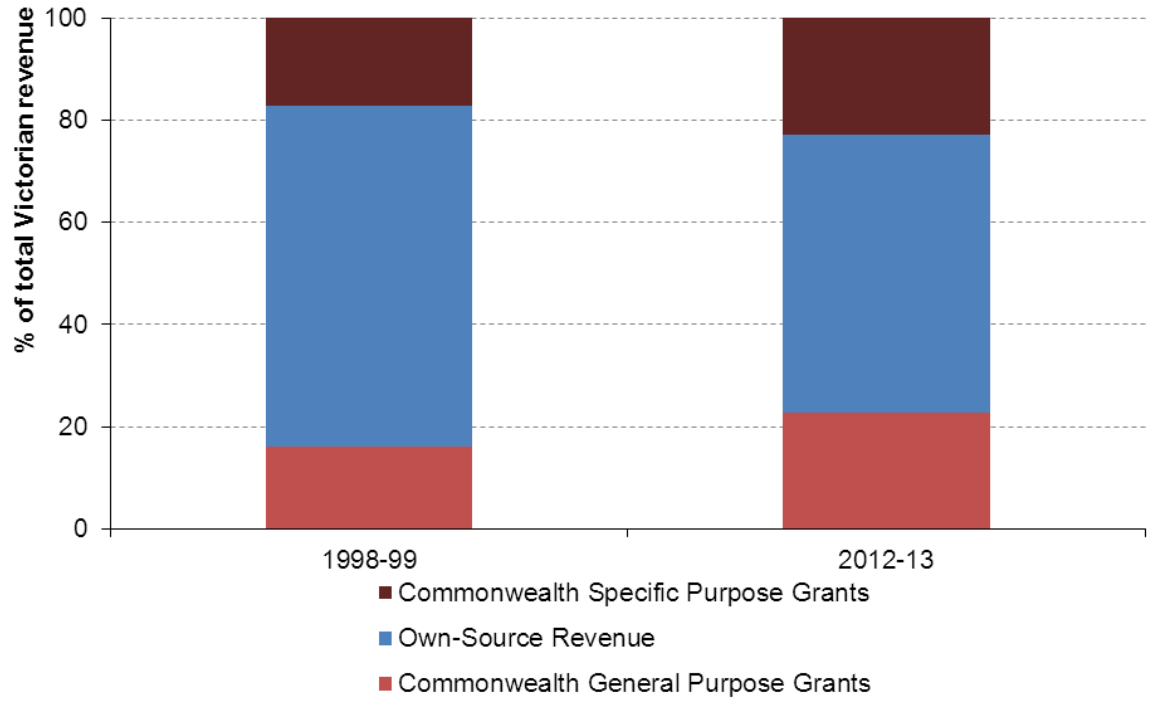
[2] See section 5(i) and section (7) of the 1999 IGA, later adopted by the *Intergovernmental Agreement on Federal-Financial Relations* in 2008 (section 25). See also, section 6 of the *Federal Financial Relations Act 2009.*

[3] GST Distribution Review Second Interim Report, p.86.

[4] Commonwealth Government 2012-13 Budget, Budget Paper 3, p.19.

Chart 2.1 – Proportion of untied and tied funding sources to Victoria (1998-99 to 2012-13)



Source: Victorian Government Annual Financial Reports and 2012-13 State Budget.

2.4. A focus on consistency and policy neutrality

The purpose of the Review is to improve the GST distribution, not to increase Commonwealth influence over State policy. Victoria accordingly welcomes the Panel's conclusion that *"it would not be desirable for the GST distribution system to penalise States for increasing their royalties*".

It is disappointing that the Panel has taken an inconsistent approach when considering linking the GST to specified State tax reform. All reforms to the methodology should be consistent with the Review's terms of reference. The Panel should reject using the GST to create incentives for State tax reform, consistent with its rejection of incentives in relation to resource taxes.

State tax reform needs to be considered in the context of the entire national tax system, and must go hand-in-hand with reform of Commonwealth taxes. The Commonwealth and the States must work together as partners to improve economic outcomes for the nation as a whole and share the benefits. The *Australia's Future Tax System Review* concluded that:

> *"…reforms to State taxes should be coordinated through intergovernmental agreements between the Australian Government and the States to provide the States with revenue stability and to facilitate good policy outcomes."*[5]

This is supported by the Panel's view that "*the optimal way to pursue State tax reform is on a multilateral basis — amongst the States and including the Commonwealth — to maximise the benefits of reforms"*.[6]

[5] Australia's Future Tax System, Report to the Treasurer, December 2009, p. 684.
[6] GST Distribution Review Second Interim Report, p. 83.

3. Substantive reforms to improve horizontal fiscal equalisation

Key points

- The 30 year-old methodology of full equalisation is out-dated.
- Despite a declining rationale for HFE, the methodology has increased in complexity and data intensity, and the amount of funding distributed has likewise increased.
- An equal per capita (EPC) distribution is the right long-term objective for the GST pool.
- Transition to EPC should be facilitated by a partial equalisation model that better accounts for the changes to federal financial relations since the early 1980s. This would provide a model of comparable equalisation, requiring less redistribution than the current HFE model.
- Victoria's preferred model would apply relativities to 60 per cent of the GST pool, with the remainder distributed EPC. This would represent a significant improvement on today's HFE system and would also satisfy the Panel's reform criteria of improved efficiency, equity, simplicity, transparency and predictability.
- Alternatively, EPC could be implemented immediately, with States' tied grants, in the form of National Partnership (NP) payments, adjusted to ease transition.

The current system of HFE has remained virtually unchanged since 1983. It has not responded to significant social and economic changes, including:

- the narrowing of income disparities between the States;
- the increasing use of tied payments to address disadvantage;
- the Commonwealth's provision of an extensive social security safety net;
- the inclusion of the NT and the ACT;
- major reforms to federal financial relations, including the introduction of the GST in 2000; and
- the increased ease of providing quality services to regional and rural areas through improved transport links and technology.

As discussed in Victoria's earlier submissions, EPC is the most appropriate, long-term solution to distributing GST revenue. An EPC distribution would still result in a degree of redistribution when compared to returning the GST to the jurisdiction in which it was raised.

Transition to EPC can be achieved through partial equalisation models, which represent a form of comparable, rather than full, equalisation. Victoria's preferred transition method would apply relativities[7] to 60 per cent of the GST pool, with the remaining 40 per cent of the pool distributed EPC. This should be combined with returning fiscal responsibility for the Territories to the Commonwealth, and the methodological improvements suggested in Chapter 4.

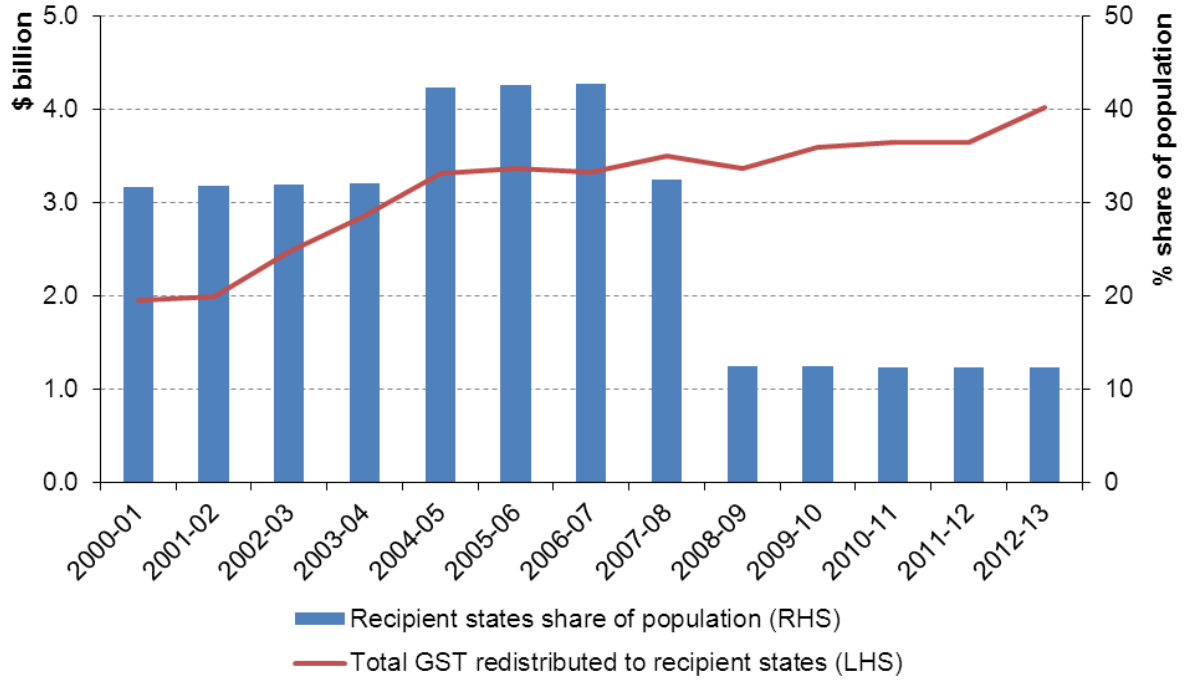
3.1. The relative assessment does not reflect actual needs

The current distribution of GST, which relies on the calculation of a complicated set of relative needs and capabilities, has become disconnected from the underlying needs facing States.

The amount of GST redistributed to recipient States has continued to grow, despite this redistribution going to a much smaller share of the population (see Chart 3.1).

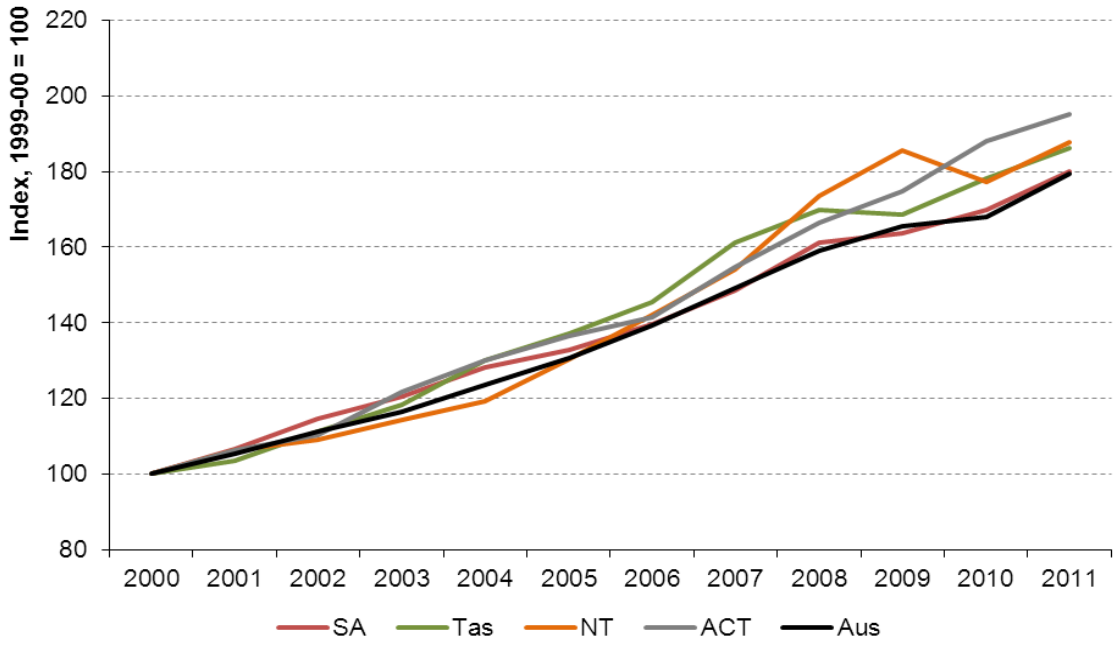
[7] Calculated with reference to 100 per cent of the pool in the assessment years.

Chart 3.1 – GST distribution to recipient States



There is little evidence to suggest this reflects changes in economic circumstances. The NT's GST relativity has increased 33 per cent since the introduction of the GST despite its Gross State Product (GSP) per capita (and also that of some other recipient States) growing faster than the national average (see Chart 3.2).

Chart 3.2 – Index of Gross State Product per capita (current prices)



The increased amounts going to the smaller States is at least partially a result of GST pool growth. For example, between 2011-12 and 2012-13, the NT's GST grant increased by over $850 per capita, (compared to $142 per capita for Victoria) because of the growth in the pool rather than any change in circumstances.

Determining actual rather than relative needs for each service delivery category would be impractical and would introduce significantly more complexity. The partial equalisation models presented in this submission mitigate some of the counterintuitive outcomes reflected in the current system. They would address the overcompensation associated with relative need assessments, while continuing to provide support to States with weaker fiscal capacities.

3.2. Equalising to a comparable standard

Partial equalisation would also effectively equalise to a comparable, rather than average level of fiscal capacity. The CGC currently equalises funding from the GST pool 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*"[8] Comparable assessment would change the focus of HFE from the *same* standard to a *comparable* standard, reducing the extent of redistribution undertaken. A comparable model of equalisation would better balance equalisation and efficiency, and encourage State responsibility and self-sufficiency.

Victoria's first submission acknowledged that HFE should be designed to ensure that individuals have access to comparable government services, regardless of the State in which they reside. However, just as interpersonal income is less than fully equalised through the taxation and welfare system, it would be reasonable to expect that governments are also compensated to a comparable level. The existing model of full equalisation limits the incentive for recipient States to increase their self-sufficiency. For example, the NT, the largest per capita recipient of the current system, does not levy any form of land tax. Equalising to a lower, yet comparable standard would provide an incentive for recipient States to better manage their own affairs, rather than depending on the support of other States through HFE.

3.3. Applying relativities to 60 per cent of the pool

Resizing the pool to which equalisation is applied would deliver equalisation on a comparable basis, and commence the long term transition to EPC. The composition of the HFE pool prior to GST reforms provides a reference point from which to start this transition.

Prior to the introduction of the GST in 2000, the CGC relativities were applied to Financial Assistance Grants (FAGs). Under the 1999 IGA, the GST replaced FAGs, revenue replacement payments and certain State taxes. In 2000, the relativities were applied to the GST pool. Effectively, HFE was now applied to FAGs, revenue replacement grants and revenue that previously would have been raised by States through their own taxes. This increased the pool distributed on the recommendation of the CGC by 32 per cent in 2000-01, without any change in the conceptual approach to HFE.[9]

When the GST was introduced, FAGs represented a little over 70 per cent of the GST pool. Chart 3.3 shows that, when projected over time, that proportion would have stabilised at 60 per cent. This suggests that the relativities should only be applied to 60 per cent of the GST pool, with the remaining 40 per cent returned to States on a population basis. [10]

Under a 60/40 GST distribution, the existing methodology could be preserved, but the pool would effectively be split in two. The relativities produced as a result of the current methodology would be applied to 60 per cent of the pool. 100 per cent of the pool, inherent in the assessed budget, would be included in the calculation of relativities. This is justified on the basis that the total GST pool is returned in full to the States. The remaining 40 per cent of the pool would be distributed to the States on an equal per capita basis. Appendix A provides further information on how this model would be applied.

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[8] Commonwealth Grants Commission http://www.cgc.gov.au/fiscal_equalisation/navigation/2.

[9] *The Commonwealth Grants Commission: the last 25 years*, CGC 2008, p.123.

[10] This model does not imply that only 60 per cent of the assessment year pools would be used to calculate the relativities. Relativities would continue to be calculated using 100 per cent of the GST pool. It also does not imply a 40 per cent discount applied to the assessments, which would be more complex than Victoria's proposed approach.

Chart 3.3 – Financial Assistance Grants as a proportion of the annual GST pool

Source: Victorian Department of Treasury and Finance calculations.

This 60/40 model can be complemented with a simplified methodology (as discussed in Chapter 4). The reduced scope of HFE would make simplification less contentious and more achievable. To smooth the impact further, transition to 60/40 could be achieved by implementing an 80/20 partial model in year one, 70/30 in year two and 60/40 in year three.

Commonwealth estimates show that both NSW and Victoria raised more revenue through the abolished State taxes than their population share. Accordingly, under the proposed model, the 40 per cent of the pool allocated EPC would still include a degree of redistribution.

The revenue impact for jurisdictions (as a proportion of State revenues) during transition is outlined in Table 3.1. This shows minimal fiscal impact on all jurisdictions except the NT. The NT has a unique set of policy challenges that make it an inappropriate inclusion in the current system of HFE (see section 3.4).

Table 3.1: Smoothing the implementation of 60/40 distribution – indicative cumulative changes in total State revenue (%)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Year 1 90/10	0.24	0.19	0.08	0.25	-0.47	-1.18	-0.33	-3.55
Year 2 80/20	0.34	0.40	0.38	0.89	-1.05	-2.75	-1.03	-8.38
Year 3 70/30	0.36	0.44	0.57	1.88	-1.93	-4.09	-0.89	-12.17
Year 4 60/40	0.41	0.91	0.58	2.16	-2.30	-5.38	-0.87	-16.84

1. Calculation is based on actual data (2008-09 to 2011-12) for the purposes of providing an indicative outcome.

3.4. The unique position of the Territories

An equalisation system works best when there are no outliers in the group of States in scope. The equalisation system is ill-equipped to deal with large variations from average State needs, which distort outcomes and increase the system's complexity and opaqueness.

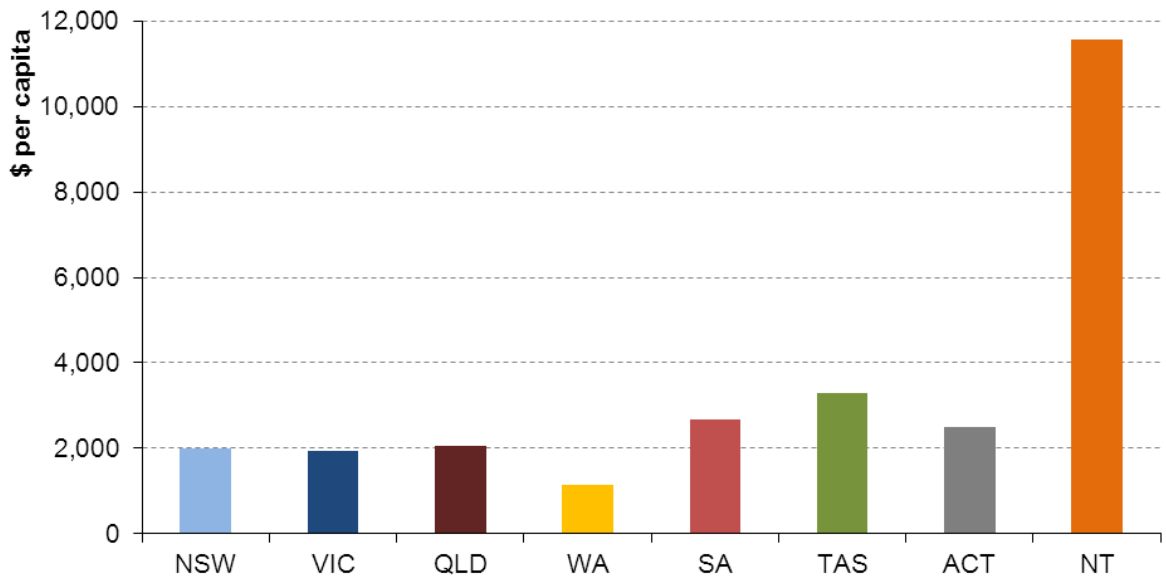
The two Australian Territories are outliers for different reasons and could appropriately be considered the responsibility of the Commonwealth Government. The Commonwealth has plenary legislative power over the Territories (section 122 of the Commonwealth Constitution) and associated executive power. Reinstating full Commonwealth fiscal responsibility for the Territories would be consistent with Canada, which funds its Territories outside its HFE system from a separate funding source.[11]

Since 1988-89, when the NT was included in the system of HFE, its relativity has been around four-and-a-half times the all-State average and continues to increase. The HFE methodology changed very little with the introduction of the NT, despite it being an obvious outlier in terms of service needs, costs and revenue-raising capacity.

The NT's unique circumstances distort the relativities of all other jurisdictions. For example, CGC analysis found that within the post-secondary education assessment, the indigenous and remoteness cost weights are only material for the NT, but are applied across all jurisdictions.[12] As shown in Chart 3.4, the NT receives ten times more GST per capita than WA, and close to three-and-a-half times more than the jurisdiction with the next highest relativity, Tasmania.

On all social, health, education and financial indicators, the NT bears little resemblance to any other Australian jurisdiction. It has an average life expectancy five years less than the rest of the nation, an infant mortality rate 75 per cent higher than the national average and significantly lower education attainment and participation. The HFE methodology requires the CGC to account for those unique characteristics in the creation of an 'average' State profile, against which the fiscal capacity and expenditure needs of all jurisdictions are compared.

Chart 3.4 – GST grants, 2012-13



Eighty per cent of the NT's revenue already comes from the Commonwealth. In 2012-13, the additional cost to the Commonwealth of resuming full fiscal responsibility for the NT would be around $2.7 billion (equivalent to the NT's GST allocation).

There is a sound case for the Commonwealth absorbing much of this cost. First, it would redress historical cost-shifting to the States of its constitutional responsibilities regarding the Territories. Indigenous disadvantage in the NT is a national policy challenge, yet other States make a substantial funding contribution. In 2012-13, HFE will redistribute $1.1 billion from other States to the NT on the basis of Indigeneity factors (not including redistribution based on remoteness costs). Yet the

[11] http://www.fin.gc.ca/fedprov/tff-eng.asp .
[12] *Report on the GST Revenue Sharing Relativities – 2010 Review* Volume 2 p. 181.

Commonwealth Government's contribution through NP payments targeted at Indigenous disadvantage will only be $0.3 billion. Over the four years to 2011, Indigeneity factors in the HFE assessment have accounted for an increased redistribution of the GST to the NT, in effect constituting cost-shifting from the Commonwealth to the States.

Second, it would address a current anomaly whereby the jurisdiction with the greatest need for financial assistance has fewer conditions imposed on the funding it receives from the Commonwealth than other States. Untied grants from the Commonwealth contribute the largest share of the NT's budget (60 per cent), this share being by far the largest of all the States. As the Panel recognised in its Interim Report, some legitimate challenges of national significance that the NT faces would be better addressed outside the HFE system.

Third, Commonwealth responsibility for the NT would provide greater transparency of funding and would likely deliver better outcomes.

The effect of the ACT on the GST distribution is smaller, but there are strong arguments for removing the ACT from the equalisation pool as well. ACT residents have significantly higher than average household incomes, yet the Commonwealth exemption from payroll tax effectively means employers in other States end up funding services to ACT residents through the distribution of the GST. The treatment of national capital expenses similarly shifts costs from the Commonwealth to the States. The cost to the Commonwealth of assuming fiscal responsibility for the ACT in 2012-13 would be less than $1 billion.

3.5. Revenue-only equalisation

An alternative, less preferred reform option would be to redefine the scope of HFE to only equalise for revenue raising capacity. Under this option, equalisation through the GST would only address differences in States' abilities to raise own-source revenue. Tied grants would be used to equalise on the expenditure side, by addressing differential demand needs and cost pressures (as discussed further in section 3.6). This approach would be consistent with the Canadian and German models of HFE and would provide a simpler and more accountable system of equalisation.

Much of the complexity in Australia's HFE system arises on the expense side of the assessment. The expenditure side of the assessment is less transparent and accounts for more redistribution than the revenue side. The inherently subjective expenditure equalisation also involves much greater reliance on data which is not fit for this purpose. This, among other issues, makes forecasting the GST relativities more difficult, and reduces the overall predictability of the system.

Implementing revenue-only equalisation would be straightforward. The CGC would continue to assess own-source revenue capacity using national average tax rates. A State's per capita revenue requirement would be calculated as the difference between assessed revenue and national average assessed revenue. The per capita GST requirements on which yearly relativities are based would be calculated as the EPC grant plus the revenue requirement. All information required for this calculation is already produced by the CGC.[13]

The changes in 2012-13 grants (based on revenue only equalisation through the 2008-09 to 2010-11 assessment years) are shown in Table 3.2.

[13] CGC, *Report on GST Revenue Sharing Relativities 2012 Update*, Attachment C

Table 3.2 : 2012-13 relativities and grants based on revenue only assessment

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Revenue-only grant ($pc)	2,264	2,423	1,870	337	2,794	3,002	2,510	2,284	**2,086**
Revenue-only grant ($m)	16,807	13,931	8,780	818	4,693	1,548	940	536	**48,200**[(a)]
Change in grant ($m)	2,042	2,881	-866	-1,974	190	-153	4	-2,172	**5,118**[(b)]
Change (% of State revenue)	3.4	6.0	-2.0	-7.7	1.3	-3.3	0.1	-47.7	

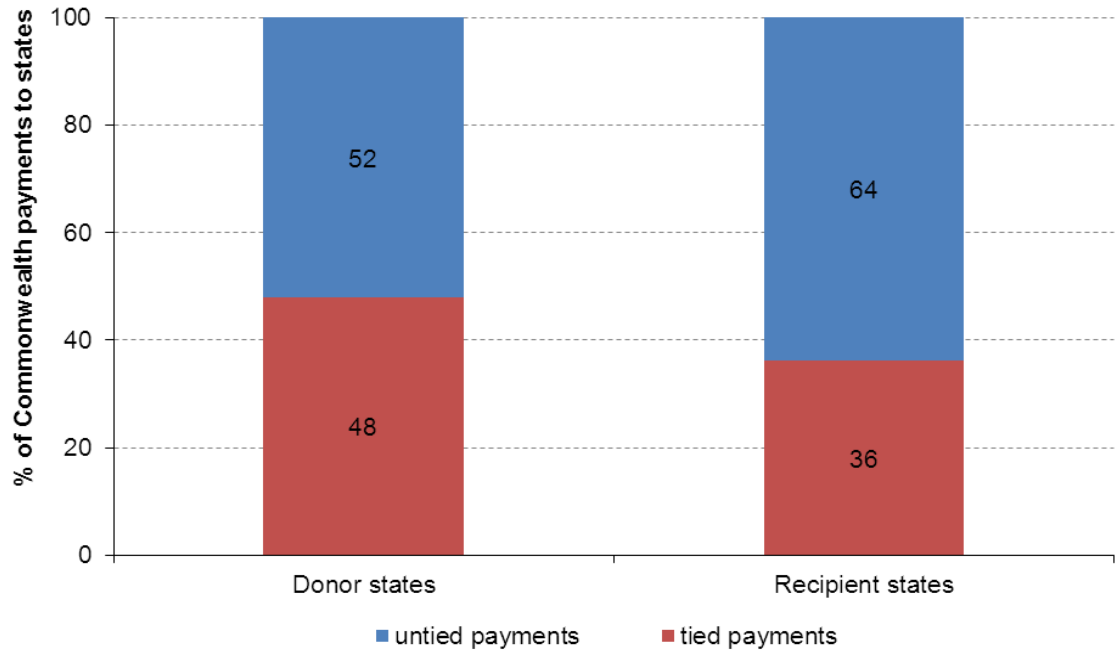
Notes: 2012-13 relativity is the average of 2008-09, 2009-10 and 2010-11 revenue only relativities, calculated from 2012 Update Tables C-3, C-6 and C-9 using 'average GST' and 'assessed differences in revenue' figures.
(a) The GST pool from 2012-13 Commonwealth Budget Paper 3.
(b) Figure represents total redistributed.

3.6. Transitional assistance through tied grants

The Panel has raised concerns about the impact on State budgets of significant reforms to the GST distribution. If necessary, other streams of Commonwealth funding to States could be used to achieve a transition to an EPC distribution or partial equalisation model.

In 2011-12, total Commonwealth transfers to States were almost evenly split between tied grants (51 per cent) and untied grants (49 per cent). Perversely, the current system results in donor States, assessed by the CGC as requiring less support to meet their expenditure needs, receiving a greater share of their Commonwealth transfers as tied (or conditional) payments. States with greater expenditure needs receive relatively more of their total Commonwealth transfers untied, with no funding conditions (see Chart 3.5).

Chart 3.5 – Proportion of tied and untied payments, 2011-12



Source: Commonwealth Budget Paper 2012-13, Budget Paper No.3.

This perverse outcome would be corrected by moving to a system of partial equalisation, and using NP payments to address any significant State expenditure needs above a nationally comparable level.

This would provide a more transparent link between actual costs and funding, and enable the success of measures to address national policy challenges to be monitored.

In fact, this is already occurring in public hospital funding, the largest area of State government expenditure. The Independent Hospital Pricing Authority must have regard to *"legitimate and unavoidable variations in wage costs and other inputs which affect the costs of service delivery"* in determining adjustments to the national efficient price.[14]

Using tied grants to equalise States' expenditure needs allows for bold reform to the GST distribution system, achieving greater simplicity, predictability and transparency.

[14] National Health Reform Agreement Clause B13.

4. Changes for greater simplicity and transparency

Key Points

- The partial equalisation models examined in Chapter 3 are one form of comparable assessment. This chapter considers a range of methodological reforms to simplify HFE that also represent a move to a 'comparable' model of equalisation. These methodological reforms can and should be implemented even if more substantive reform is delayed.
- Compensating States to a more comparable standard could be achieved through the application of a policy neutral 'efficiency discount' across all expense categories, that would equalise to an effective base standard of service.
- The investment and net lending assessments, introduced following the CGC's *2010 Review*, have worsened an already complex, volatile and inefficient system of HFE, and should be removed. They produce inconsistent outcomes depending on financing method and the choice of infrastructure.
- Where possible, the many complex calculations for revenue and (especially) expenditure items should be replaced with broad-based category measures that deliver greater simplicity and predictability, and still ensure comparable capacities for States.
- Data revisions under the current methodology are causing excess volatility. Determining relativities using data lagged by a year (instead of most recent data) would avoid subsequent revisions and strike the right balance between stability, accuracy and contemporaneity.

Combining methodological reforms with 60/40 partial equalisation would be the most effective way to modernise HFE, shifting its focus to comparable equalisation and making it simpler, more efficient and predictable. Important methodological and data reforms could also be combined with other forms of partial equalisation outlined in chapter 3, or as a minimum, implemented in the absence of substantive reform.

4.1. Efficiency discount – supporting a base level of services

As discussed in Chapter 3, a move to an EPC distribution, and the transition options presented in this submission, such as 60/40 partial equalisation, will deliver equalisation on a more comparable basis.

Irrespective of whether or not a 60/40 approach is adopted, a cross-category, policy neutral 'efficiency discount' should be applied to States' GST requirements to support reform.

Historically, Australia's system of equalisation applied an explicit penalty to claimant States to discourage inefficient or wasteful spending. It is inequitable that States such as Victoria, which have invested in reforms necessary to make service delivery systems financially sustainable, should be asked to fully and indefinitely compensate States that do not similarly manage their own affairs. At the very least HFE should impose some discount on overall equalisation, reflecting the expectation that States retain some responsibility for enhancing their efficiency over time.

A discount could potentially be developed by determining the GST requirement based on the 'minimum levels of effort' of jurisdictions in major expense categories. This discount could then be applied to the difference between each State's GST requirement and the average GST requirement in a given assessment year.

The financial impact of a policy neutral efficiency discount would depend on the rate applied. This discount would vary depending on whether it is calculated at an individual category level or at the total expenses level. It would also vary year on year. Victoria is undertaking work with other States to establish a rigorous methodology for calculating and applying such a discount. Current analysis supports a discount based on calculations at the total expenses level of around five per cent. Further material will be provided to the Panel to detail and support this model.

4.2. Investment and net lending assessments

4.2.1 Removing investment and net lending assessments

The assessment of capital, extended after the *2010 Review* to include investment and net lending assessments, has increased the complexity and volatility of HFE and introduced new policy distortions.

The addition of net lending and investment extends the scope of HFE beyond the equalisation of operating expenditure needs and revenue raising capacity, to equalisation of State per capita holdings of net financial assets. Implementation of this expanded model has had important unintended consequences:

- the impact of capital expenditure by any State on the GST of other States depends on how the expenditure is financed; and
- the impact of Commonwealth infrastructure payments on a State's GST depends on whether capital expenditure relates to investment on roads or rail infrastructure.

Under the current methodology, financing a project through own-source revenue has a different impact on other States' relativities than financing through borrowing. As a result, a State can (inadvertently) influence another State's relativity by choosing to finance infrastructure in a particular way.

For joint Commonwealth–State projects, an investment in a rail project will result in a State losing significantly more GST revenue than investing in a comparable road project. This scenario is outlined in Box 4.1. Commonwealth National Network Road (NNR) funding is treated differently from all other Commonwealth (and State) funding for capital projects. NNR funding is assessed in the investment component of the investment category, which has ongoing disabilities applied. Fifty per cent of NNR capital funding increases the general investment category expenses and 50 per cent directly increases the investment requirement of the jurisdiction receiving the Commonwealth funding. This means that NNR funding has a smaller impact on States' overall assessed fiscal capacities, relative to rail funding. These perverse outcomes are examined further in Appendix B.

Given these perverse outcomes, the investment and net lending assessments should be discontinued. Removing these assessments would result in a neutral approach to the treatment of infrastructure, neither rewarding nor punishing States' policies on infrastructure provision. To the extent that capital provision contributes to the provision of services, it will continue to be recognised through depreciation expenses. This would give States the freedom to use their net operating balances as they see fit and to apply for Commonwealth infrastructure funding with full understanding of the impacts of the equalisation process.

Box 4.1 - Example of $1 billion increase in investment – comparison of road and rail

This example compares two options for increasing jointly funded Victorian investment in 2008-09. The first option has Commonwealth and State joint and equal funding of a road project, deemed to be a NNR. The second option is a jointly and equally funded rail project.

On the expenses side of the assessment, when the investment is directed towards a Victorian rail project, the $500 million Commonwealth grant is distributed across all States according to the net lending assessment. The Commonwealth grant for the road project on the other hand increases total investment by $500 million, with $250 million of that directly increasing Victorian investment 'needs' and the remaining $250 million distributed across all States according to the investment assessment. On the revenue side, both Commonwealth grants are treated equivalently.

Table 4.6.1: Jointly funded rail and road project in 2008-09 — total change in GST for 2010-11, 2011-12 and 2012-13 ($ million)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
Rail funding*								
GST impact	190.7	-438.0	120.2	67.1	39.8	11.3	9.1	-0.3
Road funding								
GST impact	94.0	-222.6	61.8	28.2	18.0	7.7	4.9	8.0

Table 4.6.1 shows that the GST impact from an investment is not equivalent for a road project and a rail project. Victoria is significantly disadvantaged as a result of undertaking a rail project, losing approximately twice as much GST revenue. The current treatment biases transport infrastructure decisions towards roads, even if there is a better economic case for increased rail infrastructure.

4.2.2. Consistent treatment of all Commonwealth payments

The Panel outlines a number of options for excluding or partially excluding Commonwealth payments in its first Interim Report, including differentiating between Commonwealth capital grants and other Commonwealth grants.

The current treatment of Commonwealth payments and infrastructure payments is inconsistent. The Commonwealth Government and the CGC have the discretion to determine whether a Commonwealth payment is treated by inclusion or exclusion for GST purposes. This discretion creates inequity, potentially arbitrary outcomes and lacks transparency and predictability.

On balance, the fairest and most appropriate approach is to treat all Commonwealth payments, including capital payments, by inclusion. All Commonwealth payments, regardless of their purpose, add to the fiscal capacity of States. It is important, for equity and efficiency reasons, to recognise this source of State revenue when distributing the GST revenue.

The Panel has also proposed smoothing the impact of specific (possibly either large, one off or projects of national significance) Commonwealth capital grants. The current three year averaging period already provides some level of smoothing for large one-off payments. Any further smoothing of grants should apply in a consistent and transparent way to all Commonwealth capital payments, without the need for discretionary decision making.

On the expense side, the Panel should seek to rectify the inconsistent treatment of infrastructure projects, as discussed above. It is inequitable that joint Commonwealth–State investment in a rail project will result in a State losing significantly more GST revenue than investing in a comparable road project.

4.3. Broad-based indicators

In its first Interim report, the Panel noted that "… the GST distribution process should be able to produce fair and reasonable outcomes more simply." Global indicators and broad-based indicators are one way to achieve this goal. Broad-based indicators seek to identify a single measure for each of the categories on the revenue and expenses side of the HFE assessment (replacing the large number of sub-categories, each with its own data requirements).[15]

Broad-based indicators are a sensible short to medium term measure that would improve simplicity and transparency. The greatest gains from broad-based indicators would be on the complex expenditure side of the assessment, which currently uses 14 expense categories, divided into 43 components that are subject to 93 disability adjustments.

Broad-based indicators, which are largely based on independent, high quality, publicly available data, would make it easier to understand changes in relativities and to accurately predict future relativities. A simpler equalisation system would increase acceptance of outcomes and remove the false precision associated with the current assessment. It would also minimise the potential for States to affect GST outcomes through policy changes that affected 'average policy'.

Broad-based indicators could apply to the individual revenue and expense categories without the need to determine more detailed, State-specific revenue-raising capacities or expense disabilities. This would deliver comparable equalisation simply and predictably, without significant changes to GST shares.

4.3.1. Broad-based revenue measures

The CGC assesses revenue by applying the national average effective tax rate for each type of tax to each State's revenue base. The CGC estimates the revenue base, factoring in State-to-State differences. These include different tax free thresholds; different value ranges for the imposition of tax rates; and different inclusions to tax bases.

Estimating the revenue base requires assumptions and approximations. In some cases, the CGC applies a discount due to the uncertainty involved. The process lacks transparency, is overly complex, involves CGC subjectivity and is unpredictable.

A simpler approach would be to use macro-economic aggregates available by State as broad-based indicators (proxies) for the revenue bases. Table 4.2 shows suggested broad-based revenue indicators. Appendix D details the impact of these on total assessed revenue.

Table 4.2: Options for broad-based revenue indicators

Revenue category	Proposed Indicator	Current approach
Payroll tax	Australian National Accounts data on compensation of employees	Adjustment made to account for average tax-free threshold Adjustment made for the taxable portion of the public sector
Land tax	Australian National Accounts data on the value of land	Adjustment made to cover the different rates that apply to different value ranges Adjustment made for the average deduction threshold

[15] A global indicator uses a single measure to assess States' fiscal capacity (for example, gross state product) and expenditure need (for example population). Victoria's examination of the use of global indicators for own-source revenue and expenses (Appendix C) found none that were suitable: obvious candidates such as GSP, population and household disposable income all resulted in large changes to current relativities.

Table 4.2 (continued): Options for broad-based revenue indicators

Revenue category	Proposed Indicator	Current approach
Stamp Duty	Australian National Accounts data on dwelling investment and non-dwelling — buildings investment	Adjustment made for the scope of taxable transactions Adjustment made for progressive rate Adjustment made for refunds of appealed assessments Adjustment made for first home bonus payments
Insurance taxes	As per current assessment	Adjustment made for taxable transactions
Motor taxes	As per current assessment	States provide data excluding non-taxable transactions
Mining revenue	Actual revenue (Actual per capita: APC)	Mining is split between high and low royalty rate groups
Other revenue	As per current assessment (EPC)	EPC
Commonwealth grants	As per current assessment (APC)	APC

These broad-based revenue-raising indicators are available from robust, public sources. They more comprehensively cover the potential revenue base and therefore do not require adjustments for policy decisions, reducing the risk of State policy choices affecting their GST distribution. This approach would also significantly simplify the assessment of average State policy.

In particular, the broad-based indicator of actual per capita (APC) mining revenue eliminates the inefficiencies associated with the two-rate structure in the current assessment. The two-rate structure perversely allows decisions made by WA regarding iron ore royalty rates to influence Queensland's assessed revenue-raising capacity from black coal. An APC assessment is discussed in more detail in Chapter 5.

4.3.2. Broad-based expenditure measures

Following the CGC's *2010 Review*, the number of revenue categories dropped from 21 to eight. Despite an extensive process of CGC review, 14 expense categories remain. As John Brumby noted in his speech to the 3rd Annual Intergovernmental Relations Conference in 2011:

> *…given that the States spend around 70 per cent of their budget on health, education, transport, and police and emergency services, strong arguments can be made for even further simplification.*[16]

Like the revenue measures, the expenditure assessments involve an unacceptable degree of subjectivity, relying heavily on assumptions and approximations to estimate disability factors. In some cases the CGC applies a discount to data items due to the uncertainty involved.

Currently, the expenses assessment methodology breaks each of the 14 expense categories into a number of components:

- service expenses, which are affected by cost and use disabilities;
- administrative scale expenses; and
- Commonwealth payments, which are assessed APC to offset the revenue treatment.

[16] Taken from the presentation *'The scope of the review into the distribution of the GST revenue among the States & Territories'*.

There is scope to assess expenses, other than the Commonwealth payments component, using broad-based indicators.

Table 4.3 contains suggested broad-based expense indicators. Appendix D provides details on how these indicators apply to the expenses assessment.

Table 4.3: Options for broad-based expenses indicators

Expenses category	Proposed Indicator	Current approach
School education	ABS data on school students	Adjustment made for factors affecting the use of services including pre-compulsory enrolments, compulsory enrolments, post-compulsory enrolments. Adjustment made for factors affecting the cost of services including Indigenous students, students with low English fluency, students from a low SES background, students living in remote areas, students with disabilities and non-government students. Adjustment made for factors affecting school transport costs and administrative scale.
Post-secondary education	National Centre for Vocational Education Research VET student data	Adjustment made for factors affecting use including Indigenous status, labour force status and people with disabilities. Adjustment made for factors affecting costs including Indigeneity, remoteness, low SES status and English fluency. An adjustment is also made for administrative scale.
Admitted patients	Australian Institute for Health and Welfare (AIHW) data on public hospitals separations	Adjustment made for factors affecting the use and cost of services, including age, Indigeneity, socio-economic status and location. An adjustment is also made for administrative scale.
Community and other health services	Population (EPC)	Adjustment for factors affecting service use and cost including age and sex, indigenous status, socio-economic status and location. An adjustment is also made for service delivery scale and administrative scale.
Welfare and housing	Australian National Accounts data on gross disposable income	Adjustment for Indigenous use and costs in socio-demographic adjustment. An adjustment is also made for service delivery scale and administrative scale.
Services to communities	Population (EPC)	Adjustments include water and electricity subsidy and location. An adjustment is also made for administrative scale.

Table 4.3 (continued): Options for broad-based expenses indicators

Expenses category	Proposed Indicator	Current approach
Justice services	ABS data on persons in full-time custody, court defendants and recorded crime victims	Adjustments include Indigeneity, low SES and location. An adjustment is also made for service delivery and administrative scale.
Roads	Bureau of Infrastructure, Transport and Regional Economics data on total vehicle kilometres travelled	Adjustment made for the length and use of urban and rural roads and location. Urban population used as a proxy for urban road length. An adjustment is also made for administrative scale.
Transport services	Urban population	Adjustment is made for the differences in providing urban and non-urban services. An adjustment is also made for location and administrative scale.
Services to industry	Australian National Accounts data on factor income	Assessment of industry regulation needs.
Other expenses	Population (EPC)	EPC
Depreciation	Population (EPC)	An adjustment is made using a composite of use disabilities from expense categories. An adjustment is also made using a composite of location disabilities.

The greatest gains in simplicity and transparency are available on the expenses side. The suggested broad-based indicators would more directly and simply assess expenditure needs. They would reduce the complexity of the assessment, reduce the current reliance on data sets of dubious quality and reduce the need for assumptions and approximations. When combined with an adjustment for Indigeneity, remoteness and diseconomies of scale, they would give a good approximation of the GST required to deliver comparable services.

An adjustment for Indigeneity and remoteness should only apply to those expense categories that relate to service provision to citizens: school education, post-secondary education, admitted patients, community and other health services, welfare and housing, services to communities and justice services. Adjustment for diseconomies of scale would apply to all expense categories. Adjusting for Indigeneity and remoteness reflects their significance as expenditure disabilities. Under the current methodology, an adjustment is calculated by weighting Indigenous and remote populations by a fixed factor. This method increases the relative significance of these factors. The Panel's proposal to more directly assess expenditure needs via a separate category assessment would provide a more transparent model for adjusting for Indigeneity and remoteness.

Table 4.4 presents the impacts of a 60/40 distribution combined with application of the proposed broad-based measures to assess both revenue and expenses. It uses population adjusted for Indigeneity, remoteness and diseconomies of scale. This adjustment generally reduces the redistribution for these factors, when compared to the current methodology. Used in this way, broad-based indicators offer greater simplicity and predictability while also giving States the capacity to deliver comparable services.

Table 4.4: GST impact of 60/40 distribution combined with broad-based indicators with adjustment for Indigeneity, remoteness and diseconomies of scale 2012-13

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
Change in GST grant $m	1037	1312	-16	135	-610	-306	-208	-1345
Change to State revenue (%)	1.7	2.7	0	0.5	-4.1	-6.6	-5.3	-29.6

Note: Table 4.4 was updated on 15 October 2012 to ensure consistency with Appendix D.

4.4. Data revisions and back-casting

The CGC's 2012 Update revised some of the data used in the *2011 Update*, which had a material effect on the per capita relativities for 2008–09 and 2009–10. Appendix E examines the revisions to data for 2009–10 in more detail. The revisions in aggregate resulted in:

- a decrease of approximately $3 billion in total State own-source revenue;
- an increase of almost $3 billion in Commonwealth grants;
- a decrease in total expenses of almost $270 million; and
- an increase in investment of almost $400 million and a decrease in net lending of almost $400 million.

Even revisions that appear to be small, or offset elsewhere in the calculation, can have a significant impact on the relativities. This is due to the different disabilities that apply to each expenditure category and the differences in revenue-raising capacity. These differences mean that, for example, equivalent but opposite changes to investment and net lending will change the distribution of the GST.

Data revisions can and do materially alter State revenues, and there is a need for the basis for those revisions to be clearly communicated to States. Victoria also supports consideration of measures which would reduce the impact of data revisions on the stability and predictability of GST relativities.

Eliminating back-casting of data is one option to improve predictability and stability. This would mean that later updates do not revise the per capita relativities from earlier updates. While this option could remove some of the year to year variation in the GST relativities and improve predictability, a disadvantage is that it would 'lock in' data errors that have significant implications for relativities.

The volume of data revisions suggests that the use of data from the most recent financial year, that is subsequently revised, is contributing to the volatility of the CGC update process.

An alternative approach would be to allow more time for data to stabilise before incorporating them in the GST calculation. Data from the year previous to the most recent financial year is less susceptible to revisions, and would introduce more stability to the GST relativities without 'locking in' past per capita relativities (ensuring relativities reflect the 'true' fiscal needs of the States). This should be combined with greater transparency regarding the timing and nature of data revisions, to assist States in forecasting and understanding changes in relativities.

Table 4.5 shows how the variation in year-on-year growth in grants could be tempered by using data one year older than is currently used. This is compared to the effect of not back-casting data revisions at all. The short time series available makes it difficult to discern any trends. However, this limited analysis suggests lagging data revisions by one year could achieve a reduction in volatility comparable to not back-casting at all, without the associated loss in accuracy.

Table 4.5 Comparison of approaches to data revisions on change in GST grants (per cent)

	2010–11 to 2011–12			2011–12 to 2012–13[1]		
	Current approach	No back-casting	1 year lag in data	Current approach	No back-casting	1 year lag in data
NSW	0.6	na	0.5	4.9	5.6	7.3
Victoria	-3.4	na	-0.9	7.8	5.5	6.1
Queensland	2.3	na	-4.5	12.4	12.7	6.3
Western Australia	6.7	na	10.0	-18.2	-15.2	-1.5
South Australia	-1.4	na	1.7	6.4	6.0	4.2
Tasmania	-1.8	na	2.0	3.7	3.6	2.6
ACT	-2.5	na	-0.5	13.7	11.8	4.9
Northern Territory	5.6	na	6.5	8.8	9.0	8.8

1. Based on current estimates of GST pool for 2012–13.

na. Not available due to change in methodology in *2010 Review*.

5. Mining is not a special case

Key points

- Australia's system of HFE is in need of far reaching systemic reform. In the absence of bold reform efforts, such as moving to EPC, improvements are confined to small-scale tinkering. This can lead to piecemeal changes which lack strong policy logic. In the current economic context, in which WA has seen a dramatic fall in its relativity, the move towards EPC via partial equalisation is the only credible response.
- As a general rule, infrastructure needs associated with the mining industry should be met by the private sector, which receives most of the profits from mining activity.
- Additional non-infrastructure costs associated with mining should be treated like any other expense. These costs do not currently meet the thresholds for materiality, and capacity for objective assessment, applied to the expenses of other States.
- Expanding HFE to include industry assistance and infrastructure is inconsistent with its purpose, which is to give States capacity to deliver services to people.
- Taxes on mining resources are a major source of State government revenue. Mining revenue should be equalised just like other State revenue sources: this is crucial to the equity and efficiency of the system. Anything less would give mining jurisdictions an unfair tax advantage in attracting capital, exacerbating existing 'two-speed' economy pressures.
- For the same reason, any agreement between the Commonwealth and States to return Minerals Resource Rent Tax revenue to the States in exchange for reducing royalties should be fully included in any future equalisation system.
- There is no policy justification for artificial measures like setting floors on relativities, discounting mining revenue or quarantining a portion of the GST pool for mining States.
- Mining States benefited from equalisation during times of low resource prices. Since 1981-82, WA has received $3 billion more than its population share of funds.
- Issues with the current two-rate structure assessment for mining could be resolved by using an actual per capita (APC) assessment of mining revenue or a broad-based indicator of mining revenue-raising capacity.

Proposals to alter treatment of mining are a poor substitute for proper reform. The proposals which have been put forward by the Panel on mining lack a strong policy or equity rationale.

The Panel requested further information on:

- possible changes to the assessment of mining expenditure, either for mining infrastructure or non-infrastructure expenditure; and
- alternatives to the current treatment of mining revenue and options to indirectly compensate for mining expenditure.

Such information would not be required if the Panel focused on a reform package that included a move to an EPC distribution of the GST.

5.1. Treatment of mining expenditure

5.1.1. Broader industry needs assessment

The primary purpose of HFE is to equalise States' capacities to deliver services to people. There is no justification for expanding HFE to include equalisation of States' capacities to support industry, either generally or in relation to specific sectors.

Using the GST to compensate jurisdictions directly for mining-related expenditure, however defined, allows States' decisions to influence the GST distribution. It also creates an incentive for States to incur mining expenses in place of the private sector.

Compensating for mining expenditure is selective and anomalous, since it ignores the negative effects of the mining boom on non-resource States, such as high exchange rates and higher interest rates. The non-resource parts of the economy face additional challenges as the booming resources sector attracts labour and capital. Just as resource-rich States may need to spend to develop their natural endowments, non-resource States have a similar need to assist existing industries to adapt or develop other non-resource industries.

Finally, compensating jurisdictions for the presence of a mining industry during a historic mining boom ignores the benefits mining jurisdictions have received from non-mining States through equalisation of fiscal capacity during times of low resource prices. Since the CGC began recommending the distribution of general revenue assistance in 1981-82, WA has received $3 billion more than its population share of funds. Over the same period, Victoria received $33 billion less than its population share.[17]

Logically, any move to equalise for industry assistance would need to take a generic assessment of industry 'needs'. In this case, given the above average level of economic activity in resource-rich jurisdictions, non-resource States could be assessed as needing to undertake greater economic development effort to maintain comparable economic performance. It is therefore conceivable that a generic industry 'needs' assessment could reduce mining States' GST requirement relative to other jurisdictions.

For example, investment in transport infrastructure in Sydney and Melbourne would provide significant benefits to industry. This type of industry support also has significant wider benefits to the general public and industry.

5.1.2. Mining related infrastructure

Since the *2010 Review*, the GST distribution gives States the capacity to maintain the national average per capita level of infrastructure, given changes in population. The current treatment of infrastructure already goes beyond the definition of HFE in Australia. Equalisation should only include infrastructure to the extent that it is associated with service delivery, through inclusion of a depreciation expense as occurred before the CGC's *2010 Review*. (For further details on treatment of infrastructure, see section 4.2.)

Funding mining infrastructure through reduced GST grants for non-mining States overlooks the important role of the private sector. Box 5.1 provides a case study on private sector investment in WA. The provision of infrastructure is a normal part of a commercial mining venture, as are the associated profits that accrue to the private sector.

Consideration of the role of the private sector in shaping State expenditure needs is consistent with the assessment of other categories. Other category assessments, such as community and other health services, take into account the relative role of the private sector, and GST requirements are reduced for jurisdictions that have high levels of private sector provision.

Box 5.1 Private sector provision of mining infrastructure in Western Australia

Infrastructure provision for mining projects is primarily a private sector responsibility. This is the case in WA, with large miners providing their own fully integrated infrastructure networks.

Rio Tinto provides rail and port infrastructure for its iron ore mining operations. These include 1,400km of rail track which services 14 mines with key depots in Tom Price, Cape Lambert and Dampier. Rio Tinto's port has two ship loading terminals located at Dampier. These have been in operation since 1966.

[17] The period from 1981-82 to 2011-12, in 2011 dollars. Department of Treasury and Finance calculation based on Commonwealth budget data since 1981-82.

Box 5.1 (continued): Private sector provision of mining infrastructure in Western Australia

BHP Billiton's iron ore operations in the Pilbara include an integrated system of seven inland mining operations, more than 1,000km of rail network and two separate port facilities in Port Hedland.

Fortescue Metals Group is responsible for the Herb Elliott Port in Port Hedland. Fortescue Metal Group also constructed a purpose-designed railway to service iron ore deposits. The rail fleet consists of 24 locomotives and in excess of 1,200 freight cars.

The WA government is developing a new deep-water port at Anketell. However the private sector has funding responsibility. The port is being developed on a 'proponent pays basis' so the private sector funds the development of the port while the government department is responsible for approval processes.

5.1.3. Non-infrastructure mining-related expenditure

All States provide industry support and this has never been recognised as a 'need' for equalisation purposes. For example, Victoria supports industry in a variety of ways, including through co-investment with the motor vehicle manufacturing industry to support jobs and the long-term viability of the industry. This policy choice, appropriately, does not influence the distribution of the GST.

During the *2010 Review* the CGC investigated expanding HFE to include industry assistance. This was in response to requests for recognition of mining expenses. The CGC stated that:

> *"Business development expenses are intended to promote, attract and grow business activity in States. Identifying the drivers of economic development expenses is problematic. Development expenses generally vary considerably between the States and are highly policy influenced ...while economic development disabilities may exist, (the CGC) …would need considerable judgement to identify the economic development expenses and the disabilities to apply to them."*

On this basis, the CGC appropriately recommended not including an assessment of industry assistance needs following the *2010 Review*. It would be a regressive step to recommend the introduction of an assessment of industry support 'needs'.

5.2. Treatment of mining revenue

Perceptions that it is unfair to equalise mining revenue are mistaken. Since equalisation began, States with stronger own-source revenues have subsidised other States. Mining revenue is simply a recent instance of a long standing pattern.

If anything, efficiency arguments support redistribution of mining revenue to an even greater extent than for other revenue sources. Other taxes apply to mobile factors of production (labour and capital), whereas royalties tax the economic rent on immobile resources. Equalisation prevents mineral rich States from attracting business from other States through artificially low tax rates, rather than on efficiency grounds (for example, on payroll, see Box 5.3 below).[18]

HFE does not 'equalise away' the benefits of a mining industry. The benefits of mining are direct (royalty revenue) and indirect (through increases in other activity related taxes like payroll tax). Chart 5.1 shows overall WA own-source revenue growth has more than offset its reduced GST allocation.

[18] Freebairn argues that equalising the income from immobile factors improves efficiency. In contrast, equalising mobile factor incomes may have negative efficiency impacts (Victoria's first submission to the Review, p13).

Chart 5.1 Western Australian own-source revenue and GST redistributions

In its first Interim Report, the Panel suggested that further examination of discounting mining revenue, as happens in Canada, may be worthwhile. This element of the Canadian model cannot reasonably be considered in isolation from the other important features of that system. The Canadian system only assesses revenue-raising capacity (not operating expenses or capital expenses), does not apply to a fixed pool of funds, and does not include the Canadian Territories. Australia has a system of 'full' equalisation, with revenue and expenditure assessments applied to all States. Equalisation in Australia applies to a fixed pool of funds: there are no additional federal government funds directly allocated for equalisation purposes.

5.2.1. Alternatives to the two-rate structure

Victoria accepts that the current two-rate structure for the mining assessment creates the potential for perverse outcomes where royalty rate changes cause minerals to move between royalty rate groups. However, this is not a reason to exclude part of mining revenue from equalisation. It is an opportunity to reform the assessment in a way that is sustainable and consistent with the principles for reform enshrined in the Review's terms of reference.

The Panel has sought views on alternatives to the current two-rate approach. Victoria supports reforming the current assessment based on the principles outlined in the terms of reference, and assessing in full all mining revenue. Victoria favours options which simplify and increase the predictability of the current mining assessment. Victoria has developed three options:

- assessing mining on an APC basis; or
- using the value of mining production as a broad-based indicator of revenue-raising capacity; or
- using gross value added by mining as a broad-based indicator of revenue-raising capacity.

Actual Per Capita (APC)

An assessment of mining revenue on an APC basis would use a State's actual mining revenue in place of 'assessed revenue' in the CGC adjusted budget. Actual mining revenue would function as a proxy for revenue-raising capacity (equivalent to the treatment of revenue from Commonwealth payments).

The current assessment approach applies the all-State average policy to each jurisdiction. For mining, the notion of an average State policy is problematic, due to the uneven distribution of minerals across the nation (the main source of royalties in WA is iron ore, in Queensland it is coal). The 'national

average' royalty rate is actually primarily the product of policy in these States, making it susceptible to State policy influence.

APC would bypass the need to determine an all-State national average policy, while still reflecting each State's capacity to raise mining revenue. It would provide a more accurate reflection of revenue-raising capacity than the current assessment.

An APC assessment would also improve the predictability and simplicity of the system, by directly substituting changes in mining revenue into the calculation of relativities without requiring calculations of the effect on average State policy or category-specific revenue-raising capacity. Removing the requirement for States to provide data on the value of mining production would simplify the assessment process. Existing methods for calculating the value of mining production vary across jurisdictions, and the need for data on a consistent basis increases compliance costs.

Under the current assessment, increasing royalty rates and increasing mining production have different GST impacts (as discussed in Box 5.2 below). For example, the current assessment allows NSW to increase its GST share by increasing its royalty rates. The source of the mining revenue increase would be irrelevant under an APC assessment: both royalty increases and production increases would have the same GST consequences.

Box 5.2: Policy neutrality in the current HFE system

Under the current assessment a State acting unilaterally is significantly better off, in terms of its GST revenue, if it increases mining revenue by raising royalty rates rather than by expanding its mining production.

Currently, increasing revenue by increasing royalty rates will increase the assessed revenue for all States, as the national average rate that applies to each State's revenue base has increased. The base that rate applies to is unchanged.

If a State raises the same amount of revenue through expanding mining production, its assessed revenue will increase relative to other States. This is the result of an increased base only having a small effect on average royalty rates but a large effect on that State's revenue base.

Broad-based indicators of mining revenue

Possible broad-based indicators of mining revenue-raising capacity are the value of mining production or the gross value added of mining. These broad-based indicators will simplify and improve the predictability of the current assessment. Mining value of production closely approximates the revenue base used by most jurisdictions to levy mining royalties.

Either broad-based indicator approach would determine the average royalty rate by dividing total mining revenue by the total value of production, or gross value add. Multiplying the average royalty rate by each jurisdiction's mining broad-based indicator gives the assessed mining revenue for each jurisdiction. This removes the artificial royalty rate split between high and low royalty rate groups in the current two-rate mining assessment.

The current assessment produces perverse outcomes when minerals move between the two royalty rate groups in the assessment. This was highlighted when WA increased the royalty rate that applied to iron ore fines, putting it into the high royalty rate group. Without Commonwealth intervention to keep iron ore fines in the low royalty group WA would lose more GST revenue than was gained through increasing the royalty rate.

5.2.2. Discounting mining revenue in the assessment

An arbitrary discount for mining revenue is an unprincipled approach that undermines the integrity of the HFE system. As WA observed during the *2010 Review*:

> *"Discounting assessments should be avoided, and only used if an improvement in equalisation can be demonstrated."*
>
> And:

"Discounting reduces transparency, as the basis for the discount can rarely be explained using objective data."[19]

A discount for mining revenue is inconsistent with the first Interim Report's opposition to carve-outs from the GST to address other issues. A selective discount does not satisfy the reform criteria of efficiency, equity, predictability, transparency or simplicity.

A discount on mining revenue would have the same negative effects as placing a floor on relativities and compensating for mining expenditure. A category specific discount is even more inequitable than compensating for mining expenditure as no supporting evidence is required. It is more inefficient than a floor on relativities as it has a broader and longer lasting distortionary impact on the assessment. A category specific discount is inequitable, giving more GST revenue to States directly benefiting from the mining boom, at the expense of non-mining States.

Any equalisation system needs to continue to treat mining revenue like other State revenue. Equalisation of State capacity to tax economic rents has a particularly strong economic efficiency rationale, in preventing productivity-reducing migration of business. Absent equalisation, a State's fiscal position may be boosted by 'accidents of natural and human endowments' – mineral rents are a prime example – which allow public services to be provided with low taxes on capital and labour, distorting inter-State immigration decisions.[20]

Special treatment of mining revenues would give mineral-rich States an unfair advantage in setting tax rates on business, by allowing services to be cross-subsidised by mineral rents. Firms that would be more productive elsewhere would be attracted by artificially low tax rates, reducing overall productivity and exacerbating the existing pressures of the 'two-speed economy'. A payroll tax example is given in Box 5.3.

The proposal to reduce the impact of the mining assessment appears to rely on the assumption that mining is included in the assessment to share the benefits of the boom, and on a judgement that the current level of sharing is inequitable. Chart 5.1 clearly demonstrates that WA has overwhelmingly retained the benefits of the mining boom. In addition, despite this historic mining boom Victoria had the second lowest relativity in 2011-12 and 2012-13.

[19] Western Australian February 2009 submission CGC2008/04, p. 1 and p.3.
[20] See p. 367 of Boadway and Shah (2007), *Intergovernmental Fiscal Transfers: Principles and Practice,* Washington DC: World Bank.

Box 5.3 Potential payroll tax reduction paid for by discounting mining revenue

Interstate tax differences are an important driver of business migration. If mineral-rich States elected to respond to a 25 per cent discount in mining by lowering payroll tax rates to attract firms, other States would be placed at a distinct disadvantage, as shown in Table 5.1.

In this stylised example, if all States adjusted payroll tax settings to absorb the change, WA could cut its payroll tax by a quarter while Victoria, South Australia, Tasmania and the ACT would have to raise their tax takes by at least 10 per cent. The gap between the lowest and highest payroll tax rates would grow from 2.1 to 3.5 percentage points, potentially driving significant business migration for reasons of tax advantage, driven by relative resource endowment, not productivity.

Table 5.1: 25 per cent discount on mining revenue and equivalent change in payroll tax – 2012-13

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
Payroll tax rate (%)	5.45	4.90	4.75	5.50	4.95	6.10	6.85	5.50
Payroll tax revenue ($m)	7,024	4,812	3,867	3,368	1,113	310	325	177
GST gain from mining discount ($m)	-410	-575	329	841	-114	-40	-39	8
Change in payroll tax revenue (%)	6	12	-9	-25	10	13	12	-4
New payroll tax rate (approximate)(%)	5.8	5.5	4.3	4.1	5.5	6.9	7.7	5.3

Source: Department of Treasury and Finance calculations using data from CGC 2012 Update, 2012-13 State Budget Papers (and 2011-12 Queensland MYFER), and State Revenue Offices

5.3. Treating mining outside the current system

The Panel proposes the 'temporary use' of part of the GST pool to address mining State concerns with the GST distribution. The Interim Report is unclear on what this proposal involves. The assumption is it involves quarantining part of the GST pool to compensate mining States.

The 'temporary use' of the GST pool to address mining needs is inconsistent with other findings in the first Interim Report, which rule out quarantining part of the pool to, for example, address Indigenous disadvantage. Quarantining is inconsistent with the GST remaining untied and being distributed in full to all States. The appropriate term of a temporary adjustment or concession will be inherently subjective, introducing new complexity, arbitrariness, and inequity.

5.4. Temporarily loading the mining assessment

The Panel's proposal to temporarily load the mining assessment is equivalent to excluding or discounting mining revenue. A temporary loading does not reflect the long term nature of equalisation. It also ignores the significant assistance the mining States received from the redistribution of general revenue assistance over the course of Australia's federation (see Chart 1.1). There is no case for special treatment of mining, whether a special discount of mining revenue, temporary loading or direct compensation for mining expenditure.

5.5. Making the mining redistribution more contemporary

The Panel proposes making the mining assessment more contemporary. The GST distribution system should treat all revenue sources consistently. Mining revenue should not be subject to special treatment, either in terms of concessionary treatment or increasing contemporaneity.

Piecemeal changes to reflect economic circumstances, including the current mining boom, are a poor and temporary substitute for bolder, even-handed reform.

6. Response to other Panel requests

The Panel's two Interim Reports requested information and views on a range of issues. Many of these have been covered in previous chapters.

This chapter provides comment on some issues not covered elsewhere in this submission, including:

- limiting changes in relativities;
- changing the averaging period; and
- improvements to governance arrangements.

6.1. Limiting changes in relativities

6.1.1. Relativity 'floors'

Like the Panel, Victoria opposes setting a floor on relativities.[21] Setting a floor at 0.75 is arbitrary and increases the complexity of the GST distribution by requiring an extra calculation to determine States' GST shares.

A 0.75 floor distorts the assessment of relative fiscal capacities, especially in the short term. Setting a floor on relativities is an artificial and unjustifiable constraint that would result in jurisdictions above the floor 'subsidising' those below, even if the total own-source revenue of the state/states below the floor were increasing.

6.1.2. Limiting reductions in GST grants

Victoria does not support 'freezing' relativities. Artificial limits on relativities, whether in the form of a floor or limiting their movement, are arbitrary and inequitable. A limit on relativity changes, like an arbitrary 0.75 floor, increases the complexity of an already complicated system. Moreover, a limit to changes in relativities will continue to influence the assessment after jurisdictions return to the long-term historical trend of relativities well above 0.75.

Limiting the change in the GST relativities could transfer GST revenue to States with increasing fiscal capacity. No rationale has been provided for this inequitable transfer of the GST.

6.2. Changing the averaging period

6.2.1. Victoria supports maintaining three year averaging

Victoria agrees with the Panel "*that the three year average provides a practical and appropriate balance between the benefits of stability and contemporaneity*".[22] During the CGC's *2010 Review,* Victoria was a strong supporter of the move to three year averaging. Victoria continues to support three year averaging as providing the right balance between stability and contemporaneity.

6.3. Governance

6.3.1. Defining and reviewing HFE

Victoria agrees with the Panel that there is:

> *…merit in separating responsibility for determining the objectives of the GST distribution and the definition of HFE from the responsibility for interpreting and implementing HFE.*[23]

[21] "There is not a compelling case for adopting a floor at present", GST Distribution Review first Interim Report p.41.
[22] The GST Distribution Review first Interim Report, p.35.
[23] The GST Distribution Review first Interim Report, p.132.

Separating the role of defining HFE from the implementation of HFE is consistent with sound public policy principles.

Definition of HFE should be agreed by all jurisdictions

The GST is an important State revenue source and States should have some say in the principles used to distribute that revenue. As a matter of good governance, it is not appropriate for the CGC to define HFE while also administering the system.

The Commonwealth should not unilaterally define the principles of HFE and the objectives of the GST distribution. Given the importance of the GST revenue to the States, HFE should be subject to negotiation and agreement with all States. The Standing Council on Federal Financial Relations, or the Council of Australian Governments, would be appropriate forum for this negotiation.

The terms of reference for the CGC annual updates and regular reviews should be subject to agreement between the Commonwealth and State treasurers.

Regular independent review

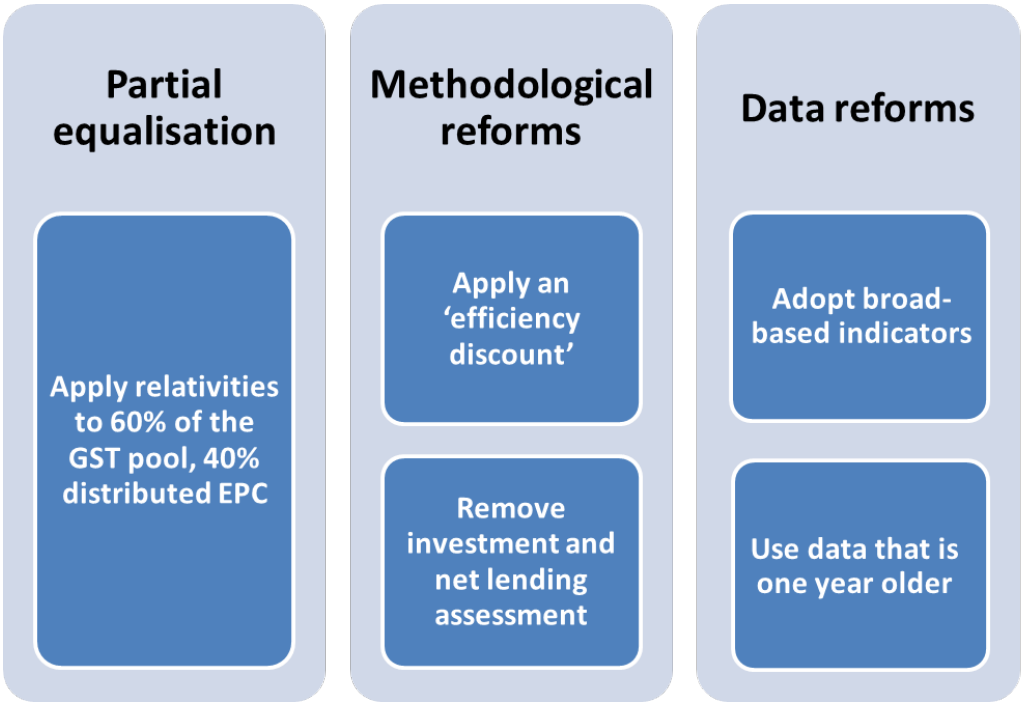
Victoria supports the Panel's suggestion that HFE be subject to periodic independent review. However, the prospect of securing regular reviews should not detract from the important opportunity presented by the current Review. The Panel's focus should be on sustainable reforms, which align with the key criteria in its terms of reference.

7. Conclusion

The system of HFE used in Australia has outlived its intent and usefulness. This Review is an opportunity to recommend reforms that better meet the needs of Australia's federation today and into the future.

Victoria's preferred reform package offers significant gains against all the reform criteria, and comprises:

- 60 per cent of the GST pool being equalised, with the remainder distributed EPC; combined with; and
- methodological and data changes that include applying an efficiency discount, removing the net lending and investment assessment, the use of broad-based indicators and a more measured approach to data back-casting.

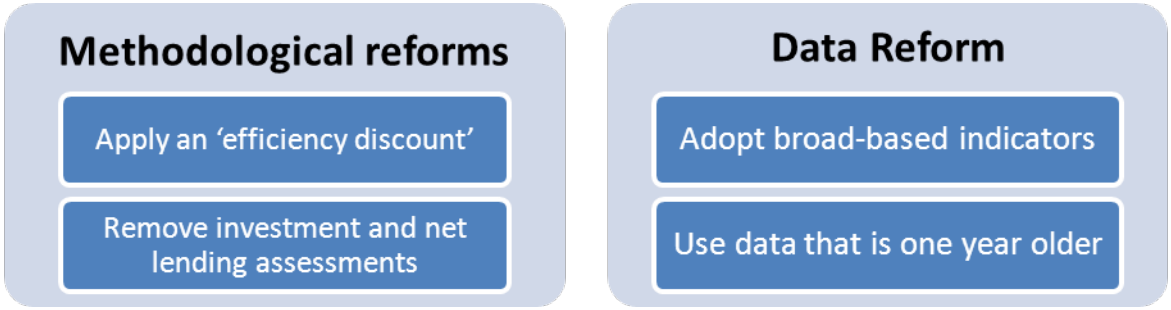


This package also aligns with the Panel's preference for a model of comparable rather than full equalisation, by:

- direct intervention in the methodology (the efficiency discount);
- equalising less than the current model (60/40 partial equalisation); and
- substituting a single measure for the many calculations that are used to precisely quantify capacity or need in the revenue and expense categories (broad-based indicators).

Together, partial equalisation, broad-based indicators and an efficiency discount significantly reduce the redistribution of HFE. This has the added benefit of eliminating, in practical terms, the windfall gains that accrue to recipient States in years that the pool grows.

In the absence of substantive reform, Victoria's suggested methodological and data reforms should still be pursued.



Taken alone, methodological and data reforms provide significantly less improved outcomes against the Review's reform criteria.

It is also possible to combine various elements of the reform components, but again these options would deliver less favourable outcomes when assessed against the Review's reform criteria than Victoria's preferred package.

Victoria believes strongly that this opportunity for substantial reform should not be missed.

8. Appendices

Introduction

These appendices provide supporting analysis for partial equalisation, method and data reforms discussed in the body of this submission, in isolation from other possible reforms. These include applying GST relativities only to 60 per cent of the pool, removing the investment and net lending assessment, and adopting broad based indicators of revenue raising capacity and expense needs, and using data that is one year older to determine GST relativities.

Some of these reforms naturally work together, such as partial equalisation and broad based indicators. The impact of combining reform options is not presented in these appendices and the impact of individual reforms is for indicative purposes only. It should be noted that some of the impact of method and data reforms will be mitigated through a move to partial equalisation.

These appendices respond to the Panel's request for analysis of the impact of proposed changes to the assessment of GST relativities. They include the impact on the adjusted budget and indicative GST grant impacts. The analysis and GST impacts are based on available data and provide indicative outcomes only.

Victoria would be happy to discuss any of these proposals or analysis further with the Review Panel or Secretariat.

A. Applying relativities to only 60 per cent of the pool

Key points

- This submission proposes a 60/40 model of partial equalisation, reflecting the pool to which relativities were applied prior to the introduction of the GST in 2000. The analysis in the appendix demonstrates how such an approach would be applied. It shows that a 60/40 GST distribution is simple – relativities are applied to 60 per cent of the pool, and the remaining 40 per cent is distributed on an equal per capita basis.
- This approach would continue to determine relativities using 100 per cent of the GST pool.
- This analysis also demonstrates that it is possible to stage the introduction of 60/40 over four years so as to mitigate the fiscal impact in a given year of the change. This transition approach would result in only a minimal annual change in any State's GST grant.

Equalisation currently applies to the total GST pool using the following formula:

GST allocation = GST pool*adjusted population share

The adjusted population share is based on each State's GST relativity and population.

Under a 60/40 GST distribution, the existing methodology could be preserved, but the pool would effectively be split in two. The relativities produced as a result of the current, or a simplified methodology, would be applied to 60 per cent of the pool and the remaining 40 per cent of the pool would be distributed on an equal per capita basis, according to the following formula:

GST allocation = ((0.6*GST Pool)*adjusted population share)+((0.4*GST Pool)*actual population share)

Under this approach, 100 per cent of the pool, inherent in the assessed budget, would be included in the calculation of relativities. This is justified on the basis that the total GST pool is returned in full to the States.

A transition path to 60/40 would see this methodology applied gradually, with 90 per cent of the pool equalised in year one, followed by 80 per cent in year two, and so on. By transitioning to 60/40 over a four year period, the fiscal impact of the policy change is smoothed (see Table A.1).

Table A.1: GST grants to States under a staged introduction to a 60/40 distribution ($ million)

Year	*Option*	*NSW*	*Vic*	*Qld*	WA	*SA*	*Tas*	*ACT*	*NT*
2008–09[1]	90/10	12,323	9,524	8,018	3,752	3,644	1,406	764	1,758
2009–10	80/20	13,666	10,332	8,389	3,784	3,935	1,521	867	2,016
2010–11	70/30	14,365	10,936	8,732	3,684	4,046	1,494	819	1,810
2011-12	60/40	14,343	10,698	8,859	3,955	3,876	1,396	790	1,682

1. Excludes health care grants, uses CGC published relativities.

Table A.2 shows annual change to State revenue under a staged introduction of 60/40. The annual change is calculated as the change from what the GST allocation would have been under the policy the previous year. Thus, the 2008-09 result is compared to the current equalisation methodology, 2009-10 to a 90/10 methodology and so on.

Table A.2: Change to State revenue under a staged introduction to a 60/40 distribution (per cent)

Year	*Option*	*NSW*	*Vic*	*Qld*	WA	*SA*	*Tas*	*ACT*	*NT*
2008–09	90/10	0.2	0.2	0.1	0.3	-0.5	-1.2	-0.3	-3.5
2009–10	80/20	0.2	0.2	0.2	0.4	-0.5	-1.4	-0.5	-4.2
2010–11	70/30	0.1	0.1	0.2	0.6	-0.6	-1.4	-0.3	-4.1
2011-12	60/40	0.1	0.2	0.1	0.5	-0.6	-1.3	-0.2	-4.2

It is important to reiterate that this model does not imply that only 60 per cent of the pool would be used to calculate the relativities. Relativities would continue to be calculated using 100 per cent of the GST pool.

B. Investment and net lending assessments

Key points

- This submission identifies that the Investment and Net Lending assessments distort the assessment of GST relativities, both for the investing State and other States.
- The analysis in this appendix indicates (with the use of illustrative scenarios) how the current methodology produces these outcomes. The analysis demonstrates that the current assessment methodology is not neutral in its treatment of the various means of funding infrastructure provision. It is also not neutral between the choice of infrastructure projects (i.e. road and rail projects) where there is joint State and Commonwealth funding.
- This evidence supports the proposal to remove the Investment and Net lending assessment from the calculation of GST relativities. This will remove any distortion on infrastructure investment decisions of States.

Scenario analysis is used to examine the outcomes from the current assessment of infrastructure provision. The scenarios illustrate:

- the impact of different methods of funding infrastructure investment; and
- the different outcomes from jointly funded road and rail projects.

B.1 Impact of funding on infrastructure provision outcomes

This infrastructure provision scenario assumes that in 2010–11 Victoria invested an additional $1 billion in general government infrastructure (in the non-road investment component of the investment category), with no change in the investment made by the other States. The result is that the value of Victorian and total State investment increases by $1 billion. The increase in total State investment equates to $44.55 per capita. It is this per capita amount that is used to determine the assessed value of investment for all the States.

Two scenarios for the funding of investment or expenditure are examined.

- The first is funding from the net operating balance, which could be regarded as funding from existing reserves or debt funding.
- The second scenario is that own-source revenue is increased to fully fund the investment or expenditure. For the purposes of this analysis it is assumed that the payroll tax rate is increased to generate the additional revenue.

When the investment is funded from the Victorian net operating balance, net lending for Victoria and total States is reduced by $1 billion. Funding the expenditure by an increase in payroll tax revenue results in total payroll tax receipts increasing by $1 billion and the national average payroll tax rate, which is used to determined assessed revenue, increasing slightly. There would be no change to net lending in this funding scenario. Table B.1 presents the assessed values of non-road investment, net lending and payroll tax revenue from the current case (2012 Update) and under the two scenarios.

Table B.1: Current and scenario assessed values, 2010–11 ($ million)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
Assessed non-road investment (under both scenarios)									
Current	3,468.0	2,647.3	2,489.1	1,366.5	757.1	248.9	183.5	187.8	11,348
Scenario	3,786.5	2,883.1	2,692.5	1,475.0	831.5	273.6	200.0	206.1	12,348
Funded using the net operating balance (Scenario 1)									
Current	-5,055.0	-3,797.0	-3,061.6	-1,518.3	-1,166.2	-364.7	-239.8	-164.3	-15,367
Scenario	-5,379.1	-4,045.4	-3,263.5	-1,621.0	-1,239.9	-387.5	-255.9	-174.5	-16,367
Funded using payroll tax revenue (Scenario 2)									
Current	6,096.5	4,464.4	3,275.4	2,441.2	1,000.7	276.8	259.8	154.4	17,969
Scenario	6,435.8	4,712.8	3,457.6	2,577.1	1,056.4	292.2	274.3	163.0	18,969

Sources: CGC, *Report on GST Revenue Sharing Relativities 2012 Update* and DTF.

The calculations which produce the resultant per capita relativities for 2010–11 and the GST grants for 2012–13 are presented in Tables B.2 and B.3 respectively.

The outcomes of these investment scenarios on the per capita relativities and GST grants for 2010-11 are presented in Table B.4. This indicates that additional investment by Victoria will have:

- various, and not obviously consistent impacts on the GST received by other States, despite no change in their need for or ability to provide infrastructure; and
- different impacts on different States, depending on how Victoria chooses to fund that investment.

Table B.2: Determination of per capita relativities resulting from additional $1 billion Victorian general government investment—by funding option, 2010–11

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Average*
Debt funding									
Assessed net lending ($pc)	-740.81	-725.03	-718.72	-700.47	-751.50	-761.33	-706.84	-760.70	-729.17
plus:									
Assessed expenses ($pc)	8,574.49	8,199.92	9,046.27	9,521.00	8,981.35	9,639.40	8,685.68	20,628.17	8,853.46
Assessed investment ($pc)	820.38	766.77	873.82	912.47	739.18	842.67	782.61	1,113.15	824.28
	8,654.06	8,241.65	9,201.37	9,733.01	8,969.03	9,720.74	8,761.45	20,980.63	8,948.57
less:									
Assessed revenue ($pc)	4,441.86	4,325.96	4,694.59	6,807.26	3,933.47	3,674.46	4,074.77	4,385.24	4,646.77
Assistance requirement ($pc)	4,212.20	3,915.69	4,506.78	2,925.74	5,035.56	6,046.28	4,686.68	16,595.39	4,301.80
less:									
Commonwealth payments ($pc)	2,231.39	2,095.52	2,212.62	2,319.37	2,371.38	3,003.34	2,145.36	4,986.03	2,257.45
GST requirement ($pc)	1,980.81	1,820.18	2,294.16	606.37	2,664.18	3,042.94	2,541.32	11,609.36	2,044.34
Per capita relativity	0.96892	0.89035	1.12220	0.29661	1.30320	1.48847	1.24310	5.67877	1.00000
Own-source revenue funding									
Assessed net lending ($pc)	-696.18	-680.51	-674.25	-656.12	-706.79	-716.55	-662.45	-715.92	-684.62
plus:									
Assessed expenses ($pc)	8,574.49	8,199.92	9,046.27	9,521.00	8,981.35	9,639.40	8,685.68	20,628.17	8,853.46
Assessed investment ($pc)	820.38	766.77	873.82	912.47	739.18	842.67	782.61	1,113.15	824.28
	8,698.69	8,286.17	9,245.84	9,777.35	9,013.74	9,765.52	8,805.84	21,025.41	8,993.12
less:									
Assessed revenue ($pc)	4,488.58	4,370.49	4,734.73	6,865.97	3,967.22	3,704.72	4,114.72	4,422.70	4,691.32
Assistance requirement ($pc)	4,210.11	3,915.69	4,511.11	2,911.38	5,046.52	6,060.80	4,691.13	16,602.71	4,301.80
less:									
Commonwealth payments ($pc)	2,231.39	2,095.52	2,212.62	2,319.37	2,371.38	3,003.34	2,145.36	4,986.03	2,257.45
GST requirement ($pc)	1,978.72	1,820.17	2,298.49	592.01	2,675.14	3,057.46	2,545.77	11,616.68	2,044.34
Per capita relativity	0.96790	0.89034	1.12432	0.28958	1.30856	1.49557	1.24527	5.68235	1.00000

Table B.3: GST Grants resulting from additional $1 billion Victorian general government investment—by funding option, 2012–13

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
Debt funding									
31 December population ('000)	7,424.4	5,749.6	4,694.8	2,427.9	1,679.7	515.6	374.7	234.8	23,101.9
GST relativities[1]	0.95299	0.92069	0.98482	0.55147	1.28477	1.58149	1.19776	5.53383	
Adjusted population ('000)	7,075.4	5,293.6	4,623.5	1,338.9	2,158.0	815.5	448.8	1,299.2	23,053.0
Share of adjusted population (%)	30.7	23.0	20.1	5.8	9.4	3.5	1.9	5.6	
Share of GST pool ($ million)	14,793.5	11,068.1	9,667.1	2,799.5	4,512.0	1,705.0	938.3	2,716.5	48,200.0
Own-source revenue funding									
31 December population ('000)	7,424.4	5,749.6	4,694.8	2,427.9	1,679.7	515.6	374.7	234.8	23,101.9
GST relativities[1]	0.95265	0.92069	0.98553	0.54913	1.28656	1.58386	1.19849	5.53502	
Adjusted population ('000)	7,072.9	5,293.6	4,626.9	1,333.2	2,161.0	816.7	449.0	1,299.5	23,052.8
Share of adjusted population (%)	30.7	23.0	20.1	5.8	9.4	3.5	1.9	5.6	
Share of GST pool ($ million)	14,788.3	11,068.2	9,674.1	2,787.6	4,518.3	1,707.6	938.9	2,717.1	48,200.0

1. average of current per capita relativities for 2008–09 and 2009–10 and 2010–11 per capita relativities from Table 1.2

Table B.4: Impact of additional $1 billion Victorian general government investment—by funding option, 2010–11

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
Operating balance funding								
Per capita relativities	-0.00013	-0.00037	0.00005	0.00042	0.00006	0.00061	0.00020	0.00564
GST impact ($m)	-2.0	-4.4	0.5	2.1	0.2	0.7	0.2	2.8
Own-source revenue funding								
Per capita relativities	-0.00047	-0.00037	0.00076	-0.00192	0.00184	0.00298	0.00092	0.00684
GST impact ($m)	-7.2	-4.4	7.5	-9.7	6.5	3.2	0.7	3.4

B.2 Comparison of jointly funded road and rail funding

In this scenario it is assumed that Victoria undertakes a $1 billion investment in 2008-09 and that half the funding is provided by the Commonwealth Government. Two scenarios for the type of infrastructure project are examined:

- a rail project, receiving $500 million in Commonwealth funding; and
- a road project, receiving $500 million in Commonwealth funding and deemed to be a National Network Road.

Table B.5 outlines the changes to annual per capita relativities for these two scenarios.

For both scenarios the Commonwealth payments are assessed actual per capita on the revenue side.

On the expenses side the Commonwealth rail funding is included in the net lending assessment and distributed accordingly. This will slightly increase all States' GST requirement. When combined with treating the Commonwealth payment APC on the revenue side this will distribute significant GST revenue away from the jurisdiction receiving the funding.

This is contrasted with the impact of receiving Commonwealth funding for a National Network Road project. On the expenses side of the assessment, the Commonwealth funding is included in the investment category, with $250 million being distributed according to the investment assessment and half included APC. That is, the CGC effectively considers half of the investment as increasing Victoria's 'need' for infrastructure investment and therefore the 'need' for GST.

This APC treatment for half the road funding on the expense amounts to an effective exclusion of half the Commonwealth road funding from the assessment, as it cancels out half of the included funds on the revenue side. This increases the GST requirement relative to receiving rail funding.

Table B.5: Jointly funded $1billion infrastructure project —difference to per capita relativities by project type, 2008–09, change in GST for 2010-11 to 2012-13 ($ millions)

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
Rail funding								
Per capita relativities	0.01214	-0.03683	0.01214	0.01214	0.01214	0.01214	0.01214	0.01214
GST impact	190.7	-438.0	120.2	67.1	39.8	11.3	9.1	-0.3
Road funding								
Per capita relativities	0.00616	-0.01833	0.00634	0.00667	0.00431	0.00547	0.00570	0.00327
GST impact	94.0	-222.6	61.8	28.2	18.0	7.7	4.9	8.0

The assessment of Commonwealth funding for road and rail projects in the calculation of GST relativities creates a significant bias in favour of investment in road projects over rail projects. The GST distribution creates an incentive to pursue Commonwealth funding for road projects over rail projects, regardless of their respective economic or policy merit.

The assessment of net lending and investment was introduced at the last methodology review in 2010 and it is not clear that this has improved the HFE process. Removing the net lending and investment assessment may be an acceptable solution to the issues that concern the Review Panel.

This option would result in the HFE system being neutral in regard to how States applied their net operating balances. The current system is based on the concept of ‘average State policy’, so if the majority of States fund investment from the net operating balance then all States are assessed on that basis. However, a preferred approach would ensure that one State’s decision regarding how they fund investment would not result in HFE repercussions for any other State.

C. Global indicators

Key points

- This analysis applies global indicators at the total revenue and expense level, bypassing the need for category assessments while differentiating between revenue raising capacity and expenditure needs. Adjustments for remoteness, Indigeneity and scale have been applied to the expense side of the global assessment.
- Victoria continues to find population size the most effective global indicator for the distribution of GST. Others, including GSP, would not enhance predictability. In this context Victoria considers broad-based indicators hold more potential as feasible methodological improvements, on the path to a population based distribution.

This Appendix responds to the Review Panel's request for possible global indicators. It outlines separate global indicators for each of the revenue and expenses assessments, removing the need to assess separate revenue and expense categories. The suggested single indicator for the revenue assessment would be evenly split between GSP and population, and the single indicator for the expenses assessment would be population.

The use of population to distribute GST revenue remains Victoria's preferred position, satisfying the principles of simplicity, transparency and predictability. Alternative global indicators, such as GSP, fail predictability tests because of data volatility and revisions.

As discussed in this submission, Victoria considers that the use of *broad-based* indicators would be a valuable methodological improvement, in combination with substantive reform, in the transition to a population based distribution. These are discussed in Appendix D.

C.1 Global revenue assessment

GSP could only be reasonably used as a proxy for those revenue categories for which the CGC currently assesses revenue raising capacity based on States' respective revenue bases. These revenue bases relate to various components of economic activity and accordingly GSP would be a reasonable proxy for revenue raising capacity.

The assessment of the 'other revenue' component of revenue is currently made on a population basis. Other revenue is a major category, accounting for around 45 per cent of total own-source revenue. This suggests that the appropriate global indicator for the own-source revenue assessment would be based on 50 per cent GSP and 50 per cent on population, in recognition that around 50 per cent of revenue is currently assessed EPC. The resultant assessed revenues are presented in Table C.1.

Table C.1: Assessed revenue based on 50% GSP and 50% population indicator ($ million)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
2004–05	24,113.3	17,688.4	13,528.1	7,478.7	5,155.3	1,532.0	1,326.8	769.9
2005–06	25,509.5	18,717.1	14,996.3	8,417.6	5,479.2	1,634.4	1,404.6	845.7
2006–07	27,705.1	20,482.8	16,763.1	9,663.4	5,995.3	1,814.4	1,563.7	941.0
2007–08	27,645.6	20,621.1	16,932.0	9,922.4	6,042.8	1,796.7	1,578.4	982.1
2008–09	28,827.2	21,374.8	18,327.4	10,903.0	6,239.4	1,836.4	1,666.9	1,054.4
2009–10	30,417.2	22,691.1	18,765.6	11,480.0	6,587.4	1,945.2	1,810.8	1,074.6
2010–11	33,189.3	24,767.6	20,471.8	13,437.8	7,189.6	2,105.9	1,969.8	1,168.8

Sources: ABS*, Australian National Accounts: State Accounts*, Cat No. 5220.0 and CGC, *Report on GST Revenue Sharing Relativities 2012 Update*.

C.2 Global expenses assessment

The expenditure side of the assessment is prone to far more significant complexity and volatility than the own-source revenue side. The expense categories used for assessment on the whole relate to the provision of services to citizens. Accordingly, population share would be the appropriate proxy for expenditure needs, on the basis that population fundamentally drives demand for services. The resultant assessed expenses are presented in Table C.2.

Table C.2: Assessed expenses based on population indicator ($ million)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
2004–05	41,733.3	31,097.2	24,473.5	12,396.5	9,585.5	3,005.8	2,035.3	1,263.9
2005–06	44,567.4	33,397.2	26,556.3	13,379.0	10,240.6	3,208.0	2,182.8	1,368.6
2006–07	48,098.6	36,261.2	29,031.4	14,620.1	11,055.8	3,448.8	2,363.9	1,489.1
2007–08	51,538.9	39,043.5	31,472.2	15,866.0	11,810.2	3,671.9	2,536.7	1,611.6
2008–09	56,680.1	43,153.2	35,001.3	17,736.5	12,926.6	4,013.4	2,794.8	1,786.0
2009–10	62,084.0	47,544.6	38,639.4	19,614.6	14,139.8	4,371.0	3,072.5	1,970.1
2010–11	64,285.9	49,398.5	40,200.8	20,488.0	14,607.7	4,506.2	3,204.8	2,031.3

Source: Using data from the CGC's *Report on GST Revenue Sharing Relativities 2012 Update*.

However, an indicator which is based on demand for services will not capture cost differences. The demographic factors that lead to the greatest amount of redistribution of GST are Indigeneity and population dispersion (CGC, *Report on GST Revenue Sharing Relativities 2012 Update*, p. 65). An extension to using population as a global indicator would be to make an adjustment for Indigeneity, remoteness and scale in order to capture some of these cost factors.

The data used to derive the Indigeneity adjustment are presented in Tables C.3 to C.5 and those used to derive the remoteness adjustment are presented in Tables C.6 to C.8. The adjustment for population scale was derived by weighting the first 500,000 of each State's population by 10 per cent. The scale indicator is obtained as a State's share of the weighted population relative to the unweighted population. This adjustment increased assessed expenses for the smaller States relative to the more populous States. The value of total assessed expenses from the Indigenous, remoteness and scale adjustments is presented in Table C.9.

Table C.3: Indigenous population ('000)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
2004–05	149.2	32.8	141.6	69.6	27.5	18.0	4.2	62.8
2005–06	152.7	33.5	144.9	71.0	28.1	18.4	4.3	64.0
2006–07	155.7	34.3	148.6	72.2	28.6	18.8	4.4	65.1
2007–08	158.7	35.1	152.5	73.5	29.2	19.2	4.5	66.3
2008–09	161.9	35.9	156.5	74.9	29.8	19.6	4.6	67.4
2009–10	165.2	36.7	160.5	76.2	30.4	20.1	4.7	68.6

Source: CGC on-line assessment tool.

Table C.4: Non-Indigenous population ('000)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
2004–05	6,607.2	5,015.8	3,853.2	1,947.5	1,525.0	468.4	326.0	143.5
2005–06	6,663.4	5,093.0	3,946.0	1,988.4	1,539.8	471.5	329.8	146.6
2006–07	6,749.3	5,187.0	4,047.3	2,040.7	1,557.2	474.4	336.7	149.7
2007–08	6,825.4	5,278.7	4,141.4	2,097.7	1,574.2	478.3	341.1	153.5
2008–09	6,972.5	5,407.3	4,268.6	2,170.2	1,593.8	483.7	347.6	158.5
2009–10	7,067.4	5,509.2	4,353.3	2,217.3	1,614.2	487.6	353.9	161.1

Source: CGC on-line assessment tool.

Table C.5: Indigenous share of population (per cent)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
2004–05	2.2	0.6	3.5	3.4	1.8	3.7	1.3	30.5
2005–06	2.2	0.7	3.5	3.4	1.8	3.8	1.3	30.4
2006–07	2.3	0.7	3.5	3.4	1.8	3.8	1.3	30.3
2007–08	2.3	0.7	3.6	3.4	1.8	3.9	1.3	30.2
2008–09	2.3	0.7	3.5	3.3	1.8	3.9	1.3	29.8
2009–10	2.3	0.7	3.6	3.3	1.8	4.0	1.3	29.9
2010–11[1]	2.3	0.7	3.6	3.3	1.8	4.0	1.3	29.9

1. Assumed to be previous year's value.
Sources: Tables 2.3 and 2.4.

Table C.6: Remote and very remote population ('000)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
2004–05	75.1	0.0	133.7	126.8	43.0	2.6	0.0	81.2
2005–06	74.7	0.0	133.9	127.5	43.0	2.6	0.0	82.3
2006–07	74.6	0.0	134.8	130.4	43.2	2.6	0.0	83.3
2007–08	74.2	0.0	135.6	132.5	43.5	2.6	0.0	84.9
2008–09	74.4	0.0	134.2	135.3	43.8	2.6	0.0	86.9
2009–10	81.3	5.6	144.8	139.4	39.9	2.7	0.0	87.8

Source: CGC on-line assessment tool.

Table C.7: Accessible population ('000)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
2004–05	6,681.3	5,048.6	3,861.1	1,890.3	1,509.5	483.7	330.2	125.1
2005–06	6,741.4	5,126.5	3,957.1	1,931.9	1,524.9	487.4	334.1	128.4
2006–07	6,830.3	5,221.3	4,061.2	1,982.5	1,542.5	490.6	341.1	131.5
2007–08	6,910.0	5,313.8	4,158.3	2,038.7	1,559.9	494.9	345.6	134.9
2008–09	7,060.0	5,443.2	4,290.9	2,109.8	1,579.8	500.7	352.2	139.0
2009–10	7,151.3	5,540.3	4,369.0	2,154.1	1,604.7	504.9	358.6	141.9

Source: CGC on-line assessment tool.

Table C.8: Remote and very remote share of population (per cent)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
2004–05	1.1	0.0	3.3	6.3	2.8	0.5	0.0	39.4
2005–06	1.1	0.0	3.3	6.2	2.7	0.5	0.0	39.1
2006–07	1.1	0.0	3.2	6.2	2.7	0.5	0.0	38.8
2007–08	1.1	0.0	3.2	6.1	2.7	0.5	0.0	38.6
2008–09	1.0	0.0	3.0	6.0	2.7	0.5	0.0	38.5
2009–10	1.1	0.1	3.2	6.1	2.4	0.5	0.0	38.2
2010–11[1]	1.1	0.1	3.2	6.1	2.4	0.5	0.0	38.2

1. Assumed to be previous year's value.
Sources: Tables C.6 and C.7.

Table C.9: Population share following scale adjustment (per cent)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2004–05	32.9	24.6	19.4	9.9	7.7	2.6	1.8	1.1
2005–06	32.7	24.6	19.6	10.0	7.7	2.6	1.7	1.1
2006–07	32.5	24.6	19.7	10.1	7.7	2.5	1.7	1.1
2007–08	32.4	24.6	19.9	10.1	7.6	2.5	1.7	1.1
2008–09	32.3	24.6	20.0	10.2	7.5	2.5	1.7	1.1
2009–10	32.1	24.7	20.1	10.3	7.5	2.5	1.7	1.1
2010–11[1]	32.1	24.7	20.1	10.4	7.5	2.5	1.7	1.1

The adjustments for Indigeneity and remoteness are applied in two steps. The first step is to apply the shares of the population that are Indigenous and remote together with a cost factor (to recognise the higher costs of servicing these populations) to the EPC assessed expenses for each State and Territory. That is:

$$Exp^{A}_{1,i} = Exp^{A}_{EPC,i} \times \left(1 + Shr^{I}_{i} \times CF^{I}_{,}\right) \times \left(1 + Shr^{R}_{i} \times CF^{R}_{,}\right) \times SF$$

Where: Exp is expenses;

Shr is population share;

CF is cost factor;

A denotes assessed;

I denotes Indigenous;

R denotes remote;

SF denotes scale factor;

1 denotes step 1;

i denotes State or Territory; and

EPC denotes EPC.

For the purposes of illustration the cost factors were specified to be 1.5, that is it would cost 50 per cent more to service the Indigenous and remote populations.

The second step is to rescale the resultant expenses so that the sum agrees with the actual sum.

$$Exp^{A}_{2,i} = Exp^{A}_{1,i} \times \frac{\sum_{i} Exp^{A}_{EPC,i}}{\sum_{i} Exp^{A}_{1,i}}$$

The resultant assessed expenses after adjusting the EPC assessment for Indigeneity and remoteness are presented in Table C.10.

Table C.10: Assessed EPC expenses adjusted for Indigeneity, remoteness and scale ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2004–05	40,332.5	28,964.1	25,035.7	13,356.2	9,663.8	3,212.9	2,083.5	2,942.2
2005–06	43,091.3	31,113.3	27,135.7	14,392.9	10,323.0	3,432.7	2,235.7	3,175.5
2006–07	46,517.0	33,789.1	29,641.8	15,715.0	11,144.5	3,694.6	2,422.2	3,444.7
2007–08	49,857.4	36,390.6	32,115.1	17,026.5	11,905.5	3,937.5	2,600.8	3,717.6
2008–09	54,856.1	40,249.0	35,665.6	19,002.2	13,038.0	4,308.7	2,868.3	4,104.0
2009–10	60,105.1	44,362.2	39,433.9	20,994.0	14,188.5	4,689.2	3,150.5	4,512.7
2010–11	62,245.1	46,095.6	41,028.7	21,923.9	14,657.1	4,832.1	3,286.9	4,653.8

C.3 Combined impact on GST grant

The calculations required for the resultant per capita relativities and the GST grants from using the global indicators for the revenue (combined EPC and GSP indicator) and expenses assessments (adjusted for Indigeneity, remoteness and scale) are presented in Tables C.11 and C.12, respectively.

Table C.11: Determination of per capita relativities resulting from global revenue and expense assessments, with an adjustment for Indigeneity, remoteness and scale

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Average*
2005–06									
Assessed net lending ($pc)	150.82	150.82	150.82	150.82	150.82	150.82	150.82	150.82	150.82
plus:									
Assessed expenses ($pc)	6,349.62	6,118.03	6,710.42	7,064.77	6,619.95	7,027.18	6,726.46	15,236.88	6,567.14
Assessed investment ($pc)	222.23	222.23	222.23	222.23	222.23	222.23	222.23	222.23	222.23
	6,722.67	6,491.08	7,083.46	7,437.81	6,992.99	7,400.22	7,099.50	15,609.92	6,940.18
less:									
Assessed revenue ($pc)	3,758.89	3,680.49	3,708.45	4,131.82	3,513.70	3,345.88	4,226.04	4,057.93	3,748.70
Assistance requirement ($pc)	2,963.77	2,810.59	3,375.01	3,305.99	3,479.29	4,054.34	2,873.47	11,551.99	3,191.49
less:									
Commonwealth payments ($pc)	1,372.90	1,365.39	1,385.14	1,390.85	1,398.71	1,356.72	1,321.94	1,910.50	1,381.43
GST requirement ($pc)	1,590.87	1,445.20	1,989.88	1,915.14	2,080.59	2,697.62	1,551.52	9,641.49	1,810.05
Per capita relativity	0.87891	0.79843	1.09935	1.05806	1.14946	1.49035	0.85717	5.32664	1.00000
2006–07									
Assessed net lending ($pc)	57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21	57.21
plus:									
Assessed expenses ($pc)	6,782.34	6,534.84	7,160.39	7,538.14	7,069.18	7,512.63	7,186.03	16,223.02	7,012.94
Assessed investment ($pc)	312.97	312.97	312.97	312.97	312.97	312.97	312.97	312.97	312.97
	7,152.51	6,905.01	7,530.56	7,908.32	7,439.36	7,882.80	7,556.21	16,593.20	7,383.11
less:									
Assessed revenue ($pc)	4,039.50	3,961.38	4,049.37	4,635.31	3,802.97	3,689.38	4,639.05	4,431.91	4,069.18
Assistance requirement ($pc)	3,113.01	2,943.63	3,481.19	3,273.00	3,636.39	4,193.42	2,917.16	12,161.28	3,313.94
less:									
Commonwealth payments ($pc)	1,418.17	1,382.87	1,436.50	1,436.67	1,438.37	1,384.28	1,339.42	1,864.19	1,418.90
GST requirement ($pc)	1,694.85	1,560.75	2,044.69	1,836.33	2,198.02	2,809.14	1,577.74	10,297.09	1,895.03
Per capita relativity	0.89436	0.82360	1.07897	0.96902	1.15988	1.48237	0.83256	5.43372	1.00000

Table C.11 (continued): Determination of per capita relativities resulting from global revenue and expense assessments, with an adjustment for Indigeneity, remoteness and scale

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Average*
2007–08									
Assessed net lending ($pc)	-199.19	-199.19	-199.19	-199.19	-199.19	-199.19	-199.19	-199.19	-199.19
plus:									
Assessed expenses ($pc)	7,168.61	6,906.86	7,561.75	7,952.36	7,470.13	7,946.40	7,597.62	17,094.76	7,410.38
Assessed investment ($pc)	386.48	386.48	386.48	386.48	386.48	386.48	386.48	386.48	386.48
	7,355.91	7,094.16	7,749.05	8,139.65	7,657.42	8,133.70	7,784.91	17,282.05	7,597.67
less:									
Assessed revenue ($pc)	3,974.95	3,913.84	3,986.76	4,634.37	3,791.60	3,625.98	4,610.88	4,515.80	4,022.47
Assistance requirement ($pc)	3,380.96	3,180.32	3,762.28	3,505.28	3,865.82	4,507.71	3,174.03	12,766.25	3,575.20
less:									
Commonwealth payments ($pc)	1,558.99	1,524.44	1,647.40	1,618.78	1,596.71	1,606.79	1,476.85	2,291.43	1,584.22
GST requirement ($pc)	1,821.97	1,655.88	2,114.88	1,886.51	2,269.11	2,900.93	1,697.19	10,474.82	1,990.98
Per capita relativity	0.91511	0.83169	1.06223	0.94753	1.13969	1.45703	0.85244	5.26113	1.00000
2008–09									
Assessed net lending ($pc)	-490.79	-490.79	-490.79	-490.79	-490.79	-490.79	-490.79	-490.79	-490.79
plus:									
Assessed expenses ($pc)	7,754.44	7,473.05	8,164.34	8,584.06	8,081.35	8,601.73	8,222.94	18,411.48	8,012.28
Assessed investment ($pc)	501.19	501.19	501.19	501.19	501.19	501.19	501.19	501.19	501.19
	7,764.84	7,483.45	8,174.74	8,594.46	8,091.76	8,612.13	8,233.34	18,421.88	8,022.68
less:									
Assessed revenue ($pc)	4,075.01	3,968.67	4,195.40	4,925.32	3,867.35	3,666.09	4,778.57	4,730.27	4,152.66
Assistance requirement ($pc)	3,689.84	3,514.78	3,979.34	3,669.14	4,224.40	4,946.05	3,454.77	13,691.61	3,870.02
less:									
Commonwealth payments ($pc)	1,961.03	1,820.40	2,148.33	1,928.03	2,016.87	1,975.18	1,704.94	3,279.71	1,974.36
GST requirement ($pc)	1,728.80	1,694.38	1,831.01	1,741.10	2,207.53	2,970.86	1,749.83	10,411.90	1,895.67
Per capita relativity	0.91198	0.89382	0.96589	0.91846	1.16451	1.56719	0.92307	5.49246	1.00000

Table C.11 (continued): Determination of per capita relativities resulting from global revenue and expense assessments, with an adjustment for Indigeneity, remoteness and scale

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Average*
2009–10									
Assessed net lending ($pc)	-645.90	-645.90	-645.90	-645.90	-645.90	-645.90	-645.90	-645.90	-645.90
plus:									
Assessed expenses ($pc)	8,375.27	8,071.96	8,828.89	9,259.40	8,680.82	9,280.80	8,870.64	19,815.99	8,651.02
Assessed investment ($pc)	797.61	797.61	797.61	797.61	797.61	797.61	797.61	797.61	797.61
	8,526.98	8,223.66	8,980.59	9,411.10	8,832.52	9,432.50	9,022.34	19,967.69	8,802.72
less:									
Assessed revenue ($pc)	4,238.45	4,128.77	4,201.44	5,063.24	4,030.30	3,849.82	5,098.51	4,718.83	4,282.75
Assistance requirement ($pc)	4,288.53	4,094.90	4,779.15	4,347.86	4,802.23	5,582.68	3,923.83	15,248.86	4,519.98
less:									
Commonwealth payments ($pc)	2,449.98	2,324.54	2,680.70	2,560.21	2,843.13	2,869.29	2,231.69	4,197.31	2,529.78
GST requirement ($pc)	1,838.55	1,770.35	2,098.45	1,787.65	1,959.10	2,713.39	1,692.14	11,051.55	1,990.20
Per capita relativity	0.92380	0.88954	1.05439	0.89823	0.98437	1.36338	0.85024	5.55299	1.00000
2010–11									
Assessed net lending ($pc)	-696.18	-680.51	-674.25	-656.12	-706.79	-716.55	-662.45	-715.92	-684.62
plus:									
Assessed expenses ($pc)	8,572.40	8,261.50	9,035.78	9,473.96	8,883.38	9,493.77	9,080.16	20,284.03	8,853.46
Assessed investment ($pc)	779.73	779.73	779.73	779.73	779.73	779.73	779.73	779.73	779.73
	8,655.95	8,360.71	9,141.26	9,597.57	8,956.32	9,556.94	9,197.44	20,347.84	8,948.57
less:									
Assessed revenue ($pc)	4,570.84	4,438.98	4,508.53	5,806.84	4,357.47	4,137.58	5,441.58	5,094.46	4,646.77
Assistance requirement ($pc)	4,085.12	3,921.73	4,632.73	3,790.73	4,598.85	5,419.37	3,755.86	15,253.38	4,301.80
less:									
Commonwealth payments ($pc)	2,231.39	2,095.52	2,212.62	2,319.37	2,371.38	3,003.34	2,145.36	4,986.03	2,257.45
GST requirement ($pc)	1,853.73	1,826.21	2,420.11	1,471.36	2,227.47	2,416.03	1,610.50	10,267.35	2,044.34
Per capita relativity	0.90676	0.89330	1.18381	0.71972	1.08958	1.18181	0.78778	5.02232	1.00000

Sources: CGC, *Report on GST Revenue Sharing Relativities 2012 Update* and Tables 2.1 and 2.9.

Table C.12: GST Grants resulting from global revenue and expenses assessments, with an adjustment for Indigeneity, remoteness and scale

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2009–10									
31 December population ('000)	7,176.5	5,495.8	4,466.5	2,267.3	1,634.5	505.3	355.2	227.7	22,128.7
GST relativities	0.89613	0.81791	1.08018	0.99154	1.14968	1.47658	0.84739	5.34050	
Adjusted population ('000)	6,431.0	4,495.1	4,824.6	2,248.1	1,879.1	746.1	301.0	1,216.2	22,141.2
Share of adjusted population (%)	29.0	20.3	21.8	10.2	8.5	3.4	1.4	5.5	
Share of GST pool ($m)	12,928.2	9,036.4	9,698.8	4,519.4	3,777.5	1,499.8	605.0	2,444.9	44,510.0
2010–11									
31 December population ('000)	7,261.1	5,579.6	4,540.7	2,314.1	1,649.9	509.0	362.0	229.4	22,445.8
GST relativities	0.90715	0.84970	1.03570	0.94500	1.15469	1.50220	0.86935	5.39577	
Adjusted population ('000)	6,586.9	4,741.0	4,702.8	2,186.9	1,905.2	764.6	314.7	1,238.0	22,439.9
Share of adjusted population (%)	29.4	21.1	21.0	9.7	8.5	3.4	1.4	5.5	
Share of GST pool ($m)	13,341.1	9,602.4	9,525.0	4,429.3	3,858.8	1,548.6	637.4	2,507.4	45,450.0
2011–12									
31 December population ('000)	7,342.0	5,657.3	4,637.7	2,361.2	1,666.0	512.4	366.2	233.0	22,775.8
GST relativities	0.91696	0.87168	1.02750	0.92141	1.09619	1.46253	0.87525	5.43553	
Adjusted population ('000)	6,732.4	4,931.3	4,765.3	2,175.6	1,826.3	749.3	320.5	1,266.2	22,767.0
Share of adjusted population (%)	29.6	21.7	20.9	9.6	8.0	3.3	1.4	5.6	
Share of GST pool ($m)	13,484.3	9,877.0	9,544.3	4,357.6	3,657.9	1,500.9	642.0	2,536.1	45,600.0
2012–13									
31 December population ('000)	7,424.4	5,749.6	4,694.8	2,427.9	1,679.7	515.6	374.7	234.8	23,101.5
GST relativities	0.91418	0.89222	1.06803	0.84547	1.07949	1.37079	0.85370	5.35593	
Adjusted population ('000)	6,787.2	5,129.9	5,014.2	2,052.7	1,813.2	706.8	319.8	1,257.5	23,081.4
Share of adjusted population (%)	29.4	22.2	21.7	8.9	7.9	3.1	1.4	5.4	
Share of GST pool ($m)	14,173.5	10,712.6	10,470.9	4,286.6	3,786.4	1,476.0	667.9	2,625.9	48,200.0

D. Broad-based measures

Key points

- This Appendix outlines some possible broad-based indicators, and associated impacts.
- An assessment of GST relativities that uses broad-based indicators will significantly simplify and increase the transparency and predictability of the assessment system.
- This analysis proposes broad-based indicators at the category level of the revenue and expense assessments. When combined with a broad adjustment for remoteness, Indigeneity and scale the broad-based assessment is able to produce an outcome which provides for comparable equalisation.
- The greatest simplicity, transparency and predictability gains from broad-based measures are on the expense side of the assessment as that is where most of the complexity in the current system lies.

This Appendix responds to the Panel's request for further information on what broader indicators could be applied to simplify the current assessment method.

The CGC assesses revenue by applying the national average effective tax rate for each type of tax to each State's revenue base. The CGC usually has to estimate the revenue base as States have different tax free thresholds, different value ranges for the imposition of tax rates and different inclusions to tax bases, just to illustrate the main differences. The use of broad based indicators would remove the need for this complex estimation, including the making of assumptions and adjustments for uncertainty.

The broad base approach to revenue could involve defining revenue bases in terms of macro-economic aggregates. This would remove the need for the complexity of the current determination of the bases. The suggested broad-based revenue indicators are presented in Table D.1.

Table D.1: Options for broad-based own-source revenue indicators

Revenue category	*Indicator*
Payroll tax	Australian National Accounts data on compensation of employees
Land tax	Australian National Accounts data on the value of land
Stamp Duty	Australian National Accounts data on dwelling investment and non-dwelling —buildings investment
Insurance taxes	As per current assessment
Motor taxes	As per current assessment
Mining revenue	Actual revenue (APC)
Other revenue	As per current assessment (EPC)

Currently, the expenses assessment methodology breaks each expense category into a number of components—service expenses which are affected by cost and use disabilities, administrative scale expenses and Commonwealth payments which are assessed APC to offset the revenue treatment.

The use of broad-based indicators would reduce the complexity of the assessment, the dubious quality of a number of data sets currently utilised in the assessment and the need for assumptions and approximations. The suggested broad based expenses indicators are presented in Table D.2.

Table D.2: Options for broad based expenses indicators

Expenses category	*Indicator*
School education	ABS data on school students
Post-secondary education	National Centre for Vocational Education Research VET student data
Admitted patients	Australian Institute for Health and Welfare (AIHW) data on public hospitals separations
Community and other health services	Population (EPC)
Welfare and housing	Australian National Accounts data on gross disposable income
Services to communities	Population (EPC)
Justice services	ABS data on persons in full-time custody, court defendants and recorded crime victims
Roads	Bureau of Infrastructure, Transport and Regional Economics data on total vehicle kilometres travelled
Transport services	Urban population
Services to industry	Australian National Accounts data on factor income
Other expenses	Population (EPC)
Depreciation	Population (EPC)

D.1 Broad-based indicators for revenue

D.1.1 Payroll tax

The CGC estimates the payroll tax base using ABS data on the compensation of employees, supplemented by other data to estimate the impact of the tax-free thresholds. Different thresholds are set for public and private sector wages.

The assessed payroll tax revenue is obtained by applying the national average tax rate (that is, national total payroll tax revenue divided by the national total payroll tax base) to each State's estimated payroll tax base.

An alternative methodology for determining the payroll tax base is to use the compensation of employees' data without any of the adjustments made by the CGC. This alternative methodology implicitly assumes that average State policy is not to impose a tax-free threshold. While this is not the case, the national average tax rate based on this alternative base will capture the effect of the tax-free thresholds. Table D.1.1 presents the value of compensation of employees and Table D.1.2 presents the resultant average rates.

Table D.1.1: Compensation of employees ($ million)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2004–05	160,966	109,086	80,350	42,627	29,482	8,162	11,816	4,677	447,166
2005–06	169,819	116,818	90,787	46,643	31,028	9,017	12,632	5,375	482,119
2006–07	181,318	125,510	102,642	54,136	34,231	9,808	13,859	5,894	527,398
2007–08	195,066	137,086	111,178	61,288	37,705	10,924	15,056	6,279	574,582
2008–09	197,553	139,963	116,946	68,140	38,911	11,291	16,557	6,736	596,097
2009–10	204,643	145,703	119,693	70,970	39,763	11,910	18,104	7,352	618,138
2010–11	217,666	156,838	128,318	82,103	41,958	12,085	19,437	7,547	665,952

Source: ABS, *Australian National Accounts: State Accounts*, Cat No.5220.

Table D.1.2: Average payroll tax rates from compensation of employees

Year	*Payroll tax revenue ($m)*	*Compensation of employees ($m)*	*Average tax rate (%)*
2004–05	12,004.0	447,166.0	2.68
2005–06	13,095.0	482,119.0	2.72
2006–07	14,358.0	527,398.0	2.72
2007–08	16,022.0	574,582.0	2.79
2008–09	16,922.0	596,097.0	2.84
2009–10	16,795.0	618,138.0	2.72
2010–11	17,969.2	665,952.0	2.70

Sources: CGC, *Report on GST Revenue Sharing Relativities 2011 Update* and CGC, *Report on GST Revenue Sharing Relativities 2012 Update* and Table D.1.1.

Table D.1.3 presents the assessed values of payroll tax revenue derived from applying the average tax rate to each States' compensation of employees.

Table D.1.3: Assessed payroll tax revenue—based on compensation of employees ($ million)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2004–05	4,321.1	2,928.4	2,157.0	1,144.3	791.4	219.1	317.2	125.6	12,004.0
2005–06	4,612.5	3,172.9	2,465.9	1,266.9	842.8	244.9	343.1	146.0	13,095.0
2006–07	4,936.2	3,416.9	2,794.3	1,473.8	931.9	267.0	377.3	160.5	14,358.0
2007–08	5,439.3	3,822.6	3,100.2	1,709.0	1,051.4	304.6	419.8	175.1	16,022.0
2008–09	5,608.1	3,973.3	3,319.9	1,934.4	1,104.6	320.5	470.0	191.2	16,922.0
2009–10	5,560.2	3,958.8	3,252.1	1,928.3	1,080.4	323.6	491.9	199.8	16,795.0
2010–11	5,873.2	4,231.9	3,462.4	2,215.4	1,132.1	326.1	524.5	203.6	17,969.2

Sources: Tables D.1.1 and D.1.2.

D.1.2 Land tax

Land tax is currently assessed as two components. The first component comprises the metropolitan improvement levies imposed by Victoria and WA, and land tax imposed on government entities by South Australia. This component is assessed EPC. The second component is all other land tax which is assessed according to revenue raising capacity.

The revenue base used by the CGC in assessing land tax revenue is the value of taxable land in each State as recorded by the respective State revenue offices (SROs). However, the data are not fully comparable between States for a variety of reasons, including variations in tax-free thresholds and value ranges for the tax rates. It is usually the case that the total tax revenue implied by the SRO derived revenue base is not equal to the actual land tax revenue. The CGC scales the SRO land value data and revenue raised in each value range so that the implied total revenue matches the actual revenue.

Revenue is assessed by splitting the land valuation data into 12 value ranges and applying the national average tax rate to each States land values in the value ranges. The assessed revenues for each value range are then aggregated. A discount of 25 per cent is applied to the aggregate revenue due to concerns over the comparability of the data. The EPC component and discounted assessed component are aggregated to obtain the assessed value of land tax revenue.

An alternative methodology for determining the land tax base is to use the land value data published in the Australian National Accounts. This alternative methodology implicitly assumes that average State policy is not to impose a tax-free threshold or a progressive tax scale. While this is not the case, the national average tax rate based on this alternative base will partially capture the effect of the tax-free thresholds and progressive tax scale. The first component of land tax revenue would continue to be assessed on an EPC basis.

Table D.1.4 presents the land value data and Table D.1.5 presents the national average land tax rates for the other land tax component. Table D.1.6 presents the assessed values of land tax revenue derived from applying the average tax rate to each State's land value and assessing the metropolitan improvement tax component EPC.

Table D.1.4: Value of land ($ billion)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2004–05	1,028.2	658.5	399.9	220.2	144.2	27.5	36.3	10.6	2,525.4
2005–06	1,097.9	658.1	512.1	274.9	168.2	35.2	39.8	12.1	2,798.3
2006–07	1,116.0	799.8	551.2	409.1	183.7	38.6	44.1	14.0	3,156.5
2007–08	1,095.2	909.4	596.1	467.9	197.6	40.1	47.4	13.9	3,367.6
2008–09	1,086.5	845.0	621.6	427.8	204.6	42.9	48.4	20.4	3,297.2
2009–10	1,197.7	1,118.9	802.8	465.7	245.4	50.5	59.2	24.1	3,964.3
2010–11	1,180.4	1,106.8	663.9	459.3	241.4	49.7	60.6	23.3	3,785.4

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

Table D.1.5: Average land tax rates from value of land

Year	Other land tax revenue ($m)	Land value ($b)	Average tax rate (%)
2004–05	3,487.9	2,525.4	0.14
2005–06	3,496.9	2,798.3	0.12
2006–07	4,234.6	3,156.5	0.13
2007–08	4,216.4	3,367.6	0.13
2008–09	5,416.6	3,297.2	0.16
2009–10	5,603.1	3,964.3	0.14
2010–11	5,819.5	3,785.4	0.15

Sources: CGC, *Report on GST Revenue Sharing Relativities 2011 Update* and CGC, *Report on GST Revenue Sharing Relativities 2012 Update* and Table D.1.4.

Table D.1.6: Assessed land tax revenue based on value of land ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2004–05	1,465.6	943.4	579.0	317.6	209.6	41.3	52.4	16.0	3,624.9
2005–06	1,420.6	858.8	668.9	358.1	221.4	47.5	52.1	16.6	3,644.1
2006–07	1,549.9	1,112.7	771.3	564.9	258.6	55.6	61.8	20.4	4,395.2
2007–08	1,429.7	1,182.9	782.0	603.8	260.8	54.4	62.2	19.2	4,395.1
2008–09	1,846.5	1,435.1	1,059.2	722.1	350.2	74.8	82.5	35.5	5,605.8
2009–10	1,758.0	1,631.4	1,175.2	678.8	361.7	76.0	86.9	36.1	5,804.1
2010–11	1,880.5	1,752.1	1,061.8	727.1	386.1	81.0	96.4	37.9	6,023.1

Sources: Tables D.1.4 and D.1.5.

D.1.3 Stamp duty on conveyances

Stamp duty is currently assessed as two components. The first component comprises duty on corporate reconstructions and sales of major State assets. This component is assessed EPC. The second component is all other stamp duty which is assessed according to revenue raising capacity.

The revenue base used by the CGC in assessing stamp duty revenue is the value of transfers taxed in each State as recorded by the respective SROs. The CGC makes adjustment to this base to take into account off the plan concessions, non-real property and land rich transactions.

It is usually the case that the total tax revenue implied by the SRO derived revenue base is not equal to the actual stamp duty revenue. The CGC scales the SRO value of transactions data and revenue raised in each value range so that the implied total revenue matches the actual revenue.

Revenue is assessed by splitting the land valuation data into 16 value ranges and applying the national average tax rate to each State's land values in the value ranges. The assessed revenues for each value range are then aggregated. The EPC component and the assessed component are aggregated to obtain the assessed value of stamp duty revenue.

An alternative methodology for determining the stamp duty base is to use Australian National Accounts data on private dwelling construction and non-dwelling construction—new building. This alternative methodology implicitly assumes that average State policy is not to impose a progressive tax scale. While this is not the case, the national average tax rate based on this alternative base will partially capture the effect of the progressive tax scale. The first component of stamp duty revenue would continue to be assessed on an EPC basis.

Table D.1.7 presents the private dwelling construction and non-dwelling construction—new building data, and Table D.1.8 presents the national average stamp duty rates for the other stamp duty component. Table D.1.9 presents the assessed values of stamp duty revenue derived from applying the average tax rate to each State's private dwelling and non-dwelling construction figures, and assessing the sales of major State assets component EPC.

Table D.1.7: Dwelling construction and non-dwelling construction—new building data ($ million)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2004–05	25,746	21,844	18,688	7,927	5,083	1,327	1,103	592	82,310
2005–06	25,290	21,406	21,038	9,622	5,356	1,411	1,620	768	86,511
2006–07	24,120	22,503	23,734	12,073	5,539	1,526	2,089	904	92,488
2007–08	25,510	26,555	25,779	14,366	5,582	1,804	1,875	1,009	102,480
2008–09	24,642	27,006	24,942	15,474	6,248	1,943	1,975	995	103,225
2009–10	24,915	26,650	21,905	15,190	5,935	1,922	2,260	1,023	99,800
2010–11	26,909	28,284	20,051	15,992	5,988	2,063	2,733	964	102,984

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

Table D.1.8: National average stamp duty rate based on construction

Year	*Other stamp duty revenue ($m)*	*Construction ($m)*	*Average tax rate (%)*
2004–05	9,301.9	82,310.0	11.30
2005–06	10,587.9	86,511.0	12.24
2006–07	12,813.5	92,488.0	13.85
2007–08	14,181.0	102,480.0	13.84
2008–09	9,280.4	103,225.0	8.99
2009–10	11,872.7	99,800.0	11.90
2010–11	11,930.8	102,984.0	11.59

Sources: CGC, *Report on GST Revenue Sharing Relativities 2011 Update* and CGC, *Report on GST Revenue Sharing Relativities 2012 Update* and Table 3.2.7.

Table D.1.9: Assessed stamp duty on conveyances revenue based on dwelling construction and non-dwelling construction—new building ($ million)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2004–05	2,910.8	2,469.5	2,112.6	896.2	574.7	150.1	124.7	66.9	9,305.5
2005–06	3,098.5	2,622.3	2,576.7	1,178.6	656.3	172.9	198.4	94.1	10,597.8
2006–07	3,342.0	3,117.9	3,288.4	1,672.7	767.5	211.4	289.4	125.3	12,814.6
2007–08	3,531.2	3,675.5	3,568.0	1,988.3	772.7	249.7	259.5	139.7	14,184.6
2008–09	2,234.0	2,442.1	2,253.9	1,397.0	566.0	176.0	178.5	90.0	9,337.5
2009–10	3,004.1	3,201.1	2,630.9	1,819.7	715.2	231.5	270.8	123.0	11,996.3
2010–11	3,227.4	3,361.3	2,391.7	1,887.8	718.7	246.7	322.1	115.2	12,270.9

Sources: Tables D.1.7 and D.1.8.

D.1.4 Insurance tax

The revenue base used by the CGC is Australian Prudential Regulation Authority data on total insurance premia for general, life and CTP insurance less fire services levy. This is a reasonably broad based base and so no further consideration of a broad base indicator is warranted.

D.1.5 Motor taxes

The CGC assesses motor taxes as three components—light vehicle registration fees, heavy vehicle registration fees and stamp duty on new registrations and vehicle transfers. The revenue base for registration fees is obtained from ABS data on vehicles registered in each State, while the revenue base for stamp duty is State data on vehicle sales. These are reasonably broad based and so no further consideration of a broad base indicator is warranted.

D.1.6 Mining Revenue

The CGC assesses mining revenue as three components—low royalty rate minerals, high royalty rate minerals and grants in lieu of royalties. The last component is assessed APC. The revenue base for the assessment of mining revenue is derived from ABS data on the gross value added from the mining industry supplemented with State-provided data.

Revenue is assessed for each royalty rate group by applying the national average tax rate to the relevant base. Assessed mining revenue is the sum of assessed revenue from low and high royalty rate minerals, and grants in lieu of royalties.

An alternative assessment methodology based on APC will bypass the need to determine an all-State national average policy while still assessing State capacity to raise mining revenue. The assessed value of mining revenue on an APC basis is presented in Table D.1.10.

Table D.1.10: APC assessed mining revenue ($m)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2004–05	406.3	22.6	1,005.7	1,368.5	103.6	20.1	0.0	7.7	2,934.4
2005–06	513.3	28.4	1,487.9	1,838.1	125.3	29.3	0.0	7.7	4,029.9
2006–07	487.1	35.9	1,353.3	2,135.5	144.1	33.4	0.0	80.5	4,269.7
2007–08	570.8	38.7	1,363.9	2,507.7	141.6	41.1	0.0	96.6	4,760.3
2008–09	1,278.5	47.2	3,341.4	3,218.8	152.4	31.8	0.0	227.6	8,297.7
2009–10	989.8	45.3	2,024.4	3,187.8	125.6	37.3	0.0	159.9	6,570.1
2010–11	1,243.7	44.4	2,705.6	5,214.8	156.3	42.7	0.0	153.5	9,561.0

Sources: CGC, *Report on GST Revenue Sharing Relativities 2011 Update* and CGC, *Report on GST Revenue Sharing Relativities 2012 Update*.

D.1.7 Other revenue

Other revenue is assessed on an EPC basis and so no further consideration of a broad base indicator is warranted.

D.1.8 Total revenue

The value of total assessed revenue from the current methodology is presented in Table D.1.11 and the value from the use of broad based indicators is presented in Table D.1.12.

Table D.1.11: Total assessed revenue—current methodology ($ million)

Year	*NSW*	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
2004–05	24,035.0	16,929.9	14,417.8	8,260.4	4,830.4	1,429.2	1,031.8	658.1	71,592.5
2005–06	25,322.4	17,849.0	15,841.6	9,629.7	5,068.6	1,499.9	1,088.3	705.0	77,004.5
2006–07	27,919.0	19,382.2	17,871.4	10,660.9	5,439.8	1,613.0	1,225.5	817.1	84,928.9
2007–08	27,171.4	19,772.1	18,150.2	11,270.8	5,479.6	1,623.7	1,247.2	806.1	85,521.1
2008–09	28,201.8	20,397.6	20,029.8	12,136.7	5,640.3	1,659.9	1,276.6	886.7	90,229.5
2009–10	29,784.6	22,036.1	19,685.4	13,182.2	5,946.9	1,761.9	1,430.0	944.5	94,771.7
2010–11	32,252.8	24,137.0	21,316.7	15,752.9	6,490.0	1,870.2	1,475.0	1,006.1	104,300.7

Table D.1.12: Total assessed revenue—broad-based indicators ($ million)

Year	*NSW*	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
2004–05	23,560.1	17,217.3	14,378.2	8,103.4	5,046.8	1,464.9	1,179.7	642.0	71,592.5
2005–06	24,592.1	18,027.1	16,181.3	9,287.7	5,330.5	1,564.6	1,308.3	713.1	77,004.5
2006–07	26,319.9	19,880.9	17,971.8	10,895.3	5,778.1	1,708.8	1,501.7	872.4	84,928.9
2007–08	25,892.5	20,171.2	18,088.4	11,639.9	5,661.3	1,713.6	1,464.2	889.9	85,521.1
2008–09	27,117.8	20,327.9	20,066.4	12,528.0	5,878.2	1,748.7	1,516.6	1,046.0	90,229.5
2009–10	28,541.1	22,161.1	19,905.7	13,287.3	6,242.2	1,884.3	1,692.5	1,057.5	94,771.7
2010–11	30,976.1	23,940.6	21,446.4	16,265.3	6,695.8	2,014.1	1,865.8	1,096.6	104,300.7

D.2 Broad-based indicators for expenses

D.2.1 School education

The current assessment method uses population aged 4 to 17, and is subject to a number of adjustments for differences in use and costs A broad-based approach would use ABS data on government school students. National total enrolments would be converted into national enrolment rates using national population data for 5 to 19 year olds. These national age enrolment rates would be applied to each State's population aged 5 to 19 years to arrive at an assessed number of enrolments. Each State's share of assessed enrolments relative to its population share would provide a demand indicator for schools education. Table D.2.1 presents data on the number of school students, Table D.2.2 presents data on the population of 5 to 19 year olds, Table D.2.3 presents data on the derived national enrolment rates, Table D.2.4 presents data on the number of students for each State implied by the national enrolment rate and Table D.2.5 presents the demand indicator.

Table D.2.1: Full and part-time school students ('000)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2006	1,111.7	833.5	662.6	345.5	257.1	84.2	59.8	38.8	3,393.3
2007	1,111.8	837.0	703.9	347.3	258.8	83.5	59.6	39.1	3,441.0
2008	1,111.0	841.6	712.4	351.7	258.4	83.1	59.3	39.5	3,457.1
2009	1,113.2	847.8	724.4	357.2	260.5	83.0	59.9	38.8	3,484.8
2010	1,121.4	852.6	731.6	360.8	261.6	83.1	60.4	39.4	3,510.9
2011	1,130.7	859.3	740.8	366.0	261.2	83.3	60.9	39.6	3,541.8

Source: ABS, *Schools Education*, Cat No. 4221.0, National Schools Statistics Collection, Table 42b.

Table D.2.2: Population of 5–19 year olds ('000)

June	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2006	1,354.7	1,006.0	849.8	426.3	302.2	100.2	66.5	49.4	4,155.0
2007	1,354.1	1,009.2	859.7	431.0	302.1	99.6	67.0	49.8	4,172.5
2008	1,355.8	1,012.5	869.9	436.8	301.6	99.2	67.3	50.5	4,193.5
2009	1,353.7	1,015.6	879.4	442.5	300.8	98.6	67.4	50.8	4,208.8
2010	1,349.0	1,012.4	882.5	444.7	299.1	98.1	67.4	50.5	4,203.7
2011	1,348.3	1,013.4	886.9	449.5	297.7	97.5	67.4	50.0	4,210.8

Source: ABS, *Australian Demographic Statistics*, Cat No. 3101.0.

Table D.2.3: Average school enrolment rates

Year	*School students ('000)*	*5-19 year olds ('000)*	*Average enrolment rate (%)*
2005–06	3,393.3	4,155.0	81.7
2006–07	3,441.0	4,172.5	82.5
2007–08	3,457.1	4,193.5	82.4
2008–09	3,484.8	4,208.8	82.8
2009–10	3,510.9	4,203.7	83.5
2010–11	3,541.8	4,210.8	84.1

Sources: Tables D.2.1and D.2.2.

Table D.2.4: Assessed school students ('000)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2006	1,106.3	821.5	694.0	348.1	246.8	81.9	54.3	40.3	3,393.3
2007	1,116.7	832.2	709.0	355.5	249.1	82.2	55.3	41.1	3,441.0
2008	1,117.7	834.7	717.1	360.1	248.7	81.8	55.4	41.6	3,457.1
2009	1,120.8	840.9	728.1	366.4	249.0	81.7	55.8	42.1	3,484.8
2010	1,126.7	845.5	737.1	371.4	249.8	81.9	56.3	42.2	3,510.9
2011	1,134.1	852.4	746.0	378.1	250.4	82.0	56.7	42.1	3,541.8

Sources: Tables D.3.2 and D.3.3.

Table D.2.5: School education broad-based demand indicator

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005–06	0.98687	0.97793	1.03890	1.03442	0.95807	1.01454	0.98971	1.17112
2006–07	0.98756	0.97626	1.03880	1.03417	0.95857	1.01328	0.99436	1.17395
2007–08	0.98830	0.97428	1.03845	1.03434	0.95957	1.01501	0.99606	1.17658
2008–09	0.98789	0.97346	1.03924	1.03196	0.96248	1.01666	0.99773	1.17683
2009–10	0.98955	0.96966	1.04015	1.03251	0.96328	1.02170	0.99832	1.16835
2010–11	0.98982	0.96818	1.04116	1.03537	0.96177	1.02154	0.99304	1.16268

The broad-based assessed school education expenses are obtained by multiplying the EPC value of expenses by the broad-based demand indicator for each state and Territory. As was noted for the assessment of expenses using global indicators, these assessed expenses reflect demand factors but not cost factors. The cost factors for Indigeneity and remoteness were applied to the broad-based assessment of school education expenses. The resultant assessed expenses are presented in Table D.2.6.

Table D.2.6: Broad-based assessed school education expenses adjusted for Indigeneity and remoteness ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	9,498.5	6,939.0	6,152.4	3,202.3	2,179.4	694.0	475.8	674.7	29,816.1
2006–07	10,030.3	7,316.8	6,564.4	3,406.8	2,305.5	728.3	505.2	714.5	31,571.9
2007–08	10,471.9	7,696.6	6,943.8	3,614.5	2,409.9	762.5	528.0	759.1	33,186.3
2008–09	11,191.0	8,213.1	7,525.3	3,929.4	2,573.6	814.2	562.0	834.4	35,643.1
2009–10	12,035.9	8,902.2	8,172.7	4,262.4	2,756.6	876.7	608.3	890.1	38,504.7
2010–11	12,561.0	9,304.5	8,597.7	4,483.4	2,880.9	909.9	637.0	913.1	40,287.6

D.2.2 Post-secondary education

Post-secondary education expenses are currently assessed as two components. The first component is service delivery expenses—these take into account socio-demographic composition, location costs, cross-border and service delivery scale factors. The second component covers administrative scale expenses.

An alternative approach is to use National Centre for Vocational Education Research (NCVER) age-group specific VET student data. The national total number of students in each age group are converted into national participation rates using ABS population data. The national age specific participation rates are applied to each State's population in the respective age groups to arrive at an assessed number of students. Each State's share of assessed students relative to its population share provides an demand indicator for post-secondary education. Table D.2.7 presents data on the number of VET and Table D.2.8 presents the demand indicator.

Table D.2.7: VET students ('000)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	553.8	448.2	292.0	135.6	117.4	41.3	23.5	21.7	1,633.5
2006–07	539.4	463.7	286.2	141.5	121.8	43.6	23.8	22.8	1,642.9
2007–08	542.2	481.9	290.3	148.5	124.5	46.1	24.6	22.2	1,680.3
2008–09	542.2	486.3	288.4	156.5	121.3	43.1	26.4	23.5	1,687.8
2009–10	577.5	519.9	301.3	165.5	123.3	49.5	29.1	24.0	1,790.1

Source: NCVER.

Table D.2.8: Post-secondary education broad-based indicator

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005–06	0.98724	1.00531	1.00702	1.02129	0.97668	0.95762	1.08515	1.07962
2006–07	0.98695	1.00478	1.00556	1.02521	0.97560	0.95509	1.09310	1.08655
2007–08	0.98702	1.00463	1.00270	1.03043	0.97410	0.95531	1.09425	1.09396
2008–09	0.98516	1.00718	1.00042	1.03208	0.97475	0.95428	1.09723	1.10414
2009–10	0.98470	1.00586	0.99788	1.03591	0.97768	0.96029	1.10634	1.10712
2010–11[1]	0.98465	1.00581	0.99783	1.03586	0.97763	0.96024	1.10628	1.10706

1. based on previous year's value adjusted for relative population growth.

The broad-based assessed post-secondary education expenses are obtained by multiplying the EPC value of expenses by the broad-based indicator for each State and Territory and then applying cost factors for Indigeneity and remoteness. The resultant assessed expenses are presented in Table D.2.9.

Table D.2.9: Broad-based assessed post-secondary education expenses adjusted for Indigeneity and remoteness ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	1,450.0	1,063.5	926.8	492.6	335.4	102.6	75.7	107.0	4,553.7
2006–07	1,436.4	1,059.7	928.1	495.8	332.1	101.1	75.9	107.2	4,536.3
2007–08	1,584.8	1,174.7	1,032.4	556.1	364.7	110.9	83.9	119.9	5,027.6
2008–09	1,665.7	1,246.8	1,095.0	595.3	382.6	116.0	88.8	127.9	5,318.2
2009–10	1,775.1	1,335.5	1,175.3	642.6	406.5	123.7	95.7	137.2	5,691.6
2010–11	1,801.0	1,359.6	1,198.1	657.7	411.5	125.0	97.8	138.6	5,789.3

D.2.3 Admitted patients

Admitted patients expenses are currently assessed as two components. The first component is service delivery expenses—these take into account socio-demographic composition, location costs and service delivery scale factors. Expenses are separated into in-patient and passenger transport expenses. The second component covers administrative scale expenses.

An alternative approach would use Australian Institute for Health and Welfare (AIHW) data on public hospitals separations by age group and sex to derive a demand indicator. The national total number of separations in each age group and sex are converted into national usage rates using ABS data on population by sex and age. These are applied to the respective State populations to obtain total assessed separations. The shares of national assessed separations relative to the shares of national population provide a broad-based indicator. Table D.2.10 presents the broad-based indicator.

Table D.2.10: Admitted patients broad-based demand indicator

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005–06	1.00844	1.00909	0.98269	0.97289	1.04585	1.03044	0.92485	0.80967
2006–07	1.00941	1.00819	0.97970	0.97552	1.04656	1.03677	0.93242	0.80927
2007–08	1.00979	1.00597	0.97730	0.97899	1.05011	1.04893	0.93915	0.80955
2008–09	1.01262	1.00665	0.97308	0.97409	1.05415	1.05315	0.93751	0.81021
2009–10	1.01481	1.00442	0.96955	0.97783	1.05332	1.06158	0.94421	0.81207
2010–11	1.01596	1.00362	0.96666	0.98191	1.05243	1.06632	0.94505	0.81159

Source: AIHW.

The broad-based assessed admitted patients expenses are obtained by multiplying the EPC value of expenses by the broad-based indicator for each State and then applying cost factors for Indigeneity and remoteness. The resultant assessed expenses are presented in Table D.2.11.

Table D.2.11: Broad-based assessed admitted patients expenses adjusted for Indigeneity and remoteness ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	5,883.1	4,240.2	3,592.3	1,864.0	1,426.7	438.6	256.4	318.8	18,019.9
2006–07	6,643.9	4,808.9	4,089.7	2,133.8	1,611.3	496.3	292.6	361.2	20,437.8
2007–08	7,383.4	5,356.5	4,582.1	2,405.9	1,790.5	554.6	328.0	404.1	22,805.3
2008–09	8,022.0	5,838.4	4,990.3	2,632.5	1,938.8	600.0	355.5	439.6	24,817.2
2009–10	8,555.1	6,236.5	5,340.1	2,836.8	2,048.1	639.8	381.9	470.5	26,508.7
2010–11	9,013.6	6,580.4	5,629.9	3,024.2	2,148.7	673.3	405.3	492.8	27,968.2

D.2.4 Community and other health services

This expense category covers a large number of health services for which no single demand indicator appears to exist. It includes expenses on the administration, inspection, support and operation of non-admitted patient services such as hospital emergency departments and outpatient clinics, community health and public health services.

As the CGC concluded in the 2010 Review, 60 per cent of all services in this category are funded by the Commonwealth and the private sector. This share is expected to significantly increase in the near future as a result of changes through the 2010 National Health reform, especially in relation to services to the elderly (who use a large proportion of these services). As part of the reforms, the majority of State aged care services will be the responsibility of the Commonwealth and no longer fulfil the criteria of 'what States do'. The remainder of the assessment is likely to fail materiality tests applied to category assessments. Therefore, rather than requiring significant adjustments the best broad base indicator for the remaining relevant expenditure in this category would be population share (i.e. assessed EPC), adjusted for Indigeneity and remoteness. The broad-based assessment of expenses is presented in Table D.2.12.

Table D.2.12: Broad-based assessed community and other health services expenses, adjusted for Indigeneity and remoteness ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	3,608.8	2,599.3	2,261.4	1,185.2	843.8	263.3	171.5	243.5	11,176.8
2006–07	3,620.2	2,623.5	2,296.0	1,203.1	846.8	263.3	172.6	245.5	11,271.0
2007–08	4,000.3	2,913.1	2,565.1	1,344.5	932.8	289.3	191.1	273.1	12,509.3
2008–09	4,438.9	3,249.8	2,873.6	1,514.3	1,030.6	319.3	212.5	304.0	13,942.9
2009–10	4,803.7	3,538.0	3,138.4	1,653.1	1,108.0	343.4	230.5	330.2	15,145.3
2010–11	5,308.3	3,923.0	3,484.7	1,842.7	1,221.6	377.8	256.6	363.3	16,777.9

D.2.5 Welfare and housing

The current approach, using Australian Government income support benefit recipient numbers, is conceptually adequate, but could be simplified as part of a suite of broad based measures..

The suggested broad-based indicator is derived from gross disposable income data from the Australian National Accounts. The indicator is calculated from each State's share of national gross disposable income relative to its share of the national population. If a State has a lower share of gross disposable income relative to its population share then it is assessed as having higher needs. The values of the broad-based indicator are presented in Table D.2.13.

Table D.2.13: Welfare and housing broad-based indicator

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005–06	0.95305	0.99565	1.06136	1.03391	1.06592	1.11246	0.66284	0.89372
2006–07	0.95837	1.00373	1.04577	1.03097	1.06729	1.08176	0.66008	0.90825
2007–08	0.97285	1.00449	1.05932	0.98093	1.03699	1.06804	0.64521	0.92103
2008–09	0.98242	1.03227	1.03603	0.94128	1.02946	1.05267	0.62681	0.90759
2009–10	0.97298	1.03579	1.04600	0.94676	1.03489	1.05283	0.59988	0.87200
2010–11	0.97699	1.04778	1.04646	0.90559	1.03097	1.05453	0.60779	0.87408

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

The broad-based assessed welfare and housing expenses are obtained by multiplying the EPC value of expenses less Commonwealth grants by the broad-based indicator for State, and then applying the cost factors for Indigeneity and remoteness. Commonwealth grants are then added back. The resultant assessed expenses are presented in Table D.2.14.

Table D.2.14: Broad-based assessed welfare and housing expenses adjusted for Indigeneity and remoteness ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	3,355.9	2,525.2	2,341.8	1,195.6	877.6	285.8	110.9	212.4	10,905.1
2006–07	3,745.9	2,843.0	2,592.3	1,339.2	975.8	307.5	123.0	240.7	12,167.4
2007–08	4,078.8	3,066.9	2,847.8	1,382.3	1,013.8	323.8	129.2	263.6	13,106.3
2008–09	4,741.7	3,627.0	3,325.8	1,589.9	1,160.2	363.8	144.1	444.7	15,397.2
2009–10	5,590.6	4,268.2	3,836.7	1,977.2	1,423.2	422.8	174.8	447.8	18,141.2
2010–11	5,608.8	4,419.6	3,963.0	1,881.9	1,368.8	428.2	176.8	800.1	18,647.2

D.2.6 Services to communities

The current assessment methodology takes into account a number of components, including water subsidies, electricity subsidies, concessions and community development expenses.

There are no obvious demand based indicators for this expense category and so the best broad based indicator would be population share (i.e. assessed EPC), adjusted for Indigeneity and remoteness. The broad-based assessment of expenses is presented in Table D.2.15.

Table D.2.15: Broad-based assessed services to communities expenses, adjusted for Indigeneity and remoteness ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	1,398.2	1,007.1	876.1	459.2	326.9	102.0	66.4	94.4	4,330.4
2006–07	1,616.8	1,171.7	1,025.4	537.3	378.2	117.6	77.1	109.6	5,033.7
2007–08	1,897.2	1,381.6	1,216.5	637.7	442.4	137.2	90.6	129.5	5,932.8
2008–09	1,932.3	1,414.6	1,250.9	659.2	448.6	139.0	92.5	132.3	6,069.3
2009–10	2,018.0	1,486.3	1,318.4	694.4	465.4	144.3	96.8	138.7	6,362.3
2010–11	2,132.7	1,576.1	1,400.0	740.3	490.8	151.8	103.1	146.0	6,740.7

D.2.7 Justice services

Justice services expenses include police, courts and corrective services expenses. The current assessment methodology attempts to take into account the impact of socio-demographic composition, service delivery scale and location factors on the cost of service delivery.

Broad-based indicators could be based on ABS data on persons in full-time custody, court defendants and recorded crime victims. The national incidence rates are applied to each State's population to arrive at an assessed number of corrective services clients, court defendants and crime victims. Each State's share of assessed numbers relative to its population share provides a demand indicator for justice services. Table D.2.16 presents that national incident rates for the three components of justice services, Table D.2.17 presents the assessed numbers for each State and Territory, Table D.2.18 presents the values of the derived broad-based indicator and Table D.2.19 presents the broad-based assessed justice services expenses, adjusted for Indigeneity and remoteness.

Table D.2.16: National justice services incident rates (per cent of population)

Year	*Persons in full-time custody*		*Court defendants*		*Recorded crime victims*
	male	Female	male	female	persons
2006	0.23	0.02	4.08	1.04	4.36
2007	0.23	0.02	4.77	1.25	4.08
2008	0.24	0.02	4.90	1.34	3.98
2009	0.24	0.02	4.99	1.32	3.67
2010	0.24	0.02	4.67	1.26	3.47
2011	0.24	0.02	8.15	2.23	3.54

Sources: ABS, *Criminal Courts, Australia, 2010–11*, Cat No. 4513.0, *Corrective Services, Australia, March 2012*, Cat No. 4512.0 and *Recorded Crime—Victims, Australia, 2011*, Cat No. 4510.0.

Table D.2.17: Assessed number of justice services clients

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
Persons in full-time custody									
2005–06	8,348	6,271	5,043	2,563	1,915	598	409	269	25,415
2006–07	8,632	6,519	5,270	2,690	1,978	617	428	281	26,414
2007–08	8,777	6,651	5,403	2,780	2,003	626	437	291	26,968
2008–09	9,200	7,012	5,711	2,964	2,094	656	461	309	28,406
2009–10	9,350	7,141	5,817	3,044	2,126	666	472	316	28,932
2010–11	9,315	7,128	5,802	3,075	2,111	662	476	314	28,883
Court defendants									
2005–06	173,623	130,473	104,673	53,041	39,865	12,447	8,506	5,517	528,146
2006–07	206,131	155,708	125,583	63,925	47,280	14,748	10,219	6,620	630,215
2007–08	216,675	164,264	133,130	68,308	49,497	15,470	10,783	7,069	665,195
2008–09	222,056	169,305	137,606	71,218	50,591	15,826	11,118	7,353	685,072
2009–10	210,813	161,128	130,947	68,341	47,987	15,003	10,650	7,019	651,888
2010–11	372,719	285,495	231,853	122,534	84,524	26,467	19,023	12,353	1,154,968
Recorded crime victims									
2005–06	295,612	221,521	176,146	88,742	67,925	21,278	14,478	9,078	894,781
2006–07	279,537	210,741	168,723	84,968	64,254	20,044	13,738	8,654	850,660
2007–08	276,525	209,482	168,860	85,127	63,366	19,701	13,610	8,647	845,318
2008–09	259,452	197,533	160,218	81,188	59,171	18,371	12,793	8,175	796,903
2009–10	248,955	190,653	154,943	78,654	56,700	17,528	12,320	7,900	767,653
2010–11	256,708	197,260	160,531	81,813	58,332	17,994	12,798	8,111	793,547
Total justice services									
2005–06	477,584	358,265	285,862	144,346	109,705	34,324	23,393	14,864	1,448,342
2006–07	494,300	372,968	299,575	151,583	113,512	35,409	24,385	15,555	1,507,289
2007–08	501,977	380,397	307,393	156,216	114,865	35,797	24,830	16,006	1,537,481
2008–09	490,708	373,850	303,535	155,370	111,856	34,853	24,372	15,837	1,510,381
2009–10	469,118	358,922	291,707	150,039	106,813	33,196	23,442	15,235	1,448,473
2010–11	638,743	489,882	398,186	207,422	144,967	45,123	32,296	20,779	1,977,398

Table D.2.18: Justice services broad-based indicator

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
2005–06	0.99810	0.99916	1.00260	1.00489	0.99780	0.99655	0.99820	1.01155
2006–07	0.99795	0.99881	1.00205	1.00682	0.99702	0.99701	1.00174	1.01438
2007–08	0.99807	0.99839	1.00087	1.00894	0.99665	0.99900	1.00303	1.01776
2008–09	0.99789	0.99856	0.99958	1.00970	0.99740	1.00096	1.00512	1.02210
2009–10	0.99866	0.99773	0.99777	1.01097	0.99838	1.00373	1.00839	1.02202
2010–11	0.99854	0.99663	0.99542	1.01744	0.99733	1.00634	1.01275	1.02802

Table D.2.19: Broad-based assessed justice services expenses, adjusted for Indigeneity and remoteness ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	3,417.7	2,464.3	2,151.3	1,130.1	798.9	249.0	162.4	233.8	10,607.4
2006–07	3,643.8	2,642.8	2,320.4	1,221.7	851.5	264.8	174.4	251.2	11,370.5
2007–08	3,907.7	2,846.6	2,512.7	1,327.7	909.9	282.8	187.6	272.1	12,247.2
2008–09	4,179.4	3,061.8	2,710.1	1,442.7	969.8	301.5	201.5	293.2	13,160.1
2009–10	4,494.3	3,307.1	2,933.7	1,565.7	1,036.3	322.9	217.8	316.1	14,194.0
2010–11	4,832.9	3,564.8	3,162.7	1,709.5	1,110.8	346.7	236.9	340.5	15,304.9

D.2.8 Roads

The current assessment methodology attempts to take into account local roads requirements, urban and rural road length, urban and rural road use bridges and location factors.

A suitable broad-based indicator would be one based on Bureau of Infrastructure, Transport and Regional Economics (BITRE) data on total vehicle kilometres travelled. Each State's share of the national vehicle kilometres travelled relative to its population share would provide a demand indicator for roads expenses. Table D3.2.20 presents the data on vehicle kilometres travelled, Table 3.3.21 the derived broad-based indicator and Table D.2.22 the broad-based indicator assessed expenses. As roads expenses do not cover services provided to citizens no adjustment has been made for Indigeneity or remoteness.

Table D.2.20: Vehicle kilometres travelled (million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005–06	63.3	56.6	45.9	23.5	15.5	5.2	3.5	1.9
2006–07	64.0	57.1	47.2	24.1	15.6	5.3	3.6	1.9
2007–08	64.2	57.4	48.4	24.3	15.6	5.3	3.6	2.0
2008–09	63.8	56.6	47.6	25.4	15.8	5.2	3.6	2.0
2009–10	65.5	57.1	47.4	25.1	16.0	5.3	3.6	2.1

Source: BITRE, *Road vehicle-kilometres travelled estimated from State/Territory fuel sales*.

Table D.2.21: Roads broad-based indicator

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005–06	0.88951	1.06138	1.08246	1.10004	0.94792	1.01516	1.00421	0.86942
2006–07	0.89012	1.05340	1.08762	1.10273	0.94392	1.02803	1.01877	0.85356
2007–08	0.88884	1.04902	1.09734	1.09285	0.94251	1.02993	1.01264	0.88554
2008–09	0.89073	1.03791	1.07616	1.13324	0.96723	1.02528	1.01930	0.88616
2009–10	0.90936	1.03517	1.05736	1.10298	0.97533	1.04513	1.00993	0.91877
2010–11[1]	0.90920	1.03498	1.05717	1.10278	0.97515	1.04494	1.00975	0.91860

1. Based on previous year's value adjusted for relative population growth.

Table D.2.22: Broad-based assessed roads expenses ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	1,219.6	1,090.5	884.3	452.8	298.6	100.2	67.4	36.6	4,150.0
2006–07	1,303.0	1,162.5	961.0	490.7	317.6	107.9	73.3	38.7	4,454.6
2007–08	1,536.3	1,373.6	1,158.2	581.5	373.3	126.8	86.1	47.9	5,283.8
2008–09	1,658.7	1,471.5	1,237.5	660.4	410.8	135.2	93.6	52.0	5,719.7
2009–10	1,640.6	1,430.2	1,187.3	628.7	400.8	132.8	90.2	52.6	5,563.1
2010–11	1,842.3	1,611.5	1,339.6	712.2	449.0	148.4	102.0	58.8	6,263.8

D.2.9 Transport services

The current assessment methodology attempts to take into account urban and rural operating subsidies, capital subsidies and location factors. As most transport services are provided in urban centres an alternative assessment methodology could be based on each State's share of the national urban population relative its share of the national population. Table D.2.23 presents the data on urban population, Table D.2.24 the derived broad-based indicator and Table D.2.25 the broad-based indicator assessed expenses. There is no need to make an adjustment for Indigeneity or remoteness for transport services expenses.

Table D.2.23: Urban population ('000)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2005–06	5,429.9	4,302.8	3,264.4	1,649.0	1,145.8	388.8	334.1	97.8	16,612.7
2006–07	5,509.7	4,386.5	3,355.1	1,694.5	1,159.1	391.6	341.1	99.9	16,937.5
2007–08	5,605.4	4,480.5	3,449.2	1,749.0	1,172.6	395.4	346.3	102.7	17,301.1
2008–09	5,702.3	4,587.5	3,545.2	1,807.6	1,188.1	399.6	352.3	106.0	17,688.6
2009–10	5,793.9	4,676.0	3,619.9	1,850.1	1,203.2	403.4	358.6	108.1	18,013.2
2010–11	5,793.9	4,676.0	3,619.9	1,850.1	1,203.2	403.4	358.6	108.1	18,013.2

Table D.2.24: Transport services broad-based indicator

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
2005–06	0.98934	1.04621	0.99818	1.00086	0.90857	0.98413	1.24298	0.58014
2006–07	0.98990	1.04537	0.99871	1.00162	0.90602	0.98130	1.24679	0.58003
2007–08	0.99043	1.04503	0.99801	1.00386	0.90412	0.98058	1.24315	0.58029
2008–09	0.99015	1.04628	0.99688	1.00306	0.90463	0.97985	1.24057	0.58436
2009–10	0.99180	1.04521	0.99563	1.00243	0.90432	0.98087	1.24029	0.58323
2010–11	0.99429	1.04428	0.99339	0.99623	0.90867	0.98768	1.23432	0.58720

Table D.2.25: Broad-based assessed transport services expenses ($ million)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2005–06	1,680.4	1,331.6	1,010.2	510.3	354.6	120.3	103.4	30.3	5,141.0
2006–07	2,185.8	1,740.2	1,331.1	672.3	459.9	155.4	135.3	39.7	6,719.6
2007–08	1,986.0	1,587.5	1,222.1	619.7	415.4	140.1	122.7	36.4	6,129.9
2008–09	2,306.2	1,855.3	1,433.8	731.1	480.5	161.6	142.5	42.9	7,153.9
2009–10	2,532.0	2,043.5	1,582.0	808.5	525.8	176.3	156.7	47.2	7,872.1
2010–11	2,368.4	1,911.4	1,479.7	756.3	491.8	164.9	146.6	44.2	7,363.3

D.2.10 Services to industry

The current assessment method separately assesses services to agriculture and services to other industries based on the respective factor income. A broad-based indicator would use total factor income. Each State's share of factor income relative to its population share could be a suitable indicator. Table D.2.26 presents the data on factor income, Table D.2.27 the derived broad-based indicator and Table D.2.28 the broad-based indicator assessed expenses. As services to industry expenses do not cover services provided to citizens no adjustment has been made for Indigeneity or remoteness.

Table D.2.26: Factor income ($ billion)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	293.3	208.8	172.6	108.9	58.4	16.5	18.4	10.9	887.8
2006–07	310.7	224.2	191.8	127.0	63.1	18.6	20.4	12.1	967.8
2007–08	333.5	243.3	208.3	142.5	69.4	19.6	22.3	14.1	1,053.0
2008–09	351.4	251.4	235.3	163.9	71.7	19.8	24.1	15.4	1,133.0
2009–10	366.7	264.4	227.5	168.9	75.4	21.2	26.4	15.0	1,165.5
2010–11	391.0	279.9	241.0	203.4	80.6	22.2	27.9	16.0	1,262.1

Table D.2.27: Services to industry broad-based indicator

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005–06	0.99043	1.04285	1.00323	0.80052	1.14373	1.26547	0.77364	0.81655
2006–07	1.01033	1.05587	0.98792	0.75163	1.14366	1.21315	0.75795	0.80380
2007–08	1.01763	1.05700	0.99518	0.73349	1.12089	1.23199	0.74822	0.75514
2008–09	1.02679	1.09262	0.94671	0.68863	1.14790	1.28876	0.73877	0.73794
2009–10	1.01061	1.07360	1.01375	0.69332	1.11937	1.22983	0.69408	0.78354
2010–11	1.01323	1.08760	1.02794	0.62067	1.11672	1.25243	0.70921	0.78329

Table D.2.28: Broad-based assessed services to industry expenses ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	1,796.9	1,417.8	1,084.5	436.0	476.8	165.3	68.7	45.5	5,491.5
2006–07	1,998.4	1,574.5	1,179.4	451.9	520.0	172.1	73.7	49.2	6,019.2
2007–08	2,271.7	1,787.5	1,356.6	504.1	573.4	195.9	82.2	52.7	6,824.2
2008–09	2,293.5	1,858.1	1,305.9	481.3	584.8	203.8	81.4	51.9	6,860.8
2009–10	2,311.6	1,880.6	1,443.1	501.0	583.1	198.0	78.6	56.9	7,052.9
2010–11	2,363.3	1,949.3	1,499.3	461.4	591.9	204.8	82.5	57.7	7,210.2

D.2.11 Other Expenses

The current assessment methodology assesses three components to other expenses—service delivery expenses which take into account cross border and location factors, other expenses which include administrative scale, natural disasters expenses, and native title and land rights expenses, and miscellaneous expenses which is the balancing item to ensure that total expenses agree with GFS total expenses (assessed EPC).

An alternative broad-based assessment methodology would be population, that is, assess all of other expenses on an EPC basis. Table D.2.29 presents the broad-based assessed other expenses.

Table D.2.29: Broad-based assessed other expenses ($ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2005–06	7,998.3	5,993.7	4,766.0	2,401.1	1,837.8	575.7	391.7	245.6	24,210.0
2006–07	8,448.3	6,369.1	5,099.2	2,568.0	1,941.9	605.8	415.2	261.6	25,709.0
2007–08	8,862.0	6,713.4	5,411.5	2,728.1	2,030.7	631.4	436.2	277.1	27,090.4
2008–09	10,278.3	7,825.4	6,347.1	3,216.3	2,344.1	727.8	506.8	323.9	31,569.8
2009–10	12,097.9	9,264.8	7,529.4	3,822.2	2,755.3	851.8	598.7	383.9	37,304.0
2010–11	11,945.0	9,178.8	7,469.7	3,806.9	2,714.3	837.3	595.5	377.4	36,924.9

D.2.12 Depreciation

The current assessment methodology is quite complex as it involves cost and stock factors calculated for each of the expense categories. An alternative broad-based assessment methodology that is policy neutral would be population, that is, assess depreciation on an EPC basis. Table D.2.30 presents the broad-based assessed depreciation expenses.

Table D.2.30: Broad-based assessed depreciation expenses ($ million)

Year	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2005–06	2,146.8	1,608.7	1,279.2	644.5	493.3	154.5	105.1	65.9	6,498.0
2006–07	2,325.9	1,753.5	1,403.9	707.0	534.6	166.8	114.3	72.0	7,078.0
2007–08	2,423.3	1,835.8	1,479.8	746.0	555.3	172.7	119.3	75.8	7,408.0
2008–09	2,747.9	2,092.1	1,696.9	859.9	626.7	194.6	135.5	86.6	8,440.0
2009–10	2,949.9	2,259.1	1,835.9	932.0	671.8	207.7	146.0	93.6	9,096.0
2010–11	3,055.5	2,347.9	1,910.8	973.8	694.3	214.2	152.3	96.5	9,445.4

D.2.13 Total expenses

The total value of expenses obtained from summing the assessed expenses of the expense categories discussed above was subject to a further adjustment to obtain the value of total assessed expenses. This adjustment was for population scale, where the first 500,000 of each State's population was given a 10 per cent weighting. The scale indicator was obtained as a State's share of the weighted population relative to the unweighted population. This adjustment increased assessed expenses for the smaller States relative to the more populous States. The value of total assessed expenses from the current methodology is presented in Table D.2.31 and the value from the use of broad based indicators is presented in Table D.2.32.

D.3 GST impact of broad-based indicators

The calculations required for the resultant per capita relativities and the GST grants from using the broad-based indicators for the revenue and expenses assessments (adjusted for Indigeneity, remoteness and scale) are presented in Tables D.3.1 and D.3.2, respectively.

Table D.2.31: Total assessed expenses—current methodology ($ million)

Year	*NSW*	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
2005–06	43,639.8	31,495.1	26,747.2	14,150.4	10,400.2	3,471.1	2,155.0	2,841.2	134,900.0
2006–07	47,124.3	33,991.7	29,325.1	15,522.2	11,257.1	3,748.1	2,319.9	3,080.6	146,369.0
2007–08	50,260.9	36,426.0	31,744.6	17,099.7	12,104.0	3,983.9	2,471.6	3,460.1	157,551.0
2008–09	54,918.5	40,243.4	35,537.6	19,149.9	13,204.6	4,362.5	2,735.6	3,939.9	174,092.0
2009–10	60,407.0	44,338.2	39,136.7	21,202.0	14,438.2	4,751.2	3,032.5	4,130.1	191,436.0
2010–11	62,260.3	45,752.1	41,076.3	22,032.8	14,818.7	4,906.2	3,144.1	4,732.8	198,723.3

Table D.2.32: Total assessed expenses—broad-based indicators ($ million)

Year	*NSW*	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
2005–06	43,022.8	32,036.3	27,183.7	14,061.6	10,387.1	3,504.7	2,213.0	2,490.7	134,900.0
2006–07	46,538.7	34,802.3	29,633.8	15,319.0	11,222.3	3,759.8	2,404.5	2,688.7	146,369.0
2007–08	49,916.2	37,452.3	32,156.2	16,541.0	11,968.3	4,020.8	2,569.4	2,926.8	157,551.0
2008–09	54,927.2	41,444.4	35,600.3	18,407.7	13,121.5	4,398.5	2,821.1	3,371.3	174,092.0
2009–10	60,242.9	45,619.3	39,284.2	20,423.9	14,362.8	4,783.4	3,098.4	3,621.2	191,436.0
2010–11	62,255.8	47,383.0	40,917.6	21,148.6	14,761.2	4,935.4	3,224.9	4,096.7	198,723.3

Table D.3.1: Determination of per capita relativities resulting from broad-based revenue and expense assessments

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Average*
2005–06									
Assessed net lending ($pc)	127.65	150.22	191.13	169.77	129.26	125.27	144.75	183.01	150.82
plus:									
Assessed expenses ($pc)	6,339.54	6,299.54	6,722.29	6,902.17	6,661.11	7,174.53	6,658.06	11,950.94	6,567.14
Assessed investment ($pc)	170.21	215.92	319.38	267.84	148.77	154.90	191.44	495.87	222.23
	6,637.40	6,665.68	7,232.79	7,339.79	6,939.13	7,454.70	6,994.25	12,629.82	6,940.18
less:									
Assessed revenue ($pc)	3,623.72	3,544.79	4,001.48	4,558.90	3,418.34	3,202.83	3,936.07	3,421.58	3,748.70
Assistance requirement ($pc)	3,013.68	3,120.89	3,231.31	2,780.89	3,520.79	4,251.88	3,058.17	9,208.25	3,191.49
less:									
Commonwealth payments ($pc)	1,372.90	1,365.39	1,385.14	1,390.85	1,398.71	1,356.72	1,321.94	1,910.50	1,381.43
GST requirement ($pc)	1,640.78	1,755.50	1,846.17	1,390.04	2,122.08	2,895.16	1,736.23	7,297.75	1,810.05
Per capita relativity	0.90648	0.96986	1.01996	0.76796	1.17239	1.59949	0.95922	4.03179	1.00000
2006–07									
Assessed net lending ($pc)	32.13	60.39	92.22	90.35	33.76	13.93	48.38	70.07	57.21
plus:									
Assessed expenses ($pc)	6,785.50	6,730.79	7,158.46	7,348.18	7,118.50	7,645.20	7,133.26	12,662.42	7,012.94
Assessed investment ($pc)	267.36	294.35	400.34	397.32	244.02	231.89	249.55	508.05	312.97
	7,084.99	7,085.53	7,651.02	7,835.85	7,396.29	7,891.02	7,431.19	13,240.55	7,383.11
less:									
Assessed revenue ($pc)	3,837.52	3,844.97	4,341.34	5,226.24	3,665.18	3,474.77	4,455.15	4,108.44	4,069.18
Assistance requirement ($pc)	3,247.47	3,240.55	3,309.68	2,609.61	3,731.10	4,416.25	2,976.04	9,132.11	3,313.94
less:									
Commonwealth payments ($pc)	1,418.17	1,382.87	1,436.50	1,436.67	1,438.37	1,384.28	1,339.42	1,864.19	1,418.90
GST requirement ($pc)	1,829.31	1,857.68	1,873.17	1,172.94	2,292.73	3,031.97	1,636.62	7,267.92	1,895.03
Per capita relativity	0.96531	0.98029	0.98846	0.61895	1.20986	1.59996	0.86363	3.83524	1.00000

Table D.3.1 (continued): Determination of per capita relativities resulting from broad-based revenue and expense assessments

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Average*
2007–08									
Assessed net lending ($pc)	-221.75	-197.66	-164.04	-158.84	-237.10	-253.81	-214.44	-172.39	-199.19
plus:									
Assessed expenses ($pc)	7,177.06	7,108.37	7,571.43	7,725.63	7,509.58	8,114.58	7,505.88	13,458.06	7,410.38
Assessed investment ($pc)	333.21	349.98	496.92	519.37	282.45	232.23	251.30	836.33	386.48
	7,288.52	7,260.68	7,904.31	8,086.17	7,554.93	8,093.00	7,542.73	14,122.00	7,597.67
less:									
Assessed revenue ($pc)	3,722.89	3,828.45	4,259.07	5,436.52	3,552.20	3,458.34	4,277.32	4,091.97	4,022.47
Assistance requirement ($pc)	3,565.63	3,432.24	3,645.24	2,649.65	4,002.73	4,634.66	3,265.40	10,030.03	3,575.20
less:									
Commonwealth payments ($pc)	1,558.99	1,524.44	1,647.40	1,618.78	1,596.71	1,606.79	1,476.85	2,291.43	1,584.22
GST requirement ($pc)	2,006.64	1,907.80	1,997.85	1,030.87	2,406.02	3,027.88	1,788.56	7,738.59	1,990.98
Per capita relativity	1.00786	0.95822	1.00345	0.51777	1.20846	1.52079	0.89833	3.88682	1.00000
2008–09									
Assessed net lending ($pc)	-513.46	-489.62	-460.18	-435.82	-536.33	-543.00	-504.73	-476.86	-490.79
plus:									
Assessed expenses ($pc)	7,764.48	7,695.00	8,149.39	8,315.50	8,133.12	8,781.02	8,087.51	15,124.35	8,012.28
Assessed investment ($pc)	467.45	417.46	662.54	627.04	372.50	345.48	303.69	773.73	501.19
	7,718.47	7,622.85	8,351.74	8,506.71	7,969.29	8,583.50	7,886.46	15,421.23	8,022.68
less:									
Assessed revenue ($pc)	3,833.36	3,774.28	4,593.46	5,659.39	3,643.51	3,490.97	4,347.80	4,692.56	4,152.66
Assistance requirement ($pc)	3,885.11	3,848.57	3,758.28	2,847.32	4,325.78	5,092.54	3,538.66	10,728.67	3,870.02
less:									
Commonwealth payments ($pc)	1,961.03	1,820.40	2,148.33	1,928.03	2,016.87	1,975.18	1,704.94	3,279.71	1,974.36
GST requirement ($pc)	1,924.08	2,028.17	1,609.95	919.29	2,308.91	3,117.35	1,833.72	7,448.95	1,895.67
Per capita relativity	1.01499	1.06990	0.84928	0.48494	1.21799	1.64446	0.96732	3.92946	1.00000

Table D.3.1 (continued): Determination of per capita relativities resulting from broad-based revenue and expense assessments

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Average*
2009–10									
Assessed net lending ($pc)	-663.72	-637.07	-628.10	-620.11	-669.92	-689.92	-647.13	-631.59	-645.90
plus:									
Assessed expenses ($pc)	8,394.48	8,300.70	8,795.39	9,007.97	8,787.42	9,467.15	8,723.94	15,901.19	8,651.02
Assessed investment ($pc)	750.38	747.12	916.45	842.81	762.20	739.64	653.82	1,330.23	797.61
	8,481.13	8,410.75	9,083.74	9,230.67	8,879.70	9,516.87	8,730.64	16,599.83	8,802.72
less:									
Assessed revenue ($pc)	3,977.03	4,032.33	4,456.71	5,860.39	3,819.09	3,729.37	4,765.58	4,643.47	4,282.75
Assistance requirement ($pc)	4,504.11	4,378.42	4,627.03	3,370.28	5,060.61	5,787.50	3,965.06	11,956.36	4,519.98
less:									
Commonwealth payments ($pc)	2,449.98	2,324.54	2,680.70	2,560.21	2,843.13	2,869.29	2,231.69	4,197.31	2,529.78
GST requirement ($pc)	2,054.12	2,053.88	1,946.33	810.07	2,217.48	2,918.20	1,733.37	7,759.06	1,990.20
Per capita relativity	1.03212	1.03200	0.97796	0.40703	1.11420	1.46629	0.87096	3.89864	1.00000
2010–11									
Assessed net lending ($pc)	-696.18	-680.51	-674.25	-656.12	-706.79	-716.55	-662.45	-715.92	-684.62
plus:									
Assessed expenses ($pc)	8,573.87	8,492.23	9,011.33	9,138.91	8,946.45	9,696.90	8,908.89	17,855.76	8,853.46
Assessed investment ($pc)	776.53	724.50	829.01	865.56	694.13	794.15	737.01	1,033.76	779.73
	8,654.23	8,536.22	9,166.09	9,348.35	8,933.79	9,774.49	8,983.45	18,173.61	8,948.57
less:									
Assessed revenue ($pc)	4,266.03	4,290.76	4,723.16	7,028.70	4,058.17	3,957.21	5,154.28	4,779.76	4,646.77
Assistance requirement ($pc)	4,388.20	4,245.46	4,442.93	2,319.66	4,875.62	5,817.28	3,829.16	13,393.85	4,301.80
less:									
Commonwealth payments ($pc)	2,231.39	2,095.52	2,212.62	2,319.37	2,371.38	3,003.34	2,145.36	4,986.03	2,257.45
GST requirement ($pc)	2,156.81	2,149.94	2,230.31	0.29	2,504.24	2,813.94	1,683.81	8,407.82	2,044.34
Per capita relativity	1.05501	1.05165	1.09097	0.00014	1.22496	1.37645	0.82364	4.11272	1.00000

Sources: CGC, *Report on GST Revenue Sharing Relativities 2012 Update* and Tables 3.2.12 and 3.3.32.

Table D.3.2: GST Grants resulting from broad-based revenue and expenses assessments

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2009–10									
31 December population ('000)	7,176,491	5,495,841	4,466,458	2,267,315	1,634,468	505,260	355,155	227,730	22,128,718
GST relativities	0.95989	0.96946	1.00396	0.63489	1.19690	1.57341	0.90706	3.91795	
Adjusted population ('000)	6,888,618	5,327,979	4,484,128	1,439,502	1,956,299	794,983	322,147	892,235	22,105,890
Share of adjusted population (%)	31.2	24.1	20.3	6.5	8.8	3.6	1.5	4.0	
Share of GST pool ($m)	13,870.2	10,727.8	9,028.7	2,898.4	3,939.0	1,600.7	648.6	1,796.5	44,510.0
2010–11									
31 December population ('000)	7,261,105	5,579,574	4,540,687	2,314,126	1,649,947	508,971	361,987	229,434	22,445,831
GST relativities	0.99606	1.00280	0.94706	0.54055	1.21210	1.58840	0.90976	3.88384	
Adjusted population ('000)	7,232,461	5,595,203	4,300,320	1,250,911	1,999,907	808,452	329,322	891,085	22,407,661
Share of adjusted population (%)	32.3	25.0	19.2	5.6	8.9	3.6	1.5	4.0	
Share of GST pool ($m)	14,669.8	11,348.9	8,722.4	2,537.3	4,056.5	1,639.8	668.0	1,807.4	45,450.0
2011–12									
31 December population ('000)	7,340,448	5,659,780	4,616,456	2,376,234	1,662,822	512,131	368,351	232,007	22,768,229
GST relativities	1.01832	1.02004	0.94356	0.46991	1.18022	1.54385	0.91220	3.90497	
Adjusted population ('000)	7,474,952	5,773,186	4,355,913	1,116,624	1,962,492	790,653	336,011	905,981	22,715,812
Share of adjusted population (%)	32.9	25.4	19.2	4.9	8.6	3.5	1.5	4.0	
Share of GST pool ($m)	15,005.3	11,589.2	8,744.1	2,241.5	3,939.5	1,587.2	674.5	1,818.7	45,600.0
2012–13									
31 December population ('000)	7,424,410	5,749,634	4,694,804	2,427,901	1,679,657	515,633	374,663	234,782	23,101,484
GST relativities	1.03404	1.05118	0.97274	0.29737	1.18572	1.49573	0.88731	3.98027	
Adjusted population ('000)	7,677,139	6,043,909	4,566,802	721,986	1,991,601	771,249	332,441	934,496	23,039,623
Share of adjusted population (%)	33.3	26.2	19.8	3.1	8.6	3.3	1.4	4.1	
Share of GST pool ($m)	16,060.9	12,644.1	9,554.0	1,510.4	4,166.5	1,613.5	695.5	1,955.0	48,200.0

E. Impact of data revisions

Key points

- Victorian submissions to the Panel have highlighted the difficulty posed by volatility in data used to determine the GST distribution. Data revisions have a large impact on GST relativities and are difficult to estimate. Data revisions introduce additional volatility into the assessment of GST relativities, with data from the most recent assessment years generally subject to the largest revisions.
- This Appendix provides further insight into the extent of data revisions, by examining in detail the data revisions between the *2011 Update* and the *2012 Update*. It indicates that revisions were widespread, affecting all components, most categories of revenue and expenses and various elements of individual assessments. These changes were inadequately explained in the associated Update report.
- The Panel proposes not back-casting data to reduce volatility. This submission proposes another approach: using data that is one year older in the calculation of GST relativities. This represents a trade-off between accuracy, volatility and contemporaneity. This approach would continue to use the data that is currently used in the assessment, but with a lag of one year. This Appendix outlines how both measures would be applied, and explores the extent to which they will increase predictability. It shows that predictability can be increased by delaying data updates for one year, while maintaining accuracy.

In the CGC's 2012 Update, data revisions accounted for almost a third of the change in the GST distribution.[24] This indicates that data revisions are a significant issue in regard to the stability and predictability of GST relativities.

Measures to achieve predictability and stability may be at the expense of other objectives. Given the importance of GST revenues to the States, confidence in forward predictions of GST revenues is an important component of financial management. On the other hand, it could be argued that it is more important that each State receives its 'correct' share of the GST pool.

E.1 Not back-casting data revisions

The Panel has proposed a default approach where data changes are not back-cast. Because the 2010 Review changed the assessment methodology and average period for GST relativities, it is not possible to create a long time series of the impact of the Review Panel's proposal. Table E.1.1 presents the GST relativities for the three financial years 2010–11 to 2012–13, as published in the various CGC reports, and what they would have been if there had been no revisions to past year annual per capita relativities.

[24] CGC, *Report on GST Revenue Sharing Relativities 2012 Update*, p. 96

Table E.1.1: GST relativities with and without back-casting, 2010–11 to 2012–13

	2010–11	*2011–12*		*2012–13*	
		No back-casting	*2011 Update*	*No back-casting*	*2012 Update*
NSW	0.95205	0.97621	0.95776	0.97795	0.95312
Victoria	0.93995	0.92138	0.90476	0.91791	0.92106
Queensland	0.91322	0.74005	0.92861	0.79810	0.98477
Western Australia	0.68298	0.65872	0.71729	0.52440	0.55105
South Australia	1.28497	1.26309	1.27070	1.27197	1.28472
Tasmania	1.62091	1.58169	1.59942	1.56140	1.58088
ACT	1.15295	1.11394	1.11647	1.17474	1.19757
Northern Territory	5.07383	5.21257	5.35708	5.38706	5.52818

Sources: CGC, *Report on GST Revenue Sharing Relativities 2010 Review*, CGC, *Report on GST Revenue Sharing Relativities 2011 Update and* CGC, *Report on GST Revenue Sharing Relativities 2012 Update*.

The limited data series available, and the impact of changes to circumstances in the most recent assessment year, make it difficult to observe patterns in the fluctuation of GST relativities. The no back-casting proposal would clearly increase the predictability of the system, as treasuries could hold past per capita relativities constant when projecting GST relativities. This proposal would arguably reduce the accuracy of relativities as past errors would remain uncorrected.

E.2 Suggested options to improve predictability and stability

An alternative option to the Review Panel's proposal of not back-casting data would be to not use the most recent financial year data for the updates. This option would represent some trade-off between predictability and contemporaneity. However, it may introduce more predictability to GST relativities without 'locking in' past per capita relativities (compromising accuracy).

Table E.2.1 presents the GST relativities for Victoria that result from the current methodology and those that would result from using data that is a year older than that currently used. Unfortunately, as discussed above, the short time series makes it difficult to discern any trends. However, the current methodology generally has more year to year variation than the one year lag proposal over the period examined.

Table E.2.1: Current and alternative GST relativities, 2010–11 to 2012–13

	2010–11		*2011–12*		*2012–13*	
	2010 Review	*1 year lag*	*2011 Update*	*1 year lag*	*2012 Update*	*1 year lag*
NSW	0.95205	0.92281	0.95776	0.92694	0.95312	0.94349
Victoria	0.93995	0.93298	0.90476	0.92144	0.92106	0.92339
Queensland	0.91322	0.97272	0.92861	0.92379	0.98477	0.92658
Western Australia	0.68298	0.69675	0.71729	0.75434	0.55105	0.69775
South Australia	1.28497	1.27456	1.27070	1.30037	1.28472	1.28653
Tasmania	1.62091	1.06762	1.59942	1.64594	1.58088	1.61018
ACT	1.15295	1.16678	1.11647	1.15261	1.19757	1.14114
Northern Territory	5.07383	4.93121	5.35708	5.24700	5.52818	5.41163

Sources: CGC, *Report on GST Revenue Sharing Relativities 2010 Review*, CGC, *Report on GST Revenue Sharing Relativities 2011 Update and* CGC, *Report on GST Revenue Sharing Relativities 2012 Update*.

E.3 Impact of revisions to 2009–10 data

The lack of detail in the 2012 Update Report makes it difficult for States to understand one of the main causes for the change in the GST relativities between 2011–12 and 2012–13. To highlight the widespread nature of the data revisions and the impact they have on the per capita relativities, the following analysis examines in detail the data revisions that produced changes to the per capita relativities for 2009–10 between the *2011 Update* and the *2012 Update*. The source of revisions is found to be spread over all the components used in the determination of the annual relativities, and across a wide range of assessment categories. However, the 2012 Update Report does not adequately identify the revisions that occurred or explain the reason for these revisions.

The 2012 Update has resulted in some noticeable revisions to the 2009–10 annual per capita relativities, as illustrated in Table E.3.1.

Table E.3.1: Annual per capita relativities, 2009–10

	Update 2011	*Update 2012*	*Difference*
NSW	0.97819	0.95681	-0.02138
Victoria	0.89986	0.92656	0.02670
Queensland	0.98295	0.98642	0.00347
Western Australia	0.62637	0.60310	-0.02326
South Australia	1.22545	1.22835	0.00290
Tasmania	1.53796	1.55618	0.01821
ACT	1.07965	1.13308	0.05343
Northern Territory	5.23021	5.27087	0.04066

Sources: CGC, *Report on GST Revenue Sharing Relativities 2011 Update and* CGC, *Report on GST Revenue Sharing Relativities 2012 Update*.

The annual per capita relativities for Queensland and South Australia remained approximately the same between the *2011 Update* and the *2012 Update*, but those for the other States changed more significantly. The relativities for NSW and WA were revised downwards, while those for the other States were revised upwards.

Revisions to the population estimates would account for some but not the bulk of the changes. The update report notes as a major revision the '*…replacing estimates of Commonwealth and privately funded service provision for 2008–09 and 2009–10 in the Community and other health assessment with newly available data for 2008–09 and 2009–10'.*

The errors corrected relate to removing the value of uranium production from the NT's revenue base, having Victorian land tax collected from electricity transmission easements not affecting the relativities and correcting the discount applied to allowances for interstate differences in road stocks.

E.4 Sources of data revision

Although the 2012 Update identifies a number of data revisions, there would appear to be other revisions and corrections that have not been identified in the Update Report. Table E.4.1 presents the revisions to the components that make up the GST requirement, the basis of determining the per capita relativities.

Most revisions are relatively minor. However, there are larger revisions to the values of assessed revenue (a 3.1 per cent downward revision in the per capita amount) and in Commonwealth non-GST payments (a 5.3 per cent upward revision).

Table E.4.1: Revisions to components of GST requirement, 2009–10

Component	*Revision*	
	$m	*$ per capita*
Assessed net lending	-400.0	-18.08
Assessed expenses	-268.9	-12.15
Assessed investment	398.8	18.02
Assessed revenue	-3,078.4	-139.12
Commonwealth non-GST payments	2,808.3	126.91

Sources: CGC, *Report on GST Revenue Sharing Relativities 2011 Update and* CGC, *Report on GST Revenue Sharing Relativities 2012 Update*.

As the contribution of these components to the GST requirement varies between States, it would be expected that the revisions would have an impact on the per capita relativities even if there were no changes to revenue raising capacities and expense disabilities.

Table E.4.2 presents the differences in the per capita relativities between the *2011 Update* and the 2012 Update, and the differences that would result if the *2011 Update* aggregate revenue raising capacities and expense disabilities were applied to the *2012 Update* values of revenue and expenses, respectively. It can be seen that the data revisions in the *2012 Update* must also cover those relating to revenue raising capacities and expense disabilities.

Table E.4.2: Differences in per capita relativities, 2009–10

	2011 Update to 2012 Update	*2012 Update values with unchanged capacities and disabilities*
NSW	-0.02138	-0.00066
Victoria	0.02670	0.00110
Queensland	0.00347	-0.00015
Western Australia	-0.02326	0.02415
South Australia	0.00290	-0.02018
Tasmania	0.01821	-0.02404
ACT	0.05343	0.00047
Northern Territory	0.04066	-0.04618

E.5 Revisions to own-source revenue

Table E.5.1 presents data relating to total own-source revenue by assessment category from the *2011 Update* and *2012 Update*. By far the greatest revenue impact was for other revenue, which is essential the balancing item that allows assessed own-source revenue to match GFS own-source revenue. There was a downward revision in the GFS value of own-source revenue between the *2011 Update* and the *2012 Update*. However, there was no mention of this in the *2012 Update*. The value of own-source revenue in the *2012 Update* is about $14,000 million less than the value in the ABS in its GFS publication. While this might be explained by the CGC netting sales and goods and services from the relevant expense categories, the value of CGC expenses and expenses in the ABS GFS publication is quite close.

Table E.5.1: Own-source revenue by CGC revenue category, 2009–10

	Update 2011		*Update 2012*		*Difference*	
	$m	$pc	$m	$pc	$m	$pc
Payroll tax	16,768.8	757.78	16,795.0	758.97	26.2	1.19
Land tax	5,804.4	262.30	5,804.1	262.29	-0.3	-0.01
Stamp duty on conveyances	11,998.8	542.23	11,996.3	542.11	-2.5	-0.11
Insurance tax	3,146.1	142.17	3,146.5	142.19	0.4	0.02
Motor taxes	7,158.0	323.47	7,159.5	323.54	1.5	0.07
Mining revenue	6,564.1	296.63	6,570.1	296.90	6.0	0.27
Other revenue	46,409.8	2,097.27	43,300.1	1,956.74	-3,109.7	-140.53
Total revenue	97,850.1	4,421.86	94,771.7	4,282.75	-3,078.4	-139.12

Table E.5.3 presents the revisions to the own-source revenue categories for each State and Territory.

E.5.1 Revisions to revenue bases

The revenue assessments depend not just on the values of own-source revenue but also on the values of the revenue bases. Table E.5.2 provides information on the revisions to the tax bases and average tax rates for each revenue category.

Table E.5.2: Own-source tax bases and average tax rates, 2009–10

	Update 2011		*Update 2012*		*Difference*	
	Base	tax rate (%)	base	tax rate (%)	base	tax rate (%)
Payroll tax ($m)	352,572.5	4.76	352,461.4	4.77	-111.2	0.01
Land tax ($m)	858,087.4	0.68	857,739.5	0.68	-348.0	0.00
Stamp duty on conveyances ($m)	342,302.7	3.51	342,104.6	3.51	-198.1	0.00
Insurance tax ($m)	27,614.6	11.39	27,613.2	11.39	-1.4	0.00
Motor taxes						
—registrations (‘000)	15,127.7	3.33	15,127.7	3.33	0.0	0.00
—transfers ($m)	65,404.0	3.25	64,703.0	3.28	-701.1	0.04
Mining revenue ($m)	98,517.6	6.66	106,634.7	6.16	8,117.1	-0.50
Other revenue (‘000)	22,153.0	20.95	22,128.7	19.57	-24.3	-1.38

It can be seen that the change in the basis of valuation of mining production to fob/sale values has increased the mining revenue base, which has result in a fall in the national average tax rate. Revisions to other taxes bases were relatively minor with only marginal impacts on average tax rates. The exception was other revenue where the reduction in revenue coupled with the increase in population lead to a significant reduction in the average tax rate.

Table E.5.3: Revisions to own-source revenue 2009–10, State and Territory ($m)

Revenue source	*NSW*	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
Payroll tax	15.7	0.2	-0.2	-0.4	-0.1	-0.4	11.1	0.3	26.2
Land tax	0.3	-0.5	0.2	-0.1	0.1	0.1	-0.3	0.0	-0.3
Stamp duty	0.1	0.1	0.0	-1.0	0.2	0.5	-2.9	0.5	-2.5
Insurance tax	-0.4	0.3	0.3	0.0	-0.1	0.0	0.7	-0.3	0.4
Motor taxes									
Registrations	-0.1	0.1	0.4	-0.4	0.1	0.5	1.2	-0.4	1.5
Transfers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining revenue	4.2	0.2	8.5	9.7	0.5	0.2	0.0	-17.2	6.0
Other revenue	-995.9	-887.1	-491.0	-348.1	-70.1	-102.7	23.3	-238.3	-3,109.7
Total revenue	-976.1	-886.7	-481.8	-340.2	-69.4	-102.0	33.1	-255.4	-3,078.4

Table E.5.4: Revisions to own-source revenue bases 2009–10, State and Territory

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
Payroll tax ($m)	117.6	24.7	-247.3	-0.3	-0.2	0.0	-0.2	-5.5	-111.2
Land tax ($m)	590.6	-1,414.8	1,685.5	-1,207.2	0.0	0.0	0.0	-2.1	-348.0
Stamp duty ($m)	-392.8	0.0	0.0	0.0	0.0	-0.9	195.6	0.0	-198.1
Insurance tax ($m)	0.0	0.0	0.0	0.0	0.0	-1.4	0.0	0.0	-1.4
Motor taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Registrations ('000)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transfers ($m)	0.0	0.0	-701.1	0.0	0.0	0.0	0.0	0.0	-701.1
Mining revenue ($m)	1,708.9	582.1	2,077.1	3,417.3	405.9	156.3	0.0	-230.6	8,117.1
Other revenue ('000)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table E.5.4 presents the revisions to the revenue bases for each State. While the total changes for most revenue categories were relatively small, there were considerable variations between States. In regard to the land tax base, the impact of removing land tax collected from electricity transmission easements is apparent in the downward revision of Victoria's land tax base by $1,414.8 million. There were revisions to the land tax bases of some other States, particularly Queensland (up by $1,685.5 million) and WA (down by $1,207.2 million) which were not mentioned in the *2012 Update*.

E.5.2 Impact of revenue revisions

Table E.5.5 presents the impact of the revisions to the assessments of own-source revenue and the revenue bases on the revenue assessments and Table E.3.6 the impact on the GST requirement and per capita relativities. The difference in the total GST requirement of $141.30 per capita is slightly higher than the difference in own-source revenue of $139.12 due to the impact of the revision to population numbers on the other components in the determination of the GST requirement.

Victoria, Queensland and the NT have above average downward revisions to their assessed own-source revenue and this is reflected in the increases in their per capita relativities. NSW has a just below average downward revisions to its assessed own-source revenue, but has a marginal increase in its per capita relativity.

Table E.5.5: Revisions to assessed revenue by State and Territory 2009–10, State and Territory

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
Payroll tax ($m)	16.4	9.1	-6.1	4.0	1.8	0.5	0.5	0.0	26.2
Land tax ($m)	-13.0	-49.6	43.2	13.1	3.7	0.7	0.8	0.8	-0.3
Stamp duty ($m)	-12.6	7.3	-10.8	-9.6	-2.5	0.6	25.1	0.0	-2.5
Insurance tax ($m)	0.2	0.1	0.1	0.1	0.0	-0.2	0.0	0.0	0.4
Motor taxes ($m)	6.9	6.2	-17.9	3.6	1.6	0.5	0.3	0.3	1.5
Mining revenue ($m)	48.8	17.7	-24.9	-3.7	3.7	2.4	0.0	-38.0	6.0
Other revenue ($m)	-1,023.5	-760.9	-631.0	-319.6	-224.6	-70.1	-48.5	-31.5	-3,109.7
Total ($m)	-976.7	-770.1	-647.4	-312.2	-216.2	-65.6	-21.7	-68.4	-3,078.4
Total ($ per capita)[1]	-136.10	-140.13	-144.95	-137.69	-132.31	-129.91	-61.09	-300.39	-139.12

1. After adjusting for population revisions.

Table E.3.6: GST requirement and per capita relativity by State and Territory, 2009–10

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Average*
2011 Update									
GST requirement ($ per capita)	1,944.66	1,788.94	1,954.12	1,245.23	2,436.21	3,057.50	2,146.37	10,397.75	1,988.02
Per capita relativity	0.97819	0.89986	0.98295	0.62637	1.22545	1.53796	1.07965	5.23021	1.00000
2011 Update with revised revenue assessment[1]									
GST requirement ($ per capita)	2,084.83	1,929.25	2,101.92	1,384.55	2,567.60	3,188.12	2,205.87	10,697.50	2,129.31
Per capita relativity	0.97911	0.90604	0.98713	0.65023	1.20583	1.49725	1.03595	5.02392	1.00000
Difference[1]									
GST requirement ($ per capita)	140.17	140.31	147.79	139.31	131.39	130.62	59.50	299.75	141.30
Per capita relativity	0.00092	0.00618	0.00418	0.02386	-0.01961	-0.04071	-0.04370	-0.20629	0.00000

1. After adjusting for population revisions.

E.6 Expenses

E.6.1 Revisions to Expenses

Table E.6.1 presents data relating to total expenses by assessment category from the *2011 Update* and the *2012 Update*. The State and Territory breakdown of the difference in expenses is presented in Table E.6.2.

Expenses for 2009–10 were revised downwards from $191.7 million in the *2011 Update* to $191.4 million in the *2012 Update*. The amount is slightly higher than the ABS GFS expenses for 2009–10 of $191,210 million. While the revision to the value of total expenses is insignificant, there are revisions of a higher magnitude to some of the expense categories, but these revisions are also marginal. The only revision to expenses identified in the *2012 Update* was the '…replacing estimates of Commonwealth and privately funded service provision for 2008–09 and 2009–10 in the Community and other health assessment with newly available data for 2008–09 and 2009–10'. These revised data would have an impact on the cost disability factors rather than on the actual expenses for this category.

Table E.6.1: Expenses by CGC expense category, 2009–10

	Update 2011		*Update 2012*		*Difference*	
	$m	$pc	$m	$pc	$m	$pc
Schools education	38,582.1	1,743.53	38,504.7	1,740.03	-77.4	-3.50
Post-secondary education	5,519.6	249.43	5,691.6	257.20	172.0	7.77
Admitted patient services	26,881.3	1,214.77	26,508.7	1,197.93	-372.6	-16.84
Community and other health services	15,197.1	686.76	15,145.3	684.42	-51.9	-2.34
Welfare and housing	18,496.6	835.86	18,141.2	819.80	-355.4	-16.06
Services to communities	6,139.5	277.45	6,362.3	287.51	222.8	10.07
Justice services	14,250.2	643.97	14,194.0	641.43	-56.3	-2.54
Roads	5,647.4	255.21	5,563.1	251.40	-84.2	-3.81
Transport services	8,418.6	380.44	7,872.1	355.74	-546.6	-24.70
Services to industry	7,043.4	318.29	7,052.9	318.72	9.5	0.43
Other expenses	36,455.0	1,647.41	37,304.0	1,685.77	849.0	38.37
Depreciation	9,073.9	410.05	9,096.0	411.05	22.1	1.00
Total expenses	191,704.9	8,663.17	191,436.0	8,651.02	-268.9	-12.15

E.6.2 Revisions to expense disabilities

The assessment of expenses involves the application of a number of cost and use disabilities to the national average per capita expenses associated with service delivery, plus the assessments of expenses not associated with service delivery (predominantly administrative scale expenses).

Table E.6.3 shows the revisions to the implied expenses disabilities from the *2012 Update*. While some of the revisions may be due to the shift in the composition of expenses, there must also be revisions to the data that were used to determine the cost and use disabilities.

Table E.6.2: Revisions to actual expenses by State and Territory, 2009–10

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
School education ($m)	-41.0	-9.5	-5.3	-4.6	-40.1	16.8	7.1	-0.7	-77.4
Post-secondary education ($m)	30.2	103.3	-12.2	0.5	56.1	4.2	-8.0	-2.2	172.0
Admitted patients ($m)	190.8	-227.0	-0.1	0.9	-321.9	1.0	-14.6	-1.7	-372.6
Community health ($m)	-199.6	-48.5	-17.6	0.6	213.4	12.7	-25.8	13.0	-51.9
Welfare and housing ($m)	-165.7	220.8	-355.2	-0.5	-41.2	-8.4	-104.5	99.2	-355.4
Services to communities ($m)	23.6	192.5	-64.7	0.1	32.9	-2.6	29.5	11.6	222.8
Justice services ($m)	37.3	-121.2	-1.1	-1.1	37.7	12.7	-8.5	-12.2	-56.3
Roads ($m)	4.9	-28.5	-0.8	0.7	-46.1	-0.1	-9.5	-4.8	-84.2
Transport services ($m)	-10.5	-536.3	-0.2	-0.6	-9.1	-0.5	13.6	-3.0	-546.6
Services to industry ($m)	-55.0	-46.5	82.5	1.6	2.4	3.5	25.5	-4.5	9.5
Other expenses ($m)	-116.0	491.8	368.3	0.4	75.9	-38.4	160.0	-93.0	849.0
Depreciation ($m)	3.0	2.3	-0.6	-3.5	19.0	-1.0	6.2	-3.2	22.1
Total expenses ($m)	-298.0	-6.7	-7.0	-5.5	-21.0	0.0	71.0	-1.7	-268.9
Total expenses ($ per capita)	-41.52	-1.22	-1.57	-2.41	-12.85	0.00	199.91	-7.46	-12.15

Table E.6.3: Revisions to expense disability factors by State and Territory, 2009–10

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*
School education								
Service expenses	0.00112	-0.00096	0.00038	-0.00017	-0.00148	-0.00091	-0.00150	-0.00067
Transport expenses	0.00338	0.00830	-0.00392	-0.00333	-0.00939	-0.05064	0.05748	-0.10523
Other expenses	0.00061	-0.00134	0.00013	0.00035	-0.00124	0.00160	0.00148	0.00574
Total expenses	0.00100	-0.00077	0.00022	-0.00013	-0.00144	-0.00143	0.00007	-0.00132
Post-secondary education								
Service expenses	-0.00317	-0.00099	0.00618	0.00618	-0.00467	-0.00233	-0.00340	-0.01485
Other expenses	0.00032	-0.00056	0.00012	0.00007	-0.00267	-0.00533	-0.01588	-0.00265
Total expenses	-0.00314	-0.00099	0.00610	0.00612	-0.00464	-0.00229	-0.00344	-0.01453
Admitted patients								
Service expenses	-0.00039	-0.00041	0.00305	-0.00327	-0.00676	0.00827	0.00644	0.01516
Other expenses	0.00032	-0.00056	0.00012	0.00007	-0.00267	-0.00533	-0.01587	-0.00268
Total expenses	-0.00048	-0.00048	0.00298	-0.00322	-0.00667	0.00884	0.00744	0.01687
Community and other health								
Service expenses	-0.01383	0.01840	0.02596	-0.01960	-0.00656	0.00953	0.07653	-0.41885
Other expenses	0.00032	-0.00056	0.00012	0.00007	-0.00267	-0.00533	-0.01587	-0.00268
Total expenses	-0.01385	0.01823	0.02575	-0.01950	-0.00642	0.01018	0.07727	-0.41472
Welfare and housing								
Service expenses	0.00218	0.00316	0.00094	-0.00304	0.00014	-0.00068	0.00181	-0.13618
Other expenses	0.00097	0.00168	0.00232	-0.00699	-0.00438	0.00368	0.00262	-0.03354
Total expenses	0.00140	0.00275	-0.00023	-0.00071	-0.00054	-0.00232	0.00624	-0.10141
Services to communities								
Service expenses	-0.01528	-0.02310	0.00846	0.03369	-0.00699	-0.01559	-0.02034	0.65306
Other expenses	0.00288	0.00298	0.00384	-0.03639	0.00949	0.03255	0.03314	-0.11146
Total expenses	-0.01512	-0.02290	0.00848	0.03312	-0.00689	-0.01554	-0.02031	0.64727

Table E.6.3 (continued): Revisions to expense disability factors by State and Territory, 2009–10

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*
Justice services								
Service expenses	0.00046	0.00084	-0.00053	-0.00177	0.00125	0.00202	0.00159	-0.02171
Other expenses	0.00180	-0.00127	0.00248	-0.02032	-0.00152	0.01671	0.01925	0.01275
Total expenses	0.00016	0.00064	-0.00074	-0.00166	0.00149	0.00374	0.00580	-0.01746
Roads								
Service expenses	-0.00378	0.00540	0.00703	-0.00353	-0.01215	-0.01018	-0.00981	0.01001
Other expenses	0.00098	0.00044	-0.00118	0.00241	0.00082	0.00533	0.00352	-0.13545
Total expenses	-0.00392	0.00522	0.00683	-0.00357	-0.01199	-0.00900	-0.00613	0.01313
Transport services								
Service expenses	0.00076	-0.00017	0.00023	-0.00069	-0.00083	-0.00272	-0.00099	-0.00156
Other expenses	0.00034	-0.00058	0.00013	0.00008	-0.00277	-0.00551	-0.01275	-0.00253
Total expenses	0.00053	-0.00037	0.00011	-0.00057	-0.00056	-0.00107	0.00091	0.00277
Services to industry								
Service expenses	0.00806	0.00314	-0.00435	-0.04045	0.00818	0.02494	0.00986	0.02799
Other expenses	0.00106	0.00041	-0.00158	-0.00756	0.00054	0.00510	0.00006	-0.00110
Total expenses	0.00743	0.00269	-0.00451	-0.03922	0.00841	0.02749	0.01286	0.03636
Other expenses								
Total expenses	-0.00555	0.01730	-0.00984	-0.00097	-0.00474	-0.00630	0.00641	-0.00229
Depreciation								
Total expenses	-0.00634	-0.00331	0.00254	0.01144	0.00422	-0.00086	-0.00957	0.10223
Total expenses	-0.00377	0.00498	0.00092	-0.00214	-0.00146	0.00188	0.01239	-0.01125

It can be seen that, in total, the implied total expense disabilities have been revised upwards for Victoria, Queensland, Tasmania and the ACT. The only revision identified in the *2012 Update* that would have an impact on the expense assessment was the correction to the discount applied to depreciation expenses for road stocks (CGC, *Report on GST Revenue Sharing Relativities 2012 Update*, p. 97).

E.6.3 Impact of expenses revisions

Table E.6.4 presents the impact of the revisions to the assessments of expenses and the disability factors on the expense assessments and Table E.6.5 the impact on the GST requirement and per capita relativities. The difference in the total GST requirement of -$9.97 per capita is slightly higher than the difference in expenses of -$12.15 due to the impact of the revision to population numbers on the other components in the determination of the GST requirement.

Victoria, Tasmania and the ACT have upward revisions to their assessed expenses, while the other States have downward revisions. Queensland had a below average downward revision in expenses. States that experienced upward revisions or below average downward revisions in assessed expenses would be expected to have increases in their per capita relativities. Victoria, Queensland, Tasmania and the ACT had increases in their per capita relativities as a result to revisions to the expenses assessment.

Table E.6.4: Revisions to assessed expenses by State and Territory 2009–10, State and Territory

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
School education ($m)	-24.6	-16.4	-17.4	-9.9	-5.6	-2.4	-0.1	-1.1	-77.4
Post-secondary education ($m)	47.8	40.9	40.6	22.3	10.9	3.7	3.6	2.2	172.0
Admitted patients ($m)	-134.2	-84.0	-60.2	-48.1	-39.9	-3.5	-1.1	-1.5	-372.6
Community health ($m)	-87.4	60.0	66.9	-37.4	-9.3	2.5	18.3	-65.5	-51.9
Welfare and housing ($m)	-109.6	-60.5	-73.4	-40.1	-28.5	-10.5	-2.1	-30.6	-355.4
Services to communities ($m)	33.5	12.1	57.2	49.6	15.1	2.0	0.5	52.8	222.8
Justice services ($m)	-21.3	-6.6	-14.9	-9.2	-1.0	0.1	0.8	-4.1	-56.3
Roads ($m)	-33.0	-9.7	-10.9	-13.6	-11.4	-2.9	-1.3	-1.3	-84.2
Transport services ($m)	-188.4	-142.5	-105.6	-54.4	-36.1	-8.9	-7.1	-3.6	-546.6
Services to industry ($m)	17.8	8.7	-5.0	-27.4	6.0	4.8	1.8	2.9	9.5
Other expenses ($m)	195.0	373.4	94.9	83.5	53.3	16.2	21.3	11.5	849.0
Depreciation ($m)	-14.7	-0.5	8.6	13.0	5.6	0.5	-0.9	10.4	22.1
Total expenses ($m)	-319.1	174.8	-19.3	-71.8	-41.0	1.6	33.9	-28.0	-268.9
Total expenses ($ per capita)	-44.47	31.81	-4.31	-31.66	-25.06	3.11	95.32	-122.96	-12.15

1. After adjusting for population revisions.

Table E.6.5: GST requirement and per capita relativity by State and Territory, 2009–10

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Average*
2011 Update									
GST requirement ($ per capita)	1,944.66	1,788.94	1,954.12	1,245.23	2,436.21	3,057.50	2,146.37	10,397.75	1,988.02
Per capita relativity	0.97819	0.89986	0.98295	0.62637	1.22545	1.53796	1.07965	5.23021	1.00000
***2011 Update* with revised expenses assessment[1]**									
GST requirement ($ per capita)	1,904.26	1,820.93	1,952.66	1,215.20	2,410.23	3,061.31	2,240.10	10,274.15	1,978.05
Per capita relativity	0.96270	0.92057	0.98716	0.61434	1.21849	1.54764	1.13248	5.19409	1.00000
Difference[1]									
GST requirement ($ per capita)	-40.40	32.00	-1.47	-30.03	-25.98	3.81	93.73	-123.60	-9.97
Per capita relativity	-0.01549	0.02071	0.00421	-0.01203	-0.00696	0.00968	0.05283	-0.03613	-

1. After adjusting for population revisions.

E.7 Commonwealth non-GST payments

E.7.1 Revisions to payments

Table E.7.1 presents data relating to Commonwealth non-GST payments by assessment category from the *2011 Update* and the *2012 Update*. By far the greatest impact was for Commonwealth non-GST payments treated by exclusion, which are assessed EPC and would have the same per capita impact on the assessment of Commonwealth payments. There was only a relatively minor revision of $18.8m to the value of payments treated by inclusion, the payments that have an impact on relativities.

Table E.7.1: Commonwealth non-GST payments by treatment, 2009–10

	2011 Update		*2012 Update*		*Difference*	
	$m	$pc	$m	$pc	$m	$pc
Treated by inclusion	44,096.8	1,992.74	44,078.0	1,991.89	-18.8	-0.85
Treated by exclusion	9,075.7	410.13	11,902.8	537.89	2,827.1	127.76
Total payments	53,172.5	2,402.87	55,980.8	2,529.78	2,808.3	126.91

The value of non-GST payments published in the Commonwealth's Final Budget Outcome 2009–10 was $53,172.0m—$52,519.5m in specific purpose payments and $652.5m in non-GST general revenue assistance. This amount is less than the $55,980.2m recorded by the CGC, although the CGC does include some Commonwealth own-purpose payments that affect the fiscal capacity of the States (these are about one per cent of total payments).

E.7.2 Revisions to included payments

Although in total the revision to Commonwealth payments treated by inclusion were relatively small, the revisions to included payments to each State and Territory would have a marked impact on per capita relativities as these payments are assessed APC. Table E.7.2 presents the differences between the *2011 Update* and *2012 Update* values and between the *2012 Update* and final budget outcome (FBO) values.

Table E.7.2: Commonwealth non-GST payments treated by inclusion, 2009–10 ($ million)

	2011 Update	*2012 Update*	*FBO*	*Difference to*	
				2011 Update	*FBO*
NSW	13,759.8	13,722.1	13,806.2	-37.7	-84.1
Victoria	9,789.7	9,819.2	9,733.6	29.5	85.6
Queensland	9,531.1	9,570.8	9,470.9	39.7	99.8
Western Australia	4,572.1	4,585.2	4,556.3	13.1	29.0
South Australia	3,801.9	3,767.8	3,856.3	-34.1	-88.5
Tasmania	1,180.8	1,178.0	1,185.7	-2.8	-7.7
ACT	606.3	601.6	586.0	-4.8	15.6
Northern Territory	855.1	833.4	883.1	-21.7	-49.7
Total	44,096.8	44,078.0	44,078.0	-18.8	0.0

It can be seen Commonwealth payments treated by inclusion were revised upwards in the *2012 Update* for Victoria, Queensland and WA and revised downwards for the remaining States. It is interesting to note that although the total value of Commonwealth payments treated by inclusion is the same for the *2012 Update* and FBO, there is considerable variation between the States. There was no discussion in the *2012 Update* as to why the values of these payments were revised and why they differ to the FBO values.

Table E.7.3 provides the details of those non-GST payments where there have been revisions between the *2011 Update* and the *2012 Update*. Only a small number of payments are affected. For those payments treated by inclusion, apart from Nation building program—maintenance, the revisions redistribute the funding between the States, with the total amount of funding unchanged. There was a downward revision of $18.8 million in payments due solely to revisions to Nation building program—maintenance, with the bulk of this coming from the ACT.

Table E.7.3: Revisions to Commonwealth non-GST payments by payment type and by State and Territory, 2009–10

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
Skills and workforce development ($m)	-2.4	0.3	2.1	0.6	-0.3	-0.1	-0.3	0.0	0.0
National schools—government schools ($m)	-7.3	5.0	11.8	0.9	-3.6	-1.4	0.2	-5.6	0.0
National healthcare ($m)	-26.7	14.7	22.0	9.2	-21.6	1.1	6.8	-5.6	0.0
National disability ($m)	-2.5	2.8	2.2	2.8	-4.4	-1.0	0.2	0.0	0.0
National affordable housing agreement ($m)	1.9	6.7	1.6	-0.4	-1.1	-1.4	-1.3	-5.9	0.0
Nation building program—maintenance ($m)	-0.7	0.0	0.0	0.0	-3.1	0.0	-10.4	-4.6	-18.8
Total treated by inclusion ($m)	-37.7	29.5	39.7	13.1	-34.1	-2.8	-4.8	-21.7	-18.8
Treated by exclusion ($m)	913.9	704.4	570.0	289.5	209.8	64.7	45.6	29.2	2,827.1
Total payments ($m)	876.2	733.9	609.6	302.6	175.7	61.9	40.9	7.5	2,808.3
Total payments ($ per capita)	122.10	133.53	136.49	133.45	107.52	122.54	115.06	32.93	126.91

Table E.7.4: Difference between Update 2012 and final budget outcome values of Commonwealth non-GST payments treated by inclusion by State and Territory, 2009–10 ($ million)

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
Skills and workforce development	-6.6	0.6	6.5	2.0	-1.1	-0.4	-0.8	-0.1	0.0
National schools—government schools	-23.7	11.6	35.9	4.2	-10.3	-4.1	0.4	-14.1	0.0
National healthcare	-53.6	44.4	46.0	15.0	-58.5	5.1	19.2	-17.6	0.0
National disability	-6.1	9.2	6.5	8.8	-14.9	-4.1	0.8	-0.2	0.0
National affordable housing agreement	6.0	19.7	4.9	-1.0	-3.6	-4.2	-4.1	-17.7	0.0

Table E.7.5: Revisions to assessed Commonwealth non-GST payments by State and Territory 2009–10

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
Included payments ($ million)	-37.7	29.5	39.7	13.1	-34.1	-2.8	-4.8	-21.7	-18.8
Payments assessed EPC ($ million)	913.9	704.4	570.0	289.5	209.8	64.7	45.6	29.2	2,827.1
Assessed payments ($ million)	876.2	733.9	609.6	302.6	175.7	61.9	40.9	7.5	2,808.3
Assessed payments ($ per capita)	122.10	133.53	136.49	133.45	107.52	122.54	115.06	32.93	126.91

1. After adjusting for population revisions.

Table E.7.6: GST requirement and per capita relativity by State and Territory, 2009–10

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Average*
2011 Update									
GST requirement ($ per capita)	1,944.66	1,788.94	1,954.12	1,245.23	2,436.21	3,057.50	2,146.37	10,397.75	1,988.02
Per capita relativity	0.97819	0.89986	0.98295	0.62637	1.22545	1.53796	1.07965	5.23021	1.00000
***2011 Update* with revised Commonwealth non-GST payments assessment[1]**									
GST requirement ($ per capita)	1,826.62	1,655.59	1,820.48	1,113.41	2,327.77	2,935.66	2,029.72	10,364.18	1,863.29
Per capita relativity	0.98032	0.88853	0.97702	0.59755	1.24928	1.57553	1.08932	5.56231	1.00000
Difference[1]									
GST requirement ($ per capita)	-118.03	-133.35	-133.64	-131.82	-108.44	-121.84	-116.65	-33.57	-124.73
Per capita relativity	0.00213	-0.01133	-0.00593	-0.02882	0.02383	0.03756	0.00967	0.33209	-

1. After adjusting for population revisions.

Nation building program road payments are split between construction and maintenance on the basis of information provided by DOTARS. Although there was a downward revision to maintenance payments, there was no change to construction payments.

Table E.7.4 presents the difference between the non-GST payments treated by inclusion as valued in the 2012 Update and in the FBO. It can be seen that while there is no difference in the total value for each payment type, there are differences in the distribution between the States. The reason why the *2012 Update* values differ to the FBO values is not discussed in the *2012 Update* report. It is unlikely that there would be any change in the phasing of payments between the FBO and collection of data by the CGC.

E.7.3 Impact of revisions to payments

Table E.7.5 presents the impact of the revisions to the assessments of Commonwealth non-GST payments and Table E.5.6 the impact on the GST requirement and per capita relativities. The difference in the total GST requirement of $127.73 per capita is slightly larger than the difference in non-GST payments of $126.91 due to the impact of the revision to population numbers on the other components in the determination of the GST requirement.

All States had upward revisions to the value of their Commonwealth payments. Victoria, Queensland and WA, the States with an above average per capita revision, had reductions in their per capita relativities.

E.8 Net lending and investment

E.8.1 Revisions to net lending and investment

Table E.8.1 presents data relating to net lending and investment from the *2011 Update* and the *2012 Update*. The value of net lending was revised downwards by $400.0 million to $14,293.0 million in the *2012 Update*. This value closely matches the $14,364.0 million for 2009–10 in the ABS GFS publication. The value of investment was revised upwards by $398.8 million to $17,650.0 million in the *2012 Update*. This value closely matches the $17,706 million value for net acquisition of non-financial assets presented in the ABS GFS publication.

Table E.8.1: Net lending and investment, 2009–10[1]

	Update 2011		*Update 2012*		*Difference*	
	$m	$pc	$m	$pc	$m	$pc
Net lending	-13,893.0	-627.83	-14,293.0	-645.90	-400.0	-18.08
Investment	17,251.2	779.59	17,650.0	797.61	398.8	18.02

1. After adjusting for population revisions.

The close but offsetting differences for net lending and investment indicate that the net operating balance derived from the values in the *2011 Update* and *2012 Update* were close. Net lending is obtained as the net operating balance less net acquisition of non-financial assets. Table E.8.2 shows that this is the case, with the difference in the net operating balance as a result of the data revisions being only $1.3 million.

Table E.8.2: Total general government operating statement, 2009–10 ($ million)

	Update 2011	*Update 2012*	*Difference*
Own-source revenue	97,850.1	94,771.7	-3,078.4
Commonwealth payments	53,172.5	55,980.8	2,808.3
Total revenue	151,022.6	150,752.5	-270.1
Expenses	191,704.9	191,436.0	-268.9
Net operating balance	-40,682.2	-40,683.5	-1.3

Although in aggregate the revisions to net lending and investment offset each other, this does not necessarily mean that the impact on the per capita relativities will be offset. The disability factors vary between the two and this will affect the impact on the per capita relativities.

E.8.2 Investment revisions

Table E.8.3 presents details of the revisions to the components of investment—land and other investment (assessed EPC), non-road investment and roads investment. The *2012 Update* noted that there was a correction made to the discount applied to allowances for interstate differences in road stocks. In the *2011 Update* depreciation expenses were discounted by 25 per cent rather than 12.5 per cent. The correct discount rate was applied in the *2012 Update*. The impact of this would be revisions to the assessed value of investment for the individual States, but not to the total value of roads investment.

E.8.3 Impact of revisions

Table E.8.4 presents the impact of the revisions to the assessments of net lending and investment and Table E.8.5 the impact on the GST requirement and per capita relativities. The difference in the total GST requirement of $2.12 per capita is slightly larger than the difference in net impact of the revisions to net lending and investment of $0.06 per capita due to the impact of the revision to populations numbers on the other components in the determination of the GST requirement.

There are large deviations around the national average revision and this is reflected in the revision to the per capita relativities. The two Territories have particularly large revisions to their per capita relativities.

Table E.8.3: Revisions to investment by State and Territory 2009–10, State and Territory

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
Land and Other Investment ($m)	-474.1	290.9	404.8	-0.5	13.2	-13.7	-41.0	91.8	271.4
Roads investment ($m)	139.7	-379.1	-179.5	0.7	-254.4	0.2	-14.2	-45.2	-731.8
Non-road investment ($m)	223.8	223.3	219.5	85.9	52.7	26.1	25.0	2.8	859.2
Total investment ($m)	-110.6	135.1	444.8	86.1	-188.5	12.6	-30.2	49.4	398.8
Total investment ($ per capita)	-15.41	24.58	99.58	37.99	-115.33	24.96	-84.99	216.85	18.02

Table E.8.5: Revisions to assessed net lending and investment by State and Territory 2009–10

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Total*
Net lending ($ million)	-143.0	-86.6	-86.1	-46.3	-22.6	-7.4	-4.8	-3.2	-400.0
Investment ($ million)	74.8	140.6	113.2	35.3	10.3	13.8	24.7	-13.8	398.8
Total ($ million)	-68.2	54.0	27.1	-11.0	-12.3	6.4	19.9	-17.0	-1.3
Total ($ per capita)	-35.34	8.82	80.31	17.58	-129.15	10.33	-98.60	202.84	-0.06

1. After adjusting for population revisions.

Table E.8.6: GST requirement and per capita relativity by State and Territory, 2009–10

	NSW	*Victoria*	*Queensland*	*Western Australia*	*South Australia*	*Tasmania*	*ACT*	*Northern Territory*	*Average*
2011 Update									
GST requirement ($ per capita)	1,944.66	1,788.94	1,954.12	1,245.23	2,436.21	3,057.50	2,146.37	10,397.75	1,988.02
Per capita relativity	0.97819	0.89986	0.98295	0.62637	1.22545	1.53796	1.07965	5.23021	1.00000
***2011 Update* with revised net lending and investment assessments[1]**									
GST requirement ($ per capita)	1,934.70	1,805.64	1,959.02	1,227.71	2,444.93	3,086.63	2,213.70	10,345.58	1,990.14
Per capita relativity	0.97214	0.90729	0.98436	0.61690	1.22852	1.55096	1.11233	5.19842	1.00000
Difference[1]									
GST requirement ($ per capita)	-9.96	16.70	4.90	-17.52	8.72	29.13	67.33	-52.18	2.12
Per capita relativity	-0.00605	0.00743	0.00141	-0.00947	0.00308	0.01300	0.03268	-0.03180	-

1. After adjusting for population revisions.