Government of Western Australia
Department of Treasury

Principles of Horizontal Fiscal Equalisation

Western Australia Occasional Paper

March 2023

Principles of Horizontal Fiscal Equalisation

Further information relating to this report may be obtained by emailing igr@treasury.wa.gov.au

Table of Contents

EXECUTIVE SUMMARY

- This paper looks at the principles that the Commonwealth Grants Commission (CGC) uses to distribute GST grants. It generally does not consider the GST reforms.
  - The aim is to promote robust debate leading into the CGC's 2025 method review. The views in it are those of the Western Australia Department of Treasury. We would welcome other viewpoints.
- While the intent of the horizontal fiscal equalisation (HFE) principle may be clear, it is extremely difficult to implement. It requires assessment of 'same standard' services, 'same effort' revenue raising, at the 'same level of efficiency', which is complex and challenging.

Supporting principles and their application

- The CGC has four supporting principles to guide it when applying the HFE principle: *what States do*; *policy neutrality*; *practicality*; and *contemporaneity*.

<u>What States do</u>

- Although not explicit, the HFE principle arguably requires the CGC to look at the scope of services provided by States and Territories (States) and the scope of circumstances faced by States.
- It involves collective observation of what all States do, to find common policy settings.
- The CGC uses average State experience as the standard.
  - However, this is the CGC's decision. It is not required by the HFE principle, which only refers to 'same', not 'average' – it does not specify that same standard.
  - There are also different methods of measuring average standard (e.g., expenses can be equalised across individuals or across States, revenues can be assessed by legal incidence or economic incidence).
- The CGC has considerable room to move on its choice and specification of standards.
  - It would be eminently sensible for the CGC to take advantage of this flexibility if its usual approach to the standards prove difficult or incur problems.

<u>Policy neutrality</u>

- The CGC's *policy neutrality* supporting principle is that State policy choices have minimal direct influence on its GST share and, conversely, that a State's GST share has minimal direct influence on its policy choices.
  - This is highly desirable.
- However, it is different from the requirement in the HFE principle for assessment of same-standard services, same-effort revenue raising, and same level of efficiency.
  - This requirement would be better described as policy consistency, which requires the CGC to determine common policy.
- There are two broad aspects to policy neutrality that cause problems for HFE:
  - A ***dominant State*** will be able to influence any assessments it dominates by changing the revenue it collects or changing its spending; and

  - A lack of ***policy consistency*** exists when a State can influence its revenue base or cost-weighted user populations, through fiscal practices and development policies.

Dominant State

- Efficiency incentives inherent in HFE are lost when a State dominates an assessment, as the benefits from a State's extra effort will be redistributed through the GST.
  - Changes in that State's policy will influence its assessments and can act as an incentive to adopt or not adopt policies that will influence their GST grant.
- The problem is pronounced for royalties, but not so for tax and expense assessments.
  - It has played out prominently in Western Australian royalty policies in the past.

Policy consistency

- The HFE principle requires assessment of 'same standard' services, 'same effort' revenue raising, and at the 'same level of efficiency'.
- This is not achieved if assessments are based on revenue bases or user populations that States have influence over.
  - The CGC relies on observed revenue bases, with no attempt to find the drivers behind those observed bases.
  - Such bases are affected by a very large range of State policies, including mining development and land zoning, and are generally subject to State compliance effort.
- This is also not achieved if a State's circumstances are sufficiently different that other States do not have policies relating to those circumstances.
  - If a State dominates the revenue base, then there is no way of knowing what other States' policies would be if they had a comparable revenue base.
  - If States have differing revenue base mixes, and tailor their policies to those mixes, then their policies will not be comparable.
- Further, if a policy area is dominated by one State, that State will have no ability to vary from average effort, as equalisation will follow that State's policy. That State will set the average.
  - For example, the CGC essentially does not give Western Australia the choice to levy a higher-than-average royalty rate on iron ore.

<u>Practicality</u>

- The *practicality* principle covers simplicity, data reliability, materiality, quality assurance and fitness for purpose of relativities.
- Only the materiality component is explicitly required by the HFE principle. However, simplicity, reliability and quality assurance are desirable, and have been requested in terms of reference since 2010.
  - Nevertheless, there is much judgement in the application of practicality.
- Sometimes the CGC discounts to equal per capita to allow the use of less reliable data. At other times, it does not discount as it does not know whether that will move the results closer to, or further from, true HFE.

- However, both of these considerations are always relevant. The CGC should adopt a consistent approach.

- Materiality thresholds are useful in the context of very detailed assessment methods, to hold the tide against the ongoing pressure to add detail.
  - However, this paper shows there are large variations in how HFE could be quantified. Hence, small materiality thresholds should not be used to judge whether a different approach to HFE still achieves HFE or not, as long as there is an underlying logic to the approach taken.

<u>Contemporaneity</u>

- Although not explicitly mentioned in the HFE principle, any approach to equalising fiscal capacities will implicitly involve an approach to contemporaneity.
  - However, the CGC should clarify why its definition of contemporaneous equalisation differs from the current approach in practice, which is effectively lagged equalisation.

Uncertainty

- There are major sources of uncertainty in the CGC's assessments, including lack of policy consistency, judgements in constructing standards, difficulty in quantifying assessments (even despite valid conceptual cases), and data that are unreliable or not fully fit for purpose.
- The paper illustrates the magnitude of uncertainty through examination of impacts across method reviews, and the potential impacts of the problems noted above.

A way forward

<u>Dominant State problem for policy neutrality</u>

- The dominant State problem could be addressed by external standard royalty rates, discounts, or (most effectively) aggregate revenue assessments.
  - Real benefits from aggregating revenue bases require a global revenue base.
  - We have previously suggested using either Gross State Product (adjusted to remove offshore petroleum, and part of general government activity), or simply adding all existing revenue bases.
  - We have focused on revenue assessments, as these are where the dominant State problem is most acute.

<u>Policy consistency</u>

- We support a separate *policy consistency* supporting principle, as this issue has been confused with the dominant State problem and has not been addressed.
  - This would be defined as: *The CGC should calculate revenue bases and disability factors which reflect the same policies across States (taking into account all policies that could affect the size of these bases and factors)*.
- One option to achieve policy consistency would be to remove all policy influences from observed revenue bases.
  - This should be broader than just tax rate elasticities to avoid bias.

  - The CGC has never attempted this, which is not surprising as we think it would be essentially impossible.
- Another option to achieve policy consistency would be to identify alternative policy-neutral alternative revenue base measures.
  - Land area would be a policy neutral measure of mining production, although it has the drawback of not taking account of the distribution of minerals.
  - Identified mineral deposits depend upon exploration, which is policy influenced.
  - Household income would be a less policy influenced measure of capacity to pay land tax, compared to land values, but is still subject to State policy influences.
  - These examples show that policy neutral measures are hard to identify. Other ideas would be welcome.
- Hence, implementing policy consistency is challenging, so it will likely remain a severe source of uncertainty that needs to be recognised.

<u>Uncertainty</u>

- The abundant need for judgement in CGC methods highlights inherent uncertainty.
- Uncertainty could be addressed either by error bounds or by introducing a *conservatism* principle, where the CGC would err on the side of less GST distribution.
- Error bounds would indicate the caution that should be applied to the relativities, but would not give clear guidance to the Federal Treasurer, and would put pressure on the Commonwealth to provide supplementary funding.
- Hence, we prefer a *conservatism* principle.
  - This would be defined as: *In the face of uncertainty, the CGC should err on the side of a smaller GST redistribution through discounts towards equal per capita*.
  - The CGC already selectively does this through discounting. This principle would involve further (and more consistent) use of discounting, including discounting of revenue bases towards equal per capita due to lack of policy consistency.
  - A caution is that, at times, discounting can increase the amount of GST grants that are redistributed. Hence, an alternative way to apply a *conservatism* principle would be to discount the final (pre-reform) relativities towards one. The size of the discount would be informed by the magnitude of the uncertainties in each assessment.
  - Alternatively, rather than discount all relativities, in the face of uncertainty, the CGC could decide to limit the redistribution away from any one or two States through the introduction of a floor on the relativities. Although the GST reforms do this, it would be preferable for the CGC to recognise this in its own recommendations.

Further considerations – narrow and broad approaches

- The CGC is not compelled to use narrow revenue assessments, and the revenue and expense assessments do not have to match. A higher-level approach for revenue assessments may be more appropriate.

Introduction

The Western Australia Department of Treasury (WA Treasury) has written this paper in preparation for the Commonwealth Grants Commission (CGC) 2025 Review of its methods to distribute GST among the States and Territories (States).

The paper outlines the principle of horizontal fiscal equalisation (HFE), as defined by the CGC, and how the CGC attempts to apply that principle in assessing States' fiscal capacities. It notes that the CGC holds HFE as its only real objective, but has developed supporting principles as a guide to achieve that objective.[1] Although most of the CGC's supporting principles are not required by its HFE definition, they remain highly desirable, but can be implemented in a choice of ways.

Essentially, the paper provides WA Treasury's position on the supporting principles used by the CGC, identifies the challenges the CGC faces in achieving HFE according to its definition, and offers some potential solutions. The main purpose is to provide a starting point for the CGC and all States to enter open and robust discussion on the HFE principles in the 2025 Review.

Although this paper at times refers to the Productivity Commission's 2018 Report into HFE, when it forms relevant context, this paper does not address the GST reforms.[2] It is aimed strictly at the CGC's role in implementing the HFE principle.

The HFE principle

The 2025 Review terms of reference requires the CGC to base its methods for measuring State fiscal capacities on the principle of HFE, but does not define HFE. The CGC articulates the HFE principle as:

> *The assessment of State relative fiscal capacities, for informing the GST distribution, will be determined for each State 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.*[3]

The HFE principle appears easy to understand, and the general public can easily appreciate the intention. It is accepted by all governments, and WA Treasury agrees with its intention.

1 Commonwealth Grants Commission, *The Principle of HFE and its implementation*, 2017-21, sec. 1.13, 2.1.

2 *Treasury Laws Amendment (Making Sure Every State and Territory Gets Their Fair Share of GST) Act 2018*.

3 Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities 2020 Review*, Vol. 2, Part A, p. 38, sec. 9.

However, the HFE principle is not as well defined as it might initially appear, and is extremely difficult to implement. The reason for this is that the principle requires the assessment of "same standard" services, "same effort" revenue raising, and at the "same level of efficiency". Achieving this is complex and challenging. We explore these challenges through this paper.

The CGC considers its main task is to identify factors, or 'disabilities', that affect State finances.[4] It describes disabilities as the "differences in State circumstances outside their direct control that give rise to differences in the capacities of States to raise revenue or differences in the cost of providing services or infrastructure, other than those that result from the policy choices of individual States".[5]

Supporting principles and their application

The CGC has developed four (unranked) supporting principles to guide it when applying the HFE principle: *what States do*; *policy neutrality*; *practicality*; and *contemporaneity*.

The CGC regards its supporting principles as guiding considerations in determining its methods, but regards them as neither separate objectives nor pre-conditions for methodological choices.[6] It regards its only real objective is to achieve HFE.[7]

It argues that, as the relevance and role of the supporting principles vary according to the issues and circumstances under consideration, a balancing of competing considerations is required when choosing methods. The CGC places no rank, hierarchy, or weighting on the supporting principles, and uses its judgment to devise the best overall result, while aiming to be consistent with its principle of HFE.

However, this raises the question whether this juggling of supporting principles, or whether the way in which individual principles are applied, is effective in helping to achieve a coherent HFE outcome.

What States do

What States do – the scope of HFE reflects the scope of States' activities and circumstances, where the common policy of all States is sought through the average of States' policies.

The *what States do* principle applies to the scope of the assessments and the identification of disabilities. It is the basis behind the CGC's approach that States' fiscal capacities are determined empirically, rather than by a concept of what States should, or could, do (where the CGC would act as an adjudicator in some sense). It refers to what States collectively do, rather than what an individual State does.

4 *ibid*., sec. 10.

5 *ibid*., sec. 12.

6 Commonwealth Grants Commission, *The Principle of HFE and its implementation*, 2017-21, pp. 11-13

7 *ibid*., p. 8, sec. 1.13

The HFE principle arguably requires the CGC to look at the scope of services provided by States and the scope of circumstances faced by States (although not explicitly stated). If some services or circumstances were ignored, then fiscal capacity cannot be said to have been adequately assessed.

It is through this collective observation of what States do that the CGC aims to assess the same standard for services, the same effort for revenue raising, and the same level of efficiency, to help achieve a common policy setting.

In each case, the CGC derives the **average** State experience, on a per-capita basis, as the standard.

However, this is a decision that the CGC has made. It is not required by the HFE principle, which only refers to 'same', not 'average' – it does not specify the same standard.

That is, there are options for the standard, such as:[8]

- Internal standards:
  - Average State policy – which can be weighted by revenue bases and service bases (i.e., service-user populations), as at present, or by population shares through the 'rotating standard', as per prior to the 1993 Review;
  - Lowest State policy (e.g., lowest standard of service, lowest revenue raising effort) – with either a single State being chosen for all services and revenues, or a separate State being chosen for each service and revenue; or
  - Highest State policy – analogous to lowest State policy.
- External standards:
  - International policy;
  - Desirable policy; or
  - Economically efficient policy.

Despite the options, the use of average State policy is not a surprising choice. It is highly relevant to the States, in most circumstances it is not significantly influenced by one State's policies, and avoids judgements about what is desirable.

However, average State policy can be measured in various ways.

- It could be measured broadly or in detail.

[8] These should not be confused with the use of New South Wales/Victoria as the standard under the GST distribution reforms. For the calculation of fiscal capacities, the CGC's aim is to give every State the same capacity as the fiscally strongest State. These options are for the standard, or level, at which that capacity is calculated. For example, all States could be given the same capacity as the fiscally strongest State to provide a low level of services or a high level of services.

- Revenue-raising efforts could be measured based on legal incidence (i.e., legalised tax and royalty bases) or economic incidence (i.e., capacity to pay, such as income or rent).
- It could recognise different standards for different circumstances, or maintain consistent standards.
  - For example, the general public might be surprised that the CGC does not seek to give States the capacity to provide the same standard of services for all their residents. Rather, the CGC explicitly equalises on the basis that remote populations (including remote Indigenous communities) will receive lower service standards than capital city populations.
  - The HFE principle does not preclude these differences in service standards, but neither does it mandate them.
  - Further, under such circumstances, the CGC can entrench disabilities, as States do not have funding to differ from their current practice.

If there is one conclusion that we would reach from the above, it is that the CGC has considerable room to move on its choice and specification of the standards.

It would be eminently sensible for the CGC to take advantage of this flexibility if its usual approach to the standards prove difficult or incur problems.

Western Australia has argued that the CGC's approach to its *what States do* principle is too narrow. It is valid to use the principle to define the scope of its assessments (i.e., HFE should address everything that is the role of States, and generally how they perform those roles), but it should not be constrained by the finer detail of what States do. This is further discussed under *Further considerations – narrow and broad approaches*.

Policy neutrality

Policy neutrality – State policy choices have minimal direct influence on HFE assessments and, conversely, that HFE has minimal direct influence on State policy choices.

The CGC's definition of its *policy neutrality* supporting principle is different from the requirement in the HFE principle for assessment of same standard services, same effort revenue raising, and same level of efficiency.

This requirement would be better described as ***policy consistency***, which requires the CGC to arrive at a common policy for use in its assessments.

- For example, the CGC uses the observed revenue bases for onshore oil and gas, but States have different policies regarding the banning of fracking.

Unlike policy consistency, policy neutrality, as defined by the CGC, is not explicitly required by the HFE principle. However, it is highly desirable, as:

- it can be considered inequitable (and inefficient) if a State can influence the level of its GST grant or the GST distribution system impacts upon State policy decisions; and
- if States have an incentive to shift their policies, then it would diminish the meaningfulness of the standard policy determined by the CGC.

Generally, the CGC seeks to achieve policy neutrality through averaging expenses per cost-weighted user population, and averaging revenue-raising rates. Actually achieving policy neutrality may require the CGC to be flexible in its approach to other supporting principles, such as the flexibility afforded to it under *what States do*, as noted above.

However, there are two broad aspects under *policy neutrality* that cause problems for HFE.

- A State that dominates a revenue base or cost-weighted user population will dominate the standard for the assessment, so will be able to influence its assessment by changing the revenue it collects or its spending. This is the ***dominant State*** problem and is more closely related to the CGC's *policy neutrality* supporting principle.
- States can influence their assessments if they can influence their revenue bases or cost-weighted user populations. This is a ***policy consistency*** problem. It does not just arise from State's revenue raising and spending practices but also their economic development and regulatory policies.

Dominant State

The CGC promotes the efficiency incentives inherent in HFE.[9] That is, the CGC equalises States to average levels (the aim of the *what States do* principle). When States' efforts achieve above-average levels, they will see the benefits retained. Lack of appropriate effort should form a signal to try harder.

The incentives should apply to both expenses (where gold-plating and inefficient service delivery is not rewarded) and to revenues (where a State is rewarded for setting optimal mixes of bases and rates to the community's capacity to pay).

However, when some States dominate the expense or revenue (e.g., cities as large as Sydney for urban transport, and Western Australia producing close to all iron ore), these incentives break down, as the benefits from a State's extra effort will be redistributed through GST. For these assessments, the policies of other States are diminished, and for some revenues are non-existent. This is the dominant State problem.[10]

---

[9] Commonwealth Grants Commission, *The Principle of HFE and its implementation*, 2017-21, p. 16, sec. 2.26

[10] Further, if the average policy is determined by one or two States' policies, is it still an 'average'?

For tax assessments, the concern is largely removed because States have relatively similar per-capita tax bases. Likewise, most (but not all) expense assessments have similar per capita cost-weighted service users. But for mining royalties, highly disparate State capacities create highly policy-affected assessments. For some components of the mining assessment, where one State collects most of the nation's revenue, the observed collections and the rate are clearly not policy neutral.

The dominant State problem can perversely and significantly influence State policies. For Western Australia, the dominant State problem played out prominently over the last decade.

- In 2011, the Western Australian Government removed the concession from the iron ore 'fines' royalty rate. The concession had compensated firms for past high processing costs and low prices for this type of iron ore, which was no longer the case. However, the estimated GST loss of more than the additional revenue (under the high- and low-rate mineral assessment) became a major consideration, and required Federal Treasurer intervention.
- In 2016, the proposal from Western Australia National Party leader, Brendon Grylls, to increase the iron ore lease rental fee (which had been static since the 1960s) was defeated in Parliament when it was more broadly understood that Western Australia would lose 90% of the additional revenue through the GST distribution.
- In 2017, Western Australia's move to increase the gold royalty rate, partly to bring it more in line with Western Australia's longstanding royalty rate policy, faced criticisms from gold miners, but ultimately failed when it became understood that it would lose 60% of any additional royalties through the GST distribution.

This was not lost on the Productivity Commission, who noted that "the system is not policy neutral: the potential for States to lose significant GST payments in some instances can deter them from the politically difficult task of improving the efficiency of their tax mixes or expanding their tax bases. Distortions are particularly pronounced for major tax reform exercises and in relation to mineral and energy resources (including royalty policies and restrictions on extraction)"[11] and that the "CGC should be directed (without delay) to pursue more simple and policy-neutral assessments".[12]

Although the dominant State problem exists predominantly in revenue assessments, it also has the potential to cause policy neutrality breaches in expense assessments. For example:

- the Northern Territory is the dominant State for Indigenous community development, in the Services to Communities assessment, where 44% of its expenditure is effectively distributed back to it through GST; and
- Western Australia has a dominant State problem for mining regulation, in the Services to Industry assessment.

[11] Productivity Commission (2018), *Horizontal Fiscal Equalisation*, Report no.88, p. 18.

[12] *ibid.* p. 2.

The actual-per-capita assessments in the Native Title and Natural Disaster assessments give similar policy neutrality problems for every State (but mitigated because the definition of the expenses gives less scope for policy influence).

Policy consistency

For the expense assessments, the CGC constructs disability factors, which are generally seen as uninfluenced by State policies.[13]. It regards these disabilities as crucial to constructing an expense assessment. Indeed, the CGC has justified not assessing expense needs for a service "…because of a lack of data or the inability to find a policy-neutral assessment measure".[14]

We agree that the adoption of policy neutral disabilities is needed to achieve the CGC's definition of HFE. Because disabilities are considered uninfluenced by State policies, they will better outline States' fiscal capacities based on each State making the same effort to raise own-source revenue, provide services at the same standard and operate at the same level of efficiency.

Disabilities should form part of all assessments. However, this is not the case for the revenue assessments, where the CGC generally relies on the observed revenue bases,[15] assessed only to the degree of standardising the rate across the nation (which in itself becomes problematic when the base is concentrated in one or only a few States). No attempt is made to find the drivers behind those observed bases.

Similarly, 'same level of efficiency' is not determined as the CGC does not remove any differences in compliance activity,[16] nor investigate how States' tax mixes align to their taxpayers' capacity to pay.[17]

It follows that common policy is not achieved in the revenue assessments, despite it being a requirement of the HFE principle.

---

[13] Although it could be argued that State policies have some impact on the size and geographic spread of the population, and on socio-economic status, these would generally be minor and steeped in historical consequence. But factors like Indigeneity and age distribution are essentially immune from State policies.

[14] Commonwealth Grants Commission (2022), *Research Paper No. 5: The framework for the treatment of Commonwealth payments in GST distribution*, p.4.

[15] The CGC does make some adjustments to the transfer duty revenue bases to reflect the scope of transactions that it considers are taxed on average. It also effectively excludes portions of the base below the average threshold through the application of a zero standard revenue rate. However, neither of these adjust for how State policies have influenced the size of their revenue bases. The only such adjustments are that it discounts the observed gambling tax revenue bases by 100% (due to policy differences), and in past reviews it has sometimes adjusted for tax elasticities.

[16] Low compliance activity can be largely offset by GST grants, and even more than 100% offset if States have revenue raising rates significantly below the standard.

[17] Even in mining, there is a capacity to pay argument. Iron ore deposits in South Australia and Tasmania have "…lower iron content, which requires additional processing to make it a marketable commodity that is competitive in international markets. These mines have higher operating costs compared to the Pilbara. Their respective States' royalty regimes are net of costs, so they raise relatively less revenue" (Commonwealth Grants Commission, *What States Do – Mining*, CGC 2016-17-S, p. 12, sec. 47). They are charged what they can afford.

Revenue bases are particularly sensitive to State policies on mining production[18] and land values, but State policies can alter their revenue bases in a number of ways, including:

- level and stability of tax/royalty rates;
- regulations over economic activities;
- provision of services and infrastructure;
- policies on releasing land and through zoning policies;[19]
- regional development – such as affordable housing;
- business development spending;
- services to industry, such as geological survey;
- approval processes – including environmental approvals;
- fiscal policies – through their impact on business confidence; and
- mining bans and restrictions.

This is a major gap in implementing HFE.

This was an issue for New South Wales, with its proposed tax reform to phase out conveyance duty and land tax, to be replaced with a land-tax type property tax. The reforms were designed to allow people to move more freely, which was expected to increase the number of property transactions, thereby increasing New South Wales's conveyance duty capacity under CGC methods, with an associated reduction in GST (while at the same time reducing actual New South Wales conveyance duty revenues).

The CGC has said it would want to mitigate the effects of that change through its methods, but an earlier (and continuing) reform from the ACT did not attract such a favourable response (see the hypothetical case study below for the inherent problems when attempting to mitigate the GST effects of such reforms). The difficulty stems directly from the way the revenue assessments are constructed.

Measuring 'same effort' can also be problematic when one State dominates the revenue base. Essentially, that State is only assessed as having the same effort as itself.

[18] Productivity Commission (2018), *Horizontal Fiscal Equalisation*, Report no.88, p. 124.

[19] A Reserve Bank of Australia report found that zoning policies raised detached house prices (and by extension land values and revenues derived from land values) by 73% above marginal costs in Sydney, 69% in Melbourne, 42% in Brisbane and 54% in Perth. Kendell, R. and Tulip, P. (2018), The *Effect of Zoning on Housing Prices*, Reserve Bank of Australia Research Discussion Paper – RDP 2018-03, https://www.rba.gov.au/publications/rdp/2018/2018-03.html.

If the average policy is determined by (or close to determined by) one State's policy, then that State will no longer have the option of having a higher or lower standard/effort, as equalisation will follow that State's policy.

- For example, the CGC essentially does not give Western Australia the choice to levy a higher-than-average royalty rate on iron ore.

Although this problem arises from one State dominating, it is distinct from the policy neutrality problem that a dominating State can influence its relativity (discussed above). Rather it is a problem with implementing the concept of 'same effort' in the HFE principle.

Another issue is how to compare revenue raising efforts when States have differing mixes of revenue bases. Do they have same effort if their revenue raising rate is the same as the national average on each individual revenue base? We consider States should be expected to tailor their revenue raising rates to their particular revenue base mix.

Hypothetical case study – adjusting for a lack of common policy

Let us hypothesise that a major coal-producing State decides to extinguish its coal industry, through environmental laws, regardless of the cost from compensation claims and loss of royalties. All other States would lose a substantial amount of GST as a result (which this State would gain) because under the CGC's observed-revenue-base assessments, the State would have little to zero capacity to raise coal royalties. But is that right? It still has coal; just a policy to not extract it.

Let us also say that the State introduces a tax reform to phase out conveyance duty and land tax, to be replaced with a land-tax type property tax (similar to the New South Wales proposal discussed earlier). The CGC says it will be compelled to mitigate GST losses to the State, given the loss is directly related to a policy decision. It would likely do this through fixing the number of per-capita property transactions in the State to some historical average. In doing that, the other States would not see an increase in GST that they would otherwise have received had the CGC not amended the assessment.

Would the CGC also be compelled to mitigate the decision that results in the closure of the State's coal mines? If so, it would likely add back the lost value of production (given the capacity is still there), again using some historical capacity. This would largely negate the GST impact of closing the mines.

The CGC's consistent response to the two policy decisions, which are arguably both beneficial, would create an incentive (to reform tax policy) and disincentive (to close coal mines, and the associated reduction in carbon emissions). To maintain incentives, the tax reform could be negated, but not the coal mine reform, to allow both benefits to go ahead. But this would conflict with the CGC's *what States do* principle (the CGC would be deciding on the preferred policy).

In addition, how long would the CGC inflate the State's value of coal production? How long would it deflate its number of property transactions? It would not be long before the magnitude would become a pure guess as the counterfactual strays further in time from observed reality.

By assessing revenues in its current manner, it is almost impossible for the CGC to avoid policy impacts, and if it makes adjustments to negate them, the CGC will run up against consistency and/or dilemmas in principle.

Practicality

Practicality – assessments should be based on sound and reliable data and methods and be as simple as possible, while also reflecting the major influences on State expenses and revenues.

Practicality covers:

- Simplicity
- Reliability of data (including the use of discounting)
- Materiality
- Quality assurance
- Fitness for purpose of relativities

Within the *practicality* principle, the only aspect that is explicitly reflected in the HFE principle is the concept of materiality. However:

- simplicity is desirable, as simpler assessments are easier to explain and update (and to undertake – often complex assessments are in fact partial and founded on many implicit detailed assumptions), and simplicity is expected by the stakeholders; and
- it is sensible that the CGC has approaches to deal with reliability of data (including that they are fit for purpose) and quality assurance.

Regardless, reliable data, quality assurance and simplicity have been specifically requested in the terms of reference since the 2010 Review.

Despite this, there is room for much judgement in the application of *practicality*.

- Simplicity can occur in varying degrees, and may not always be possible.
- Reliability of data can be dealt with by different approaches.
- Materiality is subjective, and is currently defined by the CGC, where it makes a judgement to use thresholds, and judgements over the size of those thresholds.
- Quality assurance has practical limits, and the CGC often tests this by the accuracy of its process rather than the value and validity of that process.
- Fitness for purpose involves judgements over what is fit for purpose.

Reliability of data

When the CGC considers that data is not reliable, its approach is sometimes to discount that data, usually towards an equal per capita assessment.

In some cases, it discounts to allow the use of less reliable data. It does this to lessen the impact, to a choice of level, depending on the degree to which it deems the data unreliable.[20]

At other times, the CGC decides to not discount on the basis that it does not know whether discounting will move the results closer to, or further from, true HFE. It makes these decisions on a case-by-case basis.

The two considerations give different results, but both are relevant in every case.

Unless the CGC has additional information that suggests that a result closer to equal per capita may have some validity, it will not know whether discounting will move the results closer to, or further from, true HFE.[21]

At first glance, this would suggest that, in the absence of additional data, the CGC should never discount, but should rely on whatever data it has, provided that data has some validity.

The question is whether a possible move away from (the unknown) true HFE through discounting remains an acceptable risk when dealing with unreliable data or general uncertainty. We consider that it is acceptable.

The only time a discount towards equal per capita is not acceptable is when there is further information that gives a direction of the error, and can be used to reduce the error.[22]

This is discussed further under *A way forward*; *Uncertainty.*

---

20 The CGC employs three main levels of discounting: 12.5%, 25% or 50%. It also sometimes applies a 100% discount, if it has little confidence in the data, which prevents any GST redistribution in such cases (although it rarely uses the term ‘discount’ in these cases).

21 An undiscounted assessment, based on unreliable data, may over equalise or under equalise. Hence, moving closer to equal per capita may move closer to (if over equalised), or further away from (if under equalised), true HFE.

22 When other information is available, it may be better to discount to a different base, or to blend the data with another data source.

Materiality

The CGC currently applies very detailed assessment methods. In this context, materiality thresholds are useful, to hold the tide against the ongoing pressure to add detail.

Since introducing materiality thresholds in the 2010 Review, the CGC has increased the thresholds in each subsequent review.[23] However, it is important for materiality thresholds to not be too large, as that could eliminate disabilities and lead to bias, especially as States that are disadvantaged in one respect tend to also be disadvantaged in other respects. This correlation is even more pronounced if considered separately for expenses and revenues (e.g., most of Western Australia's cost disabilities are positive).

The CGC aggregates individual disabilities before applying materiality thresholds. We consider this appropriate, but there remains the problem of determining whether a split of a variable into ranges (e.g., age ranges) is material, as there is no unique way to choose the ranges.

We have observed in recent years a tendency from the CGC to not adjust its assessments to address errors, purely based on materiality (and sometimes even when the error has a material impact). For example, in the 2020 Review Draft Report, for the Housing assessment, the CGC said it would not scale the Census data with data from the Australian Institute of Health and Welfare, which is more accurate, due to a lack of materiality from the change. The decision to not remove ACT revenues that had been inappropriately classified as mining revenue in the 2021 Update, based on materiality, is another example.

In our view, materiality should not be a consideration when making straightforward error corrections (which includes issues with consistency).

Contemporaneity

Contemporaneity – relativities should be appropriate to equalising State fiscal capacities in the grant year (application year). In practice, the CGC applies a three-year lagged average.

The HFE principle does not require relativities to be contemporaneous. However, it does require the CGC to seek to equalise fiscal capacities. Arguably, any approach to equalising fiscal capacities will implicitly involve an approach to contemporaneity (although that approach may be inconsistent between assessments).

Prior to the 2010 Review, the CGC largely referred to the concept of lagged equalisation. That is, circumstances of each data year (assessment year) are equalised with a lag. The cost of the time lag was covered by escalating needs from the data years to the grant year (through the process of converting needs to relativities using data-year GST pools, then applying those relativities to the grant-year GST pool).

[23] For example, in the 2010 Review the threshold for the inclusion of a disability was if it redistributed at least $10 per capita for any State. This was increased to $30 in the 2015 Review, and to $35 in the 2020 Review.

In the 2010 Review, the CGC introduced a *contemporaneity* principle, which stated that the recommended relativities should reflect as close as possible the circumstances of the grant year. The CGC used this new supporting principle to justify changing from five-year averaging to three-year averaging.

This meant that the CGC was using the lagged three-year-average data as a projection of the circumstances in the grant year. In the 2015 Review, Western Australia argued that the iron ore value of production was changing across years so much that the lagged three-year average was an exceedingly poor forecast. The CGC responded by adding a clarification to its *contemporaneity* supporting principle that said that it achieves contemporaneity through lagged equalisation.[24]

However, this sets up a disconnect between fully contemporaneous equalisation, as per the CGC's headline description[25] of the *contemporaneity* principle, and its current approach in practice, which is effectively lagged equalisation.

24 "…the Commission has accepted that fiscal equalisation is achieved over a run of years with a lag…", Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities 2015 Review*, Vol. 1, p. 71, sec. 162.

25 "The Commission interprets this to mean recommending relativities appropriate to equalising State fiscal capacities in the application year", Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities 2020 Review*, Vol. 2, Part A, p. 58, sec. 120.

Uncertainty

Sources of uncertainty

The CGC's assessments include many judgements, as HFE is difficult to accurately assess.

Some sources of uncertainty are as follows.

- Policy consistency
  - The CGC uses observed revenue bases, which do not remove the impact of a range of State policy decisions.
  - There may also be policy impacts on expense disability factors, but they would be much fewer and tend to only apply in the long run.
- Construction of standards
  - Whether a standard is reliable when State circumstances differ substantially (e.g., urban transport and remoteness).
  - Whether standards should be internal or external, utilise legal or economic incidence, broad or narrow, and how to weight different States.
  - Whether standards should be based on States' differing treatment of residents, or equalise across all residents.
  - What to do when one State is dominant and so there is no real average.
- Assessments that are difficult to quantify, sometimes despite a valid conceptual case (e.g., water quality, isolation, economic development).
- Data that are unreliable or not fully fit for purpose.

Impact of uncertainty

In this section, we seek to quantify the potential impact of various sources of uncertainty. The following numbers are not comprehensive, but illustrate the significance of uncertainty.

Variations in CGC assessments

One indication of uncertainty is that the CGC's assessments can change greatly at every method review.

This shows flexibility, which is good, but highlights their uncertainty. Flexibility to change assessment methods is essential to keep abreast of changing circumstances. But there have been frequent method changes for some assessments that have otherwise had relatively stable circumstances.[26]

- For example, there have been six significantly different methods of assessing mining revenues over ten method reviews (from 1981 to 2020).

The following table shows the impact across all assessments from the last five method reviews for each State, in 2022-23 dollars per capita.

- Impacts are as high as $1,714 per capita (for the Northern Territory in the 2010 Review), while many other impacts have significantly exceeded $200 per capita.
- For half of the States, the impact over the five reviews predominates in the same direction, so the total accumulated magnitude is more than the impact in any one review. Most States have substantial cumulative impacts (as high as $1,239 per capita for the Northern Territory).

Table 1

Change in Needs from CGC Method Reviews

$ per capita (2022-23 terms)

Review	1999	2004	2010	2015	2020	*Total*
Data year	1993-94	1998-99	2006-07	2011-12	2016-17	
NSW	+124	-143	-165	-47	+58	*-173*
Vic	-90	+46	+21	+73	-114	*-64*
Qld	-79	+140	+248	-17	+80	*+373*
WA	-21	+257	+171	-101	-80	*+225*
SA	-120	-15	+56	+132	-181	*-129*
Tas	+35	-255	+45	+354	+320	*+499*
ACT	+248	+154	-286	-376	-205	*-464*
NT	+126	-851	-1,714	-25	+1,224	*-1,239*

Note: For each State, we use the data year listed in the table and for that data year we compare the Review data-year relativity against the preceding Update data-year relativity. The earliest data year of the Review averaging period is used to minimise data revisions. This difference is multiplied by the estimated national per capita GST pool for 2022-23 (as per the Commonwealth's October 2022 Budget).

[26] Arguably, methods should not change unless required by change in circumstances. However, this is only true where assessment methods are regarded to be reasonable, logical and robust by the CGC and all States (or at least most). Where assessment methods are contentious, or were not fully considered by the end of the previous review, a change of circumstances should not be a requirement to improve those methods.

Policy consistency

As noted above, the CGC uses observed revenue bases, without adjusting for any of the myriad of State policies that affect these revenue bases, despite the HFE principle requiring the CGC to assess revenue raising effort at the same effort.[27]

- The one exception to this is gambling tax, where due to State policy differences the CGC applies a 100% discount.

The extent to which policy differences affect revenue bases is not known, but as an indication, the following table shows the impact on the 2022 Update if the CGC were to apply a 25% discount to all revenue bases that it currently assesses. The basis for such a discount is that the policy consistency of observed revenue bases is uncertain.[28]

- For total revenues, this is as large as $862 per capita for Western Australia, and $300 per capita or more for half the States. The only State for which the total impact is immaterial is New South Wales (but it is material for half of its individual revenues).[29]

Table 2

Impact of a 25% Discount to 2022 Update Revenue Assessments

$ per capita (2022-23 terms)

	Payroll tax	Land tax	Conveyance duty	Insurance tax	Motor taxes	Mining revenue	*Total revenue*
NSW	+12	+40	+56	+5	-9	-121	*-17*
Vic	-2	+27	+24	-5	-	-177	*-133*
Qld	-30	-47	-36	-2	+5	+36	*-74*
WA	+86	-23	-77	-4	+14	+865	*+862*
SA	-56	-65	-82	+14	+6	-127	*-311*
Tas	-98	-78	-78	-12	+19	-144	*-392*
ACT	-27	-65	+2	-8	-15	-187	*-300*
NT	+16	-28	-102	-2	-8	+76	*-49*

Note: Calculated using the CGC's 2022 Update supporting information #4 spreadsheet, which used the Commonwealth's estimated 2022-23 GST pool and populations from its December 2021 *Mid-Year Economic and Fiscal Outlook*.

27 The CGC has, at times, investigated the possibility of applying tax elasticities. However, these are difficult to estimate, inconclusive, and ignore other policy and general influences on revenues, including a States' targeted tax mix based on its residents' capacity to pay.

28 A 25% discount is the CGC's 'medium' discount. We think this is reasonable (although it might be higher or lower for specific revenues), but it is only used here to provide an illustration of the potential magnitude of policy consistency uncertainties.

29 Note that the direction is not important. The table shows the impact of shifting all the revenue bases towards equal per capita by 25%, but an equal amount of uncertainty could see them shifted away from equal per capita by 25% – in which case the magnitudes would still be as shown in the table.

For gambling tax, the CGC chooses to not assess needs. Were it to use observed revenues as the base, as it does for other revenues, the GST redistribution would be as shown in the following table. Despite holding a position that it does not discount for policy differences,[30] the CGC imposes a 100% discount on this occasion, and arbitrarily withholds these needs from States (as discussed later, discounting is appropriate, but should not be used selectively).

Table 3

Impact of Assessing Gambling Taxation on Observed Revenue Base

$ per capita (2015-16 terms)

NSW	Vic	Qld	WA	SA	Tas	ACT	NT
-61	+6	+48	+104	+94	+91	+102	-1,271

Note: Calculated for gambling expenditure as the base. Data from CGC's 2020 Review paper on gambling taxes (CGC 2018-01-07-S).

Consider the question of defining standard revenue raising effort when one or two States dominate the revenue base. As discussed earlier, this raises serious philosophical and practical issues as to whether the standard can be considered an average. Note also that the HFE principle does not require the CGC to use the national average revenue raising effort, just the same effort.

For iron ore, the standard rate is almost entirely determined by Western Australia.

- If Western Australia were to apply its historical royalty rate of 3.75% to iron ore fines, it would have improved its pre-reform assessment in the 2020-21 data year by $1,301 per capita.

  Even if the CGC were to only exclude 50% of that policy increase (as proposed in its mining revenue discussion paper during the 2020 Review[31]), this would still have an impact of $650 per capita, for something that is purely a policy decision, rather than a change in State capacity.

Discounting is frequently undertaken due to perceived data limitations, but not generally applied due to conceptual and policy-neutral limitations. So, although mining royalty rates may be accurate, because they are policy influenced when there is a dominant State, they are not an accurate measure of what States would collect if they all had production. The limitations are no different in essence, and so discounting remains valid (see the discussion under *A Way Forward*).

[30] Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities 2020 Review*, Vol. 2, Part A, p. 54, sec. 98.

[31] See Commonwealth Grants Commission, *Mining Revenue*, CGC 2018-01/08-S, p. 17, and Commonwealth Grants Commission, *Improving the Policy Neutrality of the Mining Revenue Assessment*, CGC 2018-07-S, p.8, sec 36.

Assessments that are difficult to quantify

In the 2020 Review, the CGC identified a number of assessments for which there were a conceptual case, but it could not quantify needs. In these cases, disabilities that are acknowledged by the CGC as valid, are simply not assessed.[32]

Two of these, for which significant needs could be justified, are water quality and interstate non-wage costs. The potential magnitude for each of these is shown in the following table (both of which are material for four States, with combined GST loss of $230 million for Western Australia).

Table 4

Potential Needs for Water Quality and Interstate Non-wage Costs

$ per capita

	Water Quality	Interstate Non-wage Costs
	Assessed overspending in water subsidies	CGC 2019 Update assessment
	(2020-21 terms)	(2017-18 terms)
NSW	-14	-1
Vic	-13	-1
Qld	-14	-1
WA	+84	+35
SA	+38	-1
Tas	-36	-77
ACT	-11	+95
NT	+58	-271

Note: For water quality, we used the assessed overspending (actual expense minus assessed expense) for the CGC's current water subsidy assessment (using data from the CGC's 2022 Update assessment spreadsheets). This will pick up water quality problems in communities of greater than 3,000 persons. It will also reflect policy influences, but in earlier Reviews, when the CGC used a water source assessment, its assessed expenses were much more in line with actual expenses.

For interstate non-wage costs, we used the CGC's 2019 Update assessment, which was based on adjustments to the remoteness classification of capital cities.

Data quality

The CGC sometimes discounts to address data quality problems. The following table shows the grant-year impact of including these discounts in the 2020 Review.

- This only covers discounts towards equal per capita (so does not include cases where two measures were averaged, such as Rawlinsons cost factors and recurrent cost factors in the Investment assessment).
- It does not include 100% discounts, such as gambling tax.

32 See, for example, "The Commission acknowledges that water quality is a factor that drives States' costs, but was unable to derive a simple and reliable way of measuring this", Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities 2020 Review*, Vol. 2, Part B, p. 249, sec. 157.

Table 5

Grant Impact of CGC Discounts in the 2020 Review

$ per capita (2020-21 terms)

	Land tax	Wage costs	Community health socio-demographic composition	Regional costs and service delivery scale	Total
	12.5%	12.5%	12.5%	25%	
NSW	+19	-7	+3	+5	+20
Vic	+13	+7	+6	+5	+31
Qld	-24	+5	-4	-2	-25
WA	-11	-21	-4	-8	-43
SA	-34	+25	-3	-1	-12
Tas	-40	+39	-22	-4	-28
ACT	-32	-18	+14	+7	-30
NT	-8	-77	-89	-159	-333

Note: Calculated from *CGC 2020 Review Report*, Vol. 2, Part A, p. 66.

A way forward

We offer a few suggestions below, that could be considered by the CGC.

If the CGC ultimately sees limits in its ability to achieve HFE, it needs to acknowledge this so that governments understand the limitations of its recommendations. The difficulty in implementing the HFE principle became the bed on which the GST reforms were developed.

Dominant State problem for policy neutrality

As discussed above, the main problem with policy neutrality (outside policy consistency) is that some States dominate specific mining revenue bases. The CGC could address this problem, for example, through an external standard royalty rate, discounts, or aggregate revenue assessments.

External standard royalty rate

A standard royalty rate that is not influenced by State's actual royalty rates would prevent changes in any State's royalty rate from affecting the assessment.

- An example would be an international rate, but the CGC would have to consider whether the circumstances in which they apply internationally relate to circumstances in Australia.
- Other examples would be a socially desirable rate or an economically efficient rate, but these would require more judgement (and hence uncertainty) from the CGC in quantifying the rate.

Discounts

A discount of the assessment towards equal per capita would reduce the capacity of a dominant State to influence its assessments.

In many cases, the CGC argues that discounting should not be used as it would diminish HFE.

However, as discussed later, discounting may be used to address uncertainty (e.g., arising from lack of policy consistency in the revenue base, or questions over the whether the standard policy can be described as average policy if it is dominated by one State).

In these cases, discounting would be considered to have the additional benefit of addressing the dominant State problem.

Aggregate revenue assessments

If the CGC aggregates revenue assessments, provided a single standard revenue raising rate is used, and the aggregation does not weight different parts of the base according to their separate standard revenues, then the aggregated revenue base is likely to be less dominated by a single State.

The CGC's coal royalty assessment currently amalgamates various types of coal.

The CGC has often claimed that an aggregated assessment diminishes HFE. However, given the many uncertainties in the calculation of HFE, and the vague understanding of where true HFE lies, it can be argued that significant adjustments can be made without materially diminishing the robustness of the results.

The simplest aggregation would be to have a single onshore mining revenue component. However, this would currently still leave Western Australia with more than 50% of the revenue base, leaving a substantial policy neutrality problem (which makes the change in the GST distribution of questionable value).

An aggregation of all royalty and tax assessments – generally described as a ***global revenue base*** assessment – would essentially solve the dominant State problem. No State would be able to have a significant impact on the assessment through changing its revenue rate.

Further, under a global revenue assessment, materiality thresholds could be much larger, or may no longer be required.

Western Australia has previously proposed two global revenue base assessments.

- A revenue base using Gross State Product (adjusted to remove offshore petroleum, and part of general government activity) would have the additional benefit of being far simpler, with much fewer data requirements than existing assessments (although removing offshore petroleum may have data challenges).
- A revenue base that simply adds all existing revenue bases would not be simpler, but it would take account of various issues such as progressivity. It would mirror the existing assessments, but acknowledge that States have choices of leaning more heavily on different revenue bases.

The CGC has also previously expressed concern that Western Australia has promoted aggregating revenue assessments without also proposing aggregating expense assessments. However, the driving reason for considering global revenue bases is the dominant State problem, which does not occur to a significant extent in the expense assessments.

Nevertheless, it is worthwhile also considering more aggregated expense assessments, reflecting the many stated and unstated assumptions required to support the current detailed assessments. However, a lack of more aggregated expense assessments is not a reason for ignoring the dominant State problem in the revenue assessments, which are also more subject to policy influences. The level at which revenues and expenses should be assessed is discussed under *Further considerations – narrow and broad approaches,* below.

It should be noted that the approaches described above address the problem of States being able to unduly influence the standard royalty rate.

- Discounting can also be a response to uncertainty about the policy consistency of the revenue bases.
- However, an external standard royalty rate would not address revenue base policy consistency.
- An aggregated revenue assessment would only address revenue base policy consistency if the new base were more clearly policy consistent. However, an aggregated assessment could be constructed using underlying revenue bases that address the dominant State problem if States have differing revenue base mixes. This requires the aggregation to include both royalties and taxes.

Policy consistency

Policy consistency supporting principle

That the HFE definition requires the same standard for services, the same effort for revenue raising, and the same level of efficiency implies that a common policy setting is required.

This is different from the CGC's *policy neutrality* principle, which is more related to minimising the interaction of a State's policies and its GST share.

Therefore, we propose a ***policy consistency*** supporting principle.

- This would be defined as: *The CGC should calculate revenue bases and disability factors that reflect, as far as practicable, the same policies across States (taking into account all policies that could affect the size of these bases and factors)*.

We believe it warrants a separate supporting principle as:

- it is possible to have policy consistency without policy neutrality, and vice versa;[33]
- non-neutrality can arise from a lack of policy consistency, or from other causes;[34]
- policy consistency is explicitly required by the HFE principle, whereas policy neutrality (as defined by the CGC) is not, and the CGC has described *policy neutrality* as subservient to the HFE principle; and
- discussion of policy consistency has historically been confused with *policy neutrality*, both by the CGC and the States (including Western Australia).

[33] Where a mineral is produced in only two States, the CGC could keep the policy of those two States consistent, but it would remain policy non-neutral because the dominance of those States policies can still affect their GST share. In theory, an assessment could be policy neutral but not policy consistent if the CGC were to construct a mineral assessment using observed revenue bases rather than common-policy bases, but froze them at a point in time (the CGC has not done this in practice).

[34] For example, a State with a tax base share greater than its population share could offer a rebate on a tax rather than a grant. The former policy would reduce the State's base (increase its GST share) whereas the latter would not affect its share. This would be caused by assessment design rather than policy inconsistency.

It could be questioned why a supporting principle is required when policy consistency is explicitly required by the HFE principle. The answer is that many CGC assessments have, from when the current form of HFE started in the 1981 Review, consistently failed to achieve policy consistency. A separate supporting principle would raise the issue more prominently.

Making revenue bases policy consistent

The CGC has had to rely on a broad judgement that State policy differences are not large, without clear basis for that judgement. To properly assess policy consistent revenue bases, the CGC must either remove all policy influences from observed revenue bases, or identify policy neutral revenue base measures.

Remove all policy influences from observed revenue bases

At staff level, the CGC has previously indicated that it does not know how to do this.

This is not surprising, as we think it would be essentially impossible.

Further, adjusting for some policy influences and not others would introduce bias. For example, States which have increased economic activity may be able to impose higher tax rates – so it would not be helpful to only adjust for the higher tax rates.

Policy-neutral revenue base measures

Land area would be a policy-neutral measure of mining production, although it has the drawback of not taking account of the distribution of minerals.

- This cannot be accurately solved by looking at identified mineral deposits, as these depend upon exploration, which is policy influenced.

Household income would be a less policy influenced measure of capacity to pay land tax, compared to land values, but is still subject to State policy influences.

The mining revenue and land tax assessments could be improved by discounting the observed revenue bases towards land area and household income respectively.

However, generally we cannot see any clearly policy-neutral revenue base measures, which leaves considerable uncertainty in the measurement of HFE.

Measuring same effort under dominant States and across differing revenue base mixes

The only apparent way to measure same effort under dominant States and across differing revenue base mixes is to use aggregated revenue base measures that reflect underlying capacity to pay.

For example, the iron ore and coal assessments could be merged if the CGC could measure the economic rent for these differing minerals, reducing the dominance of any State. Likewise, a measure like Gross State Product could be used for a global revenue measure to address differing revenue base mixes.

Although these approaches would alter the relativities, they can be seen as better achieving HFE, as currently same effort is arguably not being reliably measured. In their absence, there remains considerable uncertainty in the measurement of HFE.

Uncertainty

We believe that extensive consideration of the issue of uncertainty is required.

The CGC should recognise that the need for judgement demonstrates a degree of uncertainty, and it should acknowledge the uncertainties in the relativities that it produces.

This is important, as the CGC's relativities are used to redistribute large amounts of funding across States. The GST grants form a substantial part of each State's budget. Furthermore, it is generally assumed that the CGC gets HFE 'right', but HFE is essentially no more than an imprecise estimation.

At a broad level, we can see two practical options to address uncertainty:

- The CGC could provide its relativities with **error bounds**; or
- The CGC could apply a ***conservatism*** supporting principle, where the CGC takes a conservative approach to HFE.

Error bounds

The CGC could sum estimates of all the sources of uncertainty, and place error bounds on the relativities. This would give an indication of the degree of caution that should be applied to the relativities.

If the CGC were to do this, it would need to avoid bias in the recommended 'most likely' relativities. In practice, this would amount to the following.

- The CGC would not use any discounting, except where discounting improves the measure of HFE because further information is available. (Data would only be rejected when it had sufficient unreliability that it cannot add anything to HFE).
    - The error bounds would account for the unreliability in the data, which may overstate or understate the disabilities, allowing the use of data that is not fully reliable.
    - The error bounds would also account for the unreliability in the methods (including that the CGC's supporting principles allow for substantial variations in the approach to equalisation, such as alternatives in setting the standards).

- The CGC would need to make an estimate of needs where a conceptual case exists.
    - This would be accompanied with a contribution to the error bounds.
    - As a second-best alternative, the error bounds would be asymmetrical, recognising the absence of an assessment. However, it is not clear whether this can readily be implemented across error bounds for eight different State relativities.

In practice, there would be considerable pressure on the Commonwealth to provide GST funding at the level that redistributes the least, given by each State's error bounds. This would particularly be the case for States with relativities that redistribute away a large share of GST grants (i.e., relativities significantly below one).

The CGC's role is to provide recommendations for the distribution of the GST grant pool, so its recommended relativities should average to one. This would still be the case for its best estimate relativities, but it leaves open the question of what to do with the error bounds. It would not be possible to give some States the higher error bound, unless either other States receive less that the best estimate or the Commonwealth adds to the funding pool.

Conservatism

Our preferred approach is for the CGC to adopt a ***conservatism*** supporting principle.[35]

- This would be defined as: *In the face of uncertainty, the CGC should err on the side of a smaller GST redistribution through discounts towards equal per capita*.

We argue that not embracing a conservatism principle can result in a HFE result that is far from accurate, especially where biases in similar assessments can accumulate.

Hence, we support the use of discounting. We consider the CGC should implement a *conservatism* principle through the application of wide-spread discounting, wherever there is uncertainty.

This would include discounting of observed revenue bases towards equal per capita, due to the uncertainty of the policy influences of those bases, making them not fully fit-for-purpose.[36]

This would go some way to address the CGC's inability to successfully mitigate the *policy consistency* problem described earlier (that is a requirement of the HFE principle).

[35] We consider conservatism to be a better option than error bounds because, as discussed above, putting forward error bounds gives no guidance as to how the Federal Treasurer can take account of those error bounds.

[36] The CGC has previously argued that it cannot discount the mining revenue assessment, as this would result in the ACT having non-zero assessed mining revenue. However, if the CGC believes that there is no uncertainty that the ACT has no mining capacity, then it would be consistent with a conservatism principle to not discount the ACT revenue assessment – it would only discount the other States (where there is uncertainty in their revenue bases). But we would question the validity that the ACT has no mining capacity. The ACT has in the past had gravel mining, which would be a potential small source of mining royalties.

Expense disabilities would also be discounted if the CGC were to consider them subject to State policies.

The CGC has commented that this suggested principle amounts to partial equalisation.[37] But that interpretation depends on the belief that HFE is currently accurate and any move away from it will deteriorate equalisation. However, as discussed above, there are many uncertainties and judgements in the quantification of HFE.

Moreover, general CGC methods justify conservatism. The CGC starts its assessments with an equal per capita distribution of GST. It then uses information to develop methods and disabilities to move it away from equal per capita (aiming for true HFE). If that information is not reliable or not fit for purpose, it makes sense (is perfectly valid) to move the assessment back toward the direction from where that information brought it, equal per capita.

In addition, the CGC applies a *conservatism* principle in some circumstances.

- In the cases where it discounts towards equal per capita, it does not know whether that moves the distribution towards, or away from, true HFE, despite opposing discounting on that basis for policy differences.
- If there is sufficient uncertainty, the CGC chooses to do an equal per capita assessment as its default, as discussed in its 2020 Review assessment guidelines.[38]
  - This includes the gambling tax assessment, where contrary to its practice in other revenue assessments, the CGC discounts the assessment 100% towards equal per capita due to policy differences impacting on the observed revenue base.
  - This also includes assessments where the CGC has recognised the conceptual case, but lacks commensurate data, such as for water quality and isolation.

The greatest harm from errors in the assessments would come from when States lose funding, rather than from when they gain funding.

- In the presence of uncertainty, it is reasonable to place a limit on just how much will be redistributed away from a State (the GST reforms attempt to address this).
- This is a salient issue where a State dominates an assessment (which is itself an outcome of CGC decisions not to use a broader assessment). That State's fiscal capacity should be presumed to partly reflect its own effort if there is no or partial evidence to the contrary. As average effort cannot be properly established, a conservative approach would suggest that the State's effort is above the hypothetical average that would be visible should it not dominate the assessment.[39]

---

[37] Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities 2020 Review*, Vol. 2, Part A, p. 61, sec. 136.

[38] Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities 2020 Review*, Vol 2, Part A, p. 64.

[39] The Productivity Commission Review said: "too little weight is afforded to the importance of fairly rewarding effort: the current HFE system does not systematically provide for States to retain a reasonable share of the fiscal dividends of their policy efforts without them being 'equalised away' through lower GST payments. This

However, there is a drawback to discounting on an assessment-by-assessment basis.

- Discounting an individual assessment will reduce a State's needs for that assessment (take it closer to equal per capita), but in some circumstances can take the overall result for that State further from equal per capita (i.e., increase the amount of GST grants that are redistributed).[40]

Hence, an alternative way to apply a *conservatism* principle would be to discount the final (pre-reform) relativities towards one. The size of the discount would be informed by the magnitude and intention of the potential assessment-by-assessment discounts.

Alternatively, rather than discount all relativities, the CGC could decide to limit the redistribution away from any one or two States through the introduction of a floor on the relativities.[41]

- We note that there is already a floor on the pre-reform relativities, as the CGC is required to recommend a distribution of GST grants, and hence could not recommend a grant-year relativity below zero.[42]

This is what is achieved by the GST reforms. In practice, the GST reforms can be seen as being justified by uncertainty. They simply place a limit on how much GST can be redistributed away from any State in recognition that HFE can be no more than an estimation.

Note that, for 2022-23, the estimated benefit to Western Australia from the GST reforms, compared to its 2022 Update pre-reform relativity is $1,725 per capita[43] – almost identical to the 2010 Review revision for the Northern Territory in Table 1 ($1,714 per capita). The no-worse-off guarantee (NWOG) received by each other State for the 2022 Update is worth substantially less than $200 per capita. Hence, the impact of the reforms is consistent with the degree of uncertainty in the CGC's assessments.

However, it would be preferable for the CGC to recognise this in its own recommendations.

---

can result in outcomes considered to be 'unfair'." Productivity Commission (2018), *Horizontal Fiscal Equalisation*, Report no.88, p. 18.

40 A State with positive needs for an assessment will have those needs reduced through discounting (closer to equal per capita), but if its overall relativity is below one, the discounting will push that relativity away from equal per capita. The converse is also true for a State with a relativity above one, when an assessment for which it has negative needs is discounted. For example, the discounts to the interstate wages factors consistently lowers the relativities of New South Wales and Western Australia, as those two States generally have positive needs for interstate wages and relativities below one, and increases the redistribution from those States. If the Transport assessment were to be discounted, all States would move closer to equal per capita in that assessment, but the smaller States relativities would all increase, further away from equal per capita (they have negative needs for Transport but overall relativities above one).

41 This logic could also lead to a ceiling on the relativities. However, as noted earlier, there is less harm from overfunding a State than there is from underfunding a State. There is also very little cost to the other States from allowing very low population States like the Northern Territory to have higher relativities.

42 Note that, prior to the 2000 Update, the CGC recommended relativities for the distribution of financial assistance grants, which preceded the GST grants but had a substantially smaller grant pool. A relativity of zero on that smaller grant pool was effectively a much higher floor than a zero relativity on the current GST pool.

43 Difference between estimated 2022-23 post-reform GST grant in Commonwealth's October 2022 Budget and the corresponding estimated pre-reform GST grant used for the NWOG calculation.

Materiality

It was noted above that materiality thresholds should not be too large, as that could eliminate disabilities and lead to bias, and that a disability should be aggregated across categories before applying materiality thresholds.

In addition, as discussed throughout this paper, there are variations in how HFE could be quantified (e.g., different approaches to choosing standard policy). Such different approaches to HFE will likely change the result. This does not mean that HFE is not achieved, as it cannot be known where true HFE lies. Hence, small materiality thresholds should not be used to judge whether a different approach to HFE still achieves HFE or not, as long as there is an underlying logic to the approach taken.

Contemporaneity

When circumstances are changing rapidly, under the current lagged equalisation approach data years will not reflect the circumstances of the grant year, and an attempt to reflect such circumstances would require using forecasts. The CGC has an aversion to using forecasts, as in its view, they are not reliable. We note that using forecasts in isolation would give unreliable results, but using a forecast with an *ex-post* adjustment would give reliable results.

This would be similar to how the Commonwealth pays the States advance GST payments through the grant year based on the forecast GST pool and population shares, then makes an adjustment after the end of the year for the actual GST pool and population shares. The advance payments may use unreliable forecasts, but the resultant total GST entitlement paid uses reliable data based on outcomes.

If the CGC were to use forecasts, the *ex-post* adjustments could be finalised as early as several months after the grant year. However, under a three-year lagged average, the circumstances of any data year are not fully equalised until four years later. The change in each year's GST entitlement may be more volatile for some States, but would contemporaneously offset any volatility in States' fiscal capacity, with the effect of smoothing States' budgets.

Further considerations – narrow and broad approaches

The CGC is not compelled to use narrow revenue assessments

The CGC has not changed its approach to the equalisation of revenues since its 1981 Review.

The legislation at that time sought that the task measures each State's capacity to raise revenue so they would not have to "impose taxes and charges at levels appreciably different from the levels imposed by other States". The CGC, rightly or wrongly, viewed the word 'impose' to imply a measurement of the actual activity taxed by States and how they taxed it. This led the CGC to develop legalistic and narrow measures of revenue capacities, rather than broader global measures.

Notably, since the 1993 Review, the CGC has dispensed with the words "impose taxes and charges" and waived the vaguer term "at levels appreciably different from", in favour of a tighter "same effort".

Similarly, for expense assessments, the legislation at the time of the 1981 Review sought the measurement of each State's requirement to provide government services "not appreciably different from the standards of the government services provided by the other States".

The CGC viewed the word 'provide' to imply a measurement of the actual activity provided by States and similarly developed a narrow approach.

Arguably, the words 'impose' and 'provide' could be interpreted as only defining the scope of the equalisation task. That is, the CGC should not measure States' capacities to raise taxes or deliver services that they do not raise or deliver.

It is a further, somewhat unjustified, step to allow the words and the *what States do* concept to be confined by the finer detail of what States do.

- Doing so has led to the CGC's narrow interpretation and micro application of the *what States do* principle. It captures excessive detail of what States do, without capturing the overall intent; it captures their varied outcomes without recognising that their overall goals and aspirations will be similar.
- The complexity generates false precision and bias, and obscures what States are trying to do, in many cases incrementally, with some States ahead here, others there.[44]

[44] See, for example, Western Australia's Submission to the *Commonwealth Grants Commission's 2020 Methodology Review: The Principle of HFE and its Implementation*, July 2017, p. 1 available at the CGC's website.

Assessment structures should instead be designed around optimally reflecting what States are trying to achieve. The CGC should move away from the strict legal incidence of State legislation to an economic incidence, given States design their tax and royalty mixes based on their economic circumstances and according to the capacity of those who ultimately pay.[45] This more truly reflects what States do.

The CGC understands that adopting broader indicators would relieve "the problems of data quality and policy neutrality associated with a detailed approach", but would not consider a broader indicator unless "it were judged to be a more reliable indicator of States' capacity to raise revenue than an alternative approach".[46] However, could an indicator be considered reliable if it were not policy neutral and did not reflect policy consistency in a representative way?

The revenue and expense assessments do not have to match

The CGC holds the view that the revenue assessments and expenses assessments should have the same approach. That is, they should both be narrow, or both be broad based. The CGC counters calls from WA Treasury for a broader revenue assessment by asking how it proposes also broadening the assessment of expenses.[47] However, although the revenue and expense assessments are both narrow approaches, they differ greatly.[48] The CGC's revenue assessments suffer from:

- the dominant State problem, which is far less of an issue for the expense assessments; and
- policy consistency problems because, unlike expense assessments, they do not incorporate disability factors. Assessments are influenced by success in economic management and development policies, compliance, policy impacts on land values, etc.

It may follow that a different approach to revenues and expenses is perfectly valid:

- for revenue assessments, a higher-level approach is optimal; and
- for expense assessments, a narrower approach is optimal (noting that we think there are in fact good reasons for exploring higher-level expenditure assessments, as noted above).

[45] See, for example, *A Case Study on Land Tax Policy in Western Australia*, in Western Australia's *Submission to the Commonwealth Grants Commission's 2020 Methodology Review: The Principle of HFE and its Implementation*, July 2017, p. 19, available at the CGC's website.

[46] Commonwealth Grants Commission, *The Principle of HFE and its implementation*, 2017-21, p. 16, sec. 2.28; and p. 20, sec. 2.48.

[47] Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities 2020 Review*, Vol. 2, Part A, p. 42, sec. 34; p. 46, sec. 51; and p. 48, sec. 63.

[48] "The Commission agreed that its approaches to assessing revenue and expenses are different. The differences reflect how States legislate and administer these activities. For example, States do not legislate the proportion of the State hospital budget allocated to the elderly. The Commission considers the different assessment approaches for revenues and expenses are consistent with '*what States do*'." Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities 2020 Review*, Vol. 2, Part A, p. 50, sec. 77.

The CGC's view that both revenues and expenses should have the same approach is seemingly only for the sake of consistency between the two, but at the cost of optimality.

As noted above, States design their tax and royalty mixes based on their economic circumstances and according to the capacity of those who ultimately pay. That is, States take a holistic approach.

- It is possible to convert a person's liability to pay conveyance duty to a liability to pay land tax, without changing the value of the State's revenue or the burden for the taxpayer.
- It is also possible to increase payroll tax rates and lower land tax or mining royalty rates, in response to changing economic circumstances or a desire to raise or lower revenue levels.[49]

For expenses, a State is largely forced to deliver services according to the requirements of its constituents. The types of services differ little across States, and States are largely not able to change what they deliver (other than by degree or efficiency).

- It is not possible to substitute Health expenses for Justice expenses in the same way that taxes can be substituted.
- It is possible to make such substitutions at the margin, but States need functional Health and Justice systems, which wholesale substitution would not allow, unlike taxes.

Hence, States treat their revenues in a more holistic sense, which would justify a more global CGC assessment for revenues than expenses.

[49] It is true that the incidence of this tax change may fall on a different person, or change the tax burden of a particular person, but that does not matter. The fact remains that the State can vary its tax mix at will.