Australian Institute for Progress

Horizontal Fiscal Equalisation and the Commonwealth Grants Commission

John Fallon

john@economicinsights.com.au

Prepared for

Australian Institute for Progress

15 August 2019

Australian Institute for Progress
Unit 2B
50 Logan Road
WOOLLOONGABBA Q 4102
Ph +61 4 1110 4801
info@aip.asn.au

Table of Contents

Executive Summary

Vertical fiscal imbalance, fiscal equity and the Grants Commission

Australia's federal system is characterised by very high centralisation of revenue and decentralisation of expenditure – characterised by the term 'vertical fiscal imbalance'. This imbalance requires transfer of substantial revenues from the Commonwealth to the States and Territories.

Revenue transfers comprise Specific Purpose payments linked to specific functions and separate payments to equalise or near equalise the fiscal capacities of the States and Territories to deliver certain government services to a specified standard – 'a fiscal equity' objective.

Australia is at the extreme in terms of vertical fiscal imbalance, revenue centralisation and fiscal equalisation for States with federal structures.

The Commonwealth Grants Commission has responsibility for designing and implementing the methodology for the distribution of GST revenue to achieve the 'fiscal equity' objective. Specific Purpose payments are also recognised as a revenue source in the methodology applied by the Grants Commission.

The system for distributing revenue to meet the fiscal equity objective has been subject to considerable criticism and review over many years. It is complex and opaque and has distortionary effects in terms of impacts on incentives for State and Territory governments to pursue economically efficient tax and economic development policies.

The Grants Commission's objective has been recently changed by the Commonwealth so that 'full equalisation' of fiscal capacity will be changed to 'reasonable equalisation'. This new standard is effectively primarily defined as ensuring the fiscal capacity of the stronger of New South Wales or Victoria rather than the current system of equalising to the fiscal capacity of the strongest State (currently Western Australia as a result of mining royalties).

The recent changes will mean some less extreme outcomes in terms of revenue allocation and its effects but will still entail economic efficiency distortions in relation to incentives of State and Territory governments to develop efficient tax systems and pursue economic development that expands tax bases.

The system will also continue to be complex, opaque and costly to implement.

Economic efficiency is compromised

The main distortions of the distribution methodology relate to revenue rather than expenditure. However, there are some distortions that apply to expenditure as well.

The Grants Commission methodology establishes national averages for expenditure and revenue and adjusts these to reflect 'disability' factors that affect a State's fiscal capacity and over which the State has no control.

For the expenditure assessments, States still have an incentive to provide services as cost effectively as possible in relation to factors they can influence. However, large states may be able to influence the average expenditure measure and have incentives to spend more where they have above average costs. But there tends to be considerable homogeneity in services except for the Northern Territory.

However, States have no incentive to ameliorate the structural disadvantages, for which the Grants Commission assumes a State has no control, and that are relevant for determining the disability factors.

For the revenue assessments, the assessed revenue for a State (which applies to seven revenue categories) is an average tax rate across all jurisdictions times the State's actual tax base. This formulation discourages States from growing their tax bases and has led to Western Australia as being assessed, in recent years, as having very high fiscal capacity leading to a very low share of GST revenues.

It turns out that if a State expands its tax base, in relation to most taxes, it will see all but its population share of the additional revenue, calculated at the average rate, redistributed to other States. Thus the system discourages economic development that increases tax bases.

The incentives arising from the distribution methodology are the opposite of what is needed in the design of optimal tax policies from an economic efficiency perspective where the fundamental principle is implement taxes that have the least impact on economic decisions and activity.

Furthermore, States bear the full costs of the taxation and development policies but in effect share most of the benefits in terms of the GST distribution.

Fiscal equity as the predominant objective?

The Commonwealth has reset the objective of the Grants Commission and a process is underway to change the methodology over a transition period ending by 2026-27.

However, the objective is still a fiscal equity objective which will entail disincentives to pursue economic efficiency.

The fiscal equity objective has been specified as equalising fiscal capacity to the stronger of New South Wales and Victoria. This will reduce disincentives to achieve economic efficiency for the strongest and second strongest States, as they are not penalized for above average performance, but will mean no change for the other States.

The fiscal equity objective is not well grounded in principles of distributive justice nor the concepts of horizontal and vertical equity that feature in the analysis of taxation policy. It also reflects the pervasiveness of the pursuit of 'equality' with bureaucratic solutions in Australia that are at the expense of diversity and choice in a federal system.

The fiscal equity objective is specified at the level of a State or Territory and not focused on equity issues within the boundaries or for individuals. There is also no commitment to ensure equal access to services within a State or region.

It also seems incongruous that the ACT should receive a per capita grant that is above the Australian average there while average disposable income is almost twice the Australian average. Disposable incomes in the Northern Territory are also well above the Australian average and the per capita allocation in the Territory is more than four times the Australian average but fiscal disadvantages there are well recognised.

Equal per capita distribution supplemented by targeted assistance

An alternative approach that has been raised by some stakeholders is to redistribute GST on an equal per capita basis.

An equal per capita distribution would give primacy to economic efficiency effects. This is because a State's population share would be the sole determinant of the allocation of GST payments and not policies or performance with respect to revenue and service delivery capacity. An equal per capita allocation would also remove the need for administrative resources to determine allocations based on fiscal capacity assessments. Similar effects can be achieved by returning GST on a State-of-origin basis.

Such an option would also represent a move towards a more competitive form of federalism where States in effect compete with each other to provide residents with a preferred mix of public goods and taxation levels, consistent with the seminal theories of Tiebout and Buchanan in the public finance literature. However, it is recognised that the existence of vertical fiscal imbalance itself creates separate governance issues because revenue raising responsibilities are not directly linked to expenditure responsibilities and this reduces the scope for and effectiveness of 'competitive federalism'. This issue could be addressed with tax reform that might be more likely if the GST was distributed on an equal per capita basis.

However, there would be a political need to address the problems of service delivery costs in the Northern Territory and to a lesser extent Tasmania. The program of Specific Purpose Payments could be developed as an alternative to the current GST distribution arrangements to provide more targeted assistance to the Northern Territory in particular.

Estimating the economic efficiency effects from Federalism

There have been limited studies of the efficiency effects of HFE and most studies have been limited in scope with estimated effects being relatively small. However, the economy-wide modelling that has been undertaken has tended to adopt the assumption that HFE removes incentives for people to migrate only because of an incentive to migrate to benefit from a higher fiscal capacity without giving full consideration to forces that mean that HFE discourages efficient taxation and economic development.

Turning to a wider consideration of 'federalism' an empirical study by Twomey and Withers is of interest as it focuses on the overall economy-wide benefit from a federal system and the extent of fiscal decentralisation. Using growth regressions, they estimated the impact on per capita economic growth of the fact of being a federal or unitary state and the extent of fiscal decentralisation for 21 OECD countries covering the 50 year period from 1950 to 2000.

For Australia they found that the present Federation produced a net benefit of $4,507 per capita of $11,492 per household in 2006 prices. However, they noted that Australian federalism has become quite centralised and they used their regression results to estimate that Australian per capita GDP could increase by a further $4,188 if the decentralisation of revenue matched the 'best federal practice' defined by Canada, Germany and Switzerland.

These results are not directly focused on the issue of horizontal fiscal equalization but with a high degree of fiscal decentralisation, own source revenue is higher and HFE would then entail considerable direct cross subsidies across States which is less likely than under the current arrangements.

1 Introduction

This paper assesses the current and proposed arrangements for the allocation of Goods and Services Tax (GST) revenue from the Commonwealth to States and Territories through a process known as horizontal fiscal equalisation (HFE). It discusses prospective changes and their impacts in terms of economic efficiency, fiscal equalisation and other dimensions of equity, the role of the Commonwealth Grants Commission (CGC), and considerations for reform.

2 What is Horizontal Fiscal Equalisation?

The term Horizontal Fiscal Equalisation (HFE)[1] refers to both an objective and the mechanism used to achieve the objective. In the Australian context the objective has evolved to mean achieving near or complete fiscal equality across jurisdictions in the capacity to provide certain government services. The mechanism is the process for determining the transfer of funds from the Commonwealth to the States and Territories in a manner that takes account of the different revenue-raising capacities and costs-of-service provision of the States and Territories.

The need for some form of inter-jurisdictional revenue transfers arises because there is high centralisation of revenue-raising capacity at the Commonwealth level and relatively decentralised expenditure responsibilities for States and Territories and also because the States have different fiscal capacities to provide what are widely perceived to be essential government services.

The term vertical fiscal imbalance (VFI) means that the Commonwealth raises more of its own-source revenues than it own-source expenditure while the reverse is true for the States and Territories.

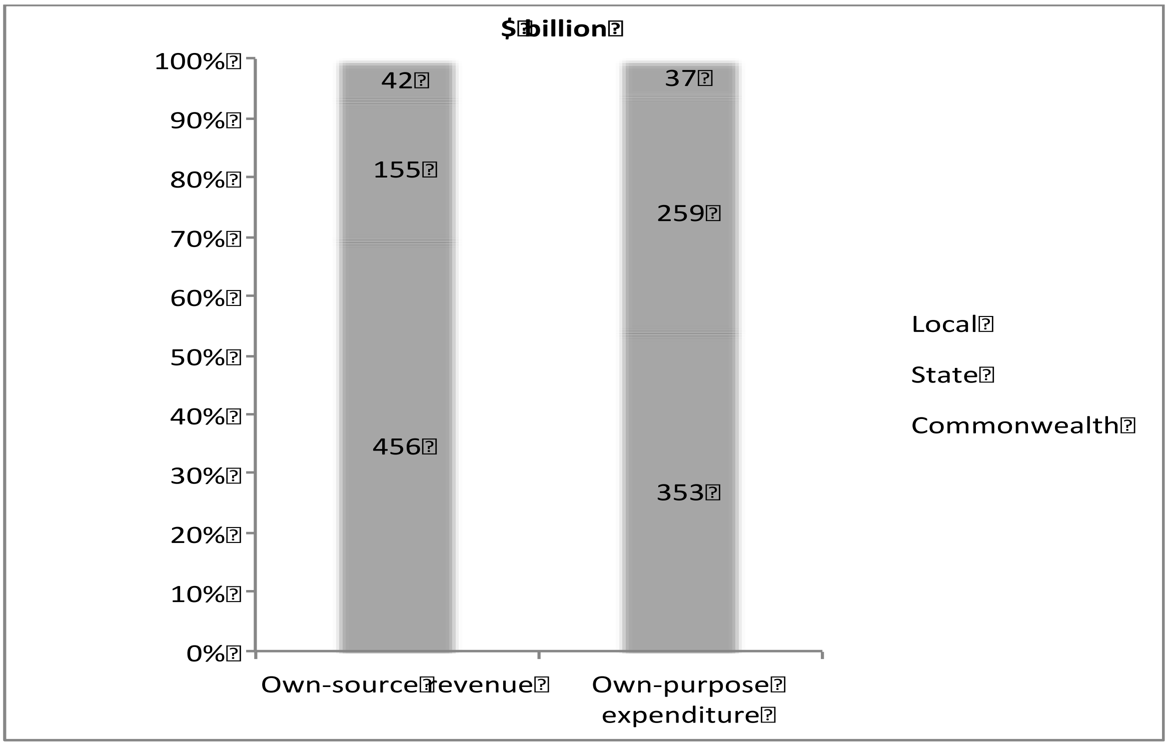
For example in 2017-18 the Commonwealth collected some 70 per cent of all (nation-wide) own-source revenue but spent some 55 per cent of all own-purpose expenditure. At the local government level imbalances are typically smaller and there was an overall surplus at the local government level in 2017-18. (Figure 1). Australia has amongst the most extreme VFI in the world.[2] It also is the most centralised federation of comparable federal nations in terms of

[1] Ergas, H. and J. Pincus (2011) Submission to the GST Distribution Review, September 2011, p. 2.

[2] Coppel, J., (2018), The Economic Impacts of HFE: Lessons from Australia, Background Paper, 14th Annual Meeting of the Network on Fiscal Relations Across Levels of Government and

revenue and has the highest level of fiscal equalisation.[3]

Figure 1: Own-source revenue and own-purpose expenditure by level of Government, 2017-18



Source: ABS Government Finance Statistics, Australia 2017-18, Cat. No. 5512

Note that in the absence of vertical fiscal imbalances and intergovernmental transfers, the States and Territories would have different fiscal capacities to provide government services at a similar level. Without VFI it would still be possible to develop a system of inter-governmental transfers from the fiscally stronger to the fiscally weaker states but VFI has likely facilitated the provision of transfers.

Australia has addressed the issue of VFI and different fiscal capacities through the development of a complex system of grants administered by the Commonwealth Grants Commission (CGC). In 2018-19 the Commonwealth, based on the advice of the CGC, transferred $127 billion to the States which represented some 40 per cent of their total revenues. GST revenues represented about 50 per cent of the total transfers to States in 2018-19 with most of the

[3] Twomey, A., and G. Withers (2007), A Report for the Council for the Australian Federation, April, p. 38.

remainder relating to payments for specific purposes.[4]

The payments for specific purposes cover most areas of State and local government activity, including health, education, skills and workforce development, community services, housing, indigenous affairs, infrastructure and the environment. Health and education typically constitute some two-thirds of payments for specific purposes. The payments for specific purposes are taken into account when determining the allocation of GST revenues to the States and Territories.

3 The Constitution and Government Roles

Australia's constitution assigns exclusive powers to the Commonwealth for certain functions and the States have responsibilities for all other matters. The Constitution does not recognise the existence or role of local governments which are in effect sub-units of State and Territory Governments. The ability of States and Territories to raise revenues from income and expenditure taxes is restricted by the Constitution, legal rulings and inter-governmental agreements.

The Constitution does not set out any rules or institutional structures to manage Commonwealth-State relations. The main current instrument for managing the roles and responsibilities between governments is an Intergovernmental Agreement on Federal Financial Relations and under this umbrella agreement various National Agreements for specific sectors and functions.

4 The Commonwealth Grants Commission and Fiscal Equalisation

In accordance with the current Intergovernmental Agreement, the Commonwealth Grants Commission (CGC) (an independent Commonwealth Statutory Body established in 1933) addresses the issues of VFI and fiscal capacity to provide government services by the development and implementation of a methodology to allocate GST revenues to the States and Territories.

The methodology has evolved over a long time period into a mechanism where the CGC's interpretation since 1981[5] has in effect been to achieve full and comprehensive equalisation of fiscal capacity to deliver a defined service level

[4] Commonwealth of Australia, 2019-20, Federal Financial Relations, Budget Paper No. 3, Government Printer, Canberra.

[5] Productivity Commission (2018), Horizontal Fiscal Equalisation, Inquiry Report No. 88, 15 May, p. 69.

for various government services i.e. the principle of HFE.[6] Furthermore fiscal capacity is calibrated to match the fiscal capacity of the fiscally strongest State.

The fiscal equalisation methodology is complex and in effect allocates considerably less GST revenue than collected at the State level or on a per capita basis in many cases. It also entails various distortions that lead to economically inefficient outcomes and inequities beyond the concept of fiscal equality in capacity to deliver services.

Following a recent Productivity Commission[7] review, the objective of the CGC and restrictions on the methodology have been clarified and revised with legislative amendments to move away from 'full' equalisation to 'reasonable' equalisation.[8]

The new policy is outlined in the *Treasury Laws Amendment (Making Sure Every State and Territory Gets Their Fair Share of GST) Act 2018*, which amends the Commonwealth Grants Commission Act 1973 and the *Federal Financial Relations Act 2009*. The amendments were passed on 14 November 2018.

The main elements of the new policy are:[9]

- transitioning from a benchmark of equalising to the strongest State to 'reasonable' *equalisation based on the fiscal capacity of the stronger of New South Wales and Victoria* to be completed by 2026-27;
- a guarantee that, during the transition period. each State and Territory will get the better of the current distribution system or the updated distribution system;
- introducing a minimum GST revenue sharing relativity that may be determined by the Treasurer for any individual State or Territory (with an initial relativity factor of 0.7); and
- permanently boosting the GST revenue pool with additional Commonwealth financial assistance.

The new policy is to be implemented in a transition phase starting in 2021-22

[6] https://www.gcg.gov.au/about-us
[7] Productivity Commission (2018), Horizontal Fiscal Equalisation, Inquiry Report No. 88, 15 May.
[8] https://www.gcg.gov.au/about-us
[9] The Senate Economics Legislation Committee (2018), Treasury Laws Amendment (Making Sure Every State and Territory Gets Their Fair Share of GST) Bill 2018 (Provisions).

and to be completed by 2026-27, with weights reflecting the old factors and new factors changing each year over the transition period until the new factors fully apply.

The new Grants Commission policy will mean less extreme outcomes in the allocation of GST revenue, particularly for Western Australia, but will still likely entail economic distortions that affect the incentives of States and Territories to reform their revenue systems and pursue economic development and will not necessarily effectively address other equity objectives. For economic efficiency, this is essentially because of the priority given to equalising or near equalising fiscal capacity to deliver a relatively high uniform standard of government services. For equity it is because there is no commitment to ensuring equity of access within a region and equity in terms of the personal distribution of income.

5 A mathematical representation of fiscal equalisation

5.1 The model

The model used to determine the 'assessed GST revenue requirement by the CGC[10] starts with the budget identity for a State which says that the revenue that a State or Territory receives from the GST, other Commonwealth payments and own-source revenue less recurrent expenditures and investment expenditure equals saving (or borrowing if saving is negative) as follows:

$$(1) \qquad (G_s + O_s + R_s) - (E_s + I_s) = N_s$$

This identity can be re-arranged and expressed so that the assessed GST revenue that is needed by a State is calculated as the average fiscal outcome if it delivered the average level of services and made the average revenue effort (with no GST revenue) as follows:

$$(2) \qquad AGSTR_i = P_i \frac{N_s}{P_s} \varepsilon_i + P_i \frac{E_s}{P_s} \gamma_i + P_i \frac{I_s}{P_s} \delta_i - P_i \frac{R_s}{P_s} \rho_i - O_i$$

Where:

AGSTR is assessed GST revenue requirement. The Commission's approach ensures States' assessed GST revenue requirement sums to the total GST revenue available ($\sum_i \mathrm{AGSTR}_i = \mathrm{G_s}$).

[10] Commonwealth Grants Commission, The GST Distribution Model – A Mathematical Treatment, https://www.cgc.gov.au/about-us/fiscal-equalisation, accessed on 26 June 2019.

i, s are subscripts used to denote an individual State (i) or all States (s);

P is population;

N, E, I, R are net lending, expense, net investment and own-source revenue respectively;

ε, γ, δ, ρ are assessed disability factors for net lending, expense, net investment, and own-source revenue respectively;

G is GST revenue;

O is other Commonwealth payments. These include Payments for Specific Purposes (PSPs) which the Commission has decided should impact on relativities. They may also include Commonwealth own-purpose outlays which the Commission treats as impacting on relativities.

The expense and revenue terms in equation (2) are shown as aggregates but in practice they are calculated at disaggregated level for 12 expense categories, seven revenue categories and net investment and net lending aggregates.

The methodology for the equalisation of fiscal capacity incorporates 'disability' factors that relate to a State's ability or disability relative to average performance.

Considering the individual terms, a State's expenditure, for example, can be interpreted as the product of its assessed per capita expenditure (average per capita expenditure adjusted by the relevant disability factor) times its population. The expenditure disability factor is calculated to measure the impact on a State's delivery costs of unavoidable non-policy influences relative to the Australian average. There can be more than one non-policy influence (population, geographic and other economic factors) with differential impacts on different parts of the same service.

Assessed net lending (or borrowing if negative) is determined such that the States hold the same net financial assets per capita. Where net lending (saving) is on average negative then this can be interpreted as another source of funds to meet expenditure requirements.

Assessed net investment is calculated as the net investment in physical assets to provide the average standard of service, with the disability adjusted level of infrastructure, at the average level of operational efficiency.

Assessed revenue is determined as the revenue if the average tax rate was applied to the State's revenue base. This means that the disability factor for assessed revenue is simply the State's per capita tax base divided by the average per capita tax base (see 5.2.2 below). This formulation is the source of extreme effects for States with a high share of mining activity. The assessed revenue for mining is done on a mineral-by-mineral basis for seven minerals plus a separate other group.

There are two exceptions for assessed revenue. Where each State has the same capacity to raise revenue, distribution is based on an equal per capita revenue. Where the Commission considers differences in per capita revenue are due wholly to non-policy influences distribution is based on actual per capita revenue.

The calculations are expressed in deviations from the average so that the sum of the assessed GST amounts equals the GST to be distributed in a year.

In meeting the objective of full equalisation, the process can be described as allocating the entire GST pool on an equal per capita basis and then adding or subtracting GST to reflect whether a State has above or below average fiscal capacity. This is equivalent to equalising to the capacity of the strongest State and making an equal per capita distribution of the remaining GST among all States.[11]

An overall relativity can be estimated which is defined as a State's overall fiscal capacity relative to the average capacity of all States. To be clear, a fiscally stronger State might be assessed as needing only 90% of the average GST available on a per capita basis, and so its relativity would be 0.9. A fiscally weaker State might be assessed as needing 110% of the average, and so its relativity would be 1.1.

The recommended share of GST in a particular year is based on an average of the relativities for the previous three years weighted by population shares. This captures differences in fiscal capacities while reducing year-to-year volatility.

5.2 How distortions arise

The main distortions of the distribution methodology relate to revenue rather than expenditure. However, there are some distortions that apply to

[11] CGC (2015), Report on GST Revenue Sharing Relativities 2015 Review, Volume 1 – Main Report, Box 1,p. 79.

expenditure as well.

5.2.1 Expenditure

For the expenditure assessment the national average is adjusted to reflect disabilities in service delivery. With this approach, a state government bears 100 per cent of the costs of any additional spending that it makes on its own account, and saves 100 per cent of any reduction in its own spending, assuming there is no provision in a specific purpose payment that restricts spending reductions. This means that States have an incentive to provide services as cost effectively as possible in relation to factors they can influence.

An exception would be where a State is large enough in a particular service category to have an impact on the national average per capita cost and has above average costs that provide an incentive to increase expenditure and so increase the average national cost and receive a higher share of GST payments. The reverse incentive would apply for large States with below average cost of service delivery. However, there tends to be considerable homogeneity in services across States so that the ability of States to influence averages is small. An exception is the Northern Territory which has a disproportionate influence on average costs of delivery of services to indigenous people.[12]

However, it should also be noted that a State has no incentive to ameliorate the structural disadvantages, for which the CGC assumes a State has no control, and that are relevant for determining the disability factors. This is because, if the disability factor is reduced, the State receives less revenue but bears the full cost of its efforts to reduce the disability.

5.2.2 Revenue

To help understand the tax effects, it is relevant to show the relationship between assessed revenue expressed in terms of average revenues and disability factors and average tax rates and the tax base for a State.

The assessed revenue for a State can be expressed (from (2) above) as:

$$(3) \qquad State\ i's\ assessed\ revenue = \ P_i \frac{R_s}{P_s} \rho_i$$

Where the disability factor can be expressed as State i’s per capita tax base divided by the average per capita tax base:

[12] Productivity Commission (2018, pp. 115-116).

(4) $$\rho_i = \frac{Y_i}{P_i} \Big/ \frac{Y_s}{P_s}$$

Substituting the expression for the disability factor (4) in the expression for the assessed revenue (3):

(5) $$State\ i's\ assessed\ revenue\ R_i = \frac{R_s\, Y_i}{Y_s}$$

Recognising that the average revenue for all States can be expressed as a tax rate τ_s times the tax base Y_s:

(6) $$State\ s's\ assessed\ revenue\ R_s = \tau_s Y_s$$

Substituting (6) into (5):

(7) $$State\ i's\ assessed\ revenue\ R_i = \tau_s Y_i$$

This makes it clear the assessed revenue for a State (for each of seven revenue categories) is an average tax rate times the State's actual tax base. Clearly States with very large mining sectors will have very large tax bases for mining relative to other States and this is characterised as a negative 'disability'. This formulation has led to Western Australia as being assessed as having very high fiscal capacity and, through the methodology, being allocated a low share of GST revenues as the mining sector boom unfolded in that State.

More generally consider how an increase in the tax rate in one State affects GST.[13] There are two effects from a tax rate increase on the GST distribution:

- the average-rate ('Robin Hood') effect — the higher tax rate increases the national weighted-average rate, which can either reduce GST payments (for States with a relatively large share of the tax base) or increase GST payments (for States with a relatively low share);
- the elasticity effect — to the extent that the higher tax rate leads to a reduction in the State's own tax base, due to lower demand or the movement of resources to other States, the State's GST payments increase as it is assessed as having lower revenue-raising capacity.

Importantly any change that increases a State's tax base (more resource extraction, more land for development or more economic development in

[13] See Productivity Commission (2018, Section 3.1) for a detailed explanation of tax effects from the CGC methodology.

general) will increase the assessed GST revenue and hence enhance fiscal capacity meaning a lower GST allocation to that State. It turns out that if a State expands its tax base it will see all but its population share of the additional revenue, calculated at the average rate, redistributed to other States. Thus the system discourages economic development that increases tax bases.

There is a further distortion for the tax system arising from the distribution methodology. If a State lowers its tax rate and the tax base increases it would be assessed as having higher revenue relative to other states because an average tax rate (across all States) is applied to the higher tax base for that State. This is the opposite of what is needed in the design of optimal tax policies from an economic efficiency perspective: where the optimal tax mix and levels need to be configured so that there is least impact in terms of lowering tax bases as a result of a tax. Optimal taxation requires higher (lower) taxes on the less (more) mobile factors of production and lower taxes generally where there is more sensitivity of economic behavior to a specific tax. In other words efficient taxes should have the least impact on economic decisions and economic activity.

It is also relevant to note that in some specific revenue areas, the above GST impacts can be moderated by other components of the formula. For example, the CGC currently applies an average tax-free threshold to its assessment of payroll tax, the largest own-source revenue item in most State budgets. This is in contrast to the use of a State's own tax base as used for other taxes and means that actions by one State to broaden or narrow its payroll tax base are unlikely to have a significant influence on its GST payments.[14]

As a final point, note that States bear the full costs of taxation reform and development policies but in effect share most of the benefits in terms of the GST distribution.

6 Rationale for Horizontal Fiscal Equalisation

6.1 History[15]

The origins of horizontal fiscal equalisation in Australia date back to the different economic circumstances of the States at the time of Federation. The Commonwealth has dominated the collection of revenue since the time of Federation and provided large transfers to the States. Initially there was

[14] Productivity Commission (2018, pp. 102-103).

[15] This review of history draws on Productivity Commission (2018), Horizontal Fiscal Equalisation, Inquiry Report, No. 88, 15 May, pp. 70-73.

substantial reliance on customs and excise revenue with at least three-quarters being returned to the States. In addition to general revenue sharing arrangements special grants were made to weaker States particularly Western Australia from 1910 and Tasmania from 1912 and South Australia from 1929. The Great Depression led to more frequent claims for special grants and the special grants process became a larger political issue.

The Grants Commission was established in 1933. At that time grants were not intended to equalise incomes or living standards but rather, with reasonable effort, put finances of a State at a standard not appreciably below that of other States.

From about 1920 to 1940 both the Commonwealth and States collected income tax but the Commonwealth assumed sole responsibility for income tax in 1942, as a war time measure that has continued. This increased the extent of VFI.

From 1942 to the early 1980s general revenue payments dominated total Commonwealth payments with special grants being relatively small and specific purpose payments growing substantially. HFE, which was an objective linked to special grants, diminished in importance in this period with several states entering and withdrawing from claimancy at various times.

In 1976, income tax sharing arrangements were developed based on an initial largely ad hoc relativity of 1.0 for Victoria and other relativities based on existing financial assistance grants. The Commonwealth Grants Commission was given the role of reviewing the relativities and new ones were applied from 1982 but subject to a guarantee that each State would receive a specified minimum increase each year, which restricted implementation of the relativities. The equalisation objective was also clarified in 1999 and refined slightly in 2010 to the following.

> State governments should receive funding from the pool of goods and services tax revenue such that, after allowing for material factors affecting revenues and expenditures, each would have the fiscal capacity to provide services and the associated infrastructure at the same standard, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency.[16]

The Intergovernmental Agreement on Federal Financial Relations that accompanied the reform of Australia’s taxation system in 1999–2000 made

[16] Commonwealth Grants Commission (2010), Volume 1 — Main Report, Report on GST Revenue Sharing Relativities: 2010 Review, Canberra, p. 34 in Productivity Commission (2018, p. 75).

provisions for all GST revenue (less administration costs) to be shared among the States on the principles of equalisation. These tax reforms also shifted from an emphasis of the amount of funds to be made available to the States, which was previously a negotiated amount, to matters of allocation. The allocation of GST revenue to the States did not increase the revenue States received as a per cent of GDP as it replaced other revenue from the Commonwealth.

The CGC's overall approach to calculating per capita relativities remained largely unchanged from 1981 to now but changes are under way to move from 'full equalisation' to 'reasonable equalisation as discussed in Section 4.

Based on the history of special grants it is reasonable to conclude that the existence of a substantial vertical fiscal imbalance necessitated the transfer of large sums of revenue from the Commonwealth to the States and that the origins of horizontal fiscal equalisation largely arose in a pragmatic manner from a perceived need to assist the fiscally weaker States. This may have reflected the demands of a Federal system where there may generally be a sense of equal rights for certain services associated with national citizenship.[17] Garnaut and Fitzgerald suggest that in the early years of Federation, the Commonwealth responded to fiscal distress in the small States as fiscal assistance was needed to allow them to function as normal members of the Federation.[18] In support of the equal rights hypothesis, there is a view that there is a pre-occupation with 'equality' or 'fairness, in Australia that leads to a reliance on government authority and bureaucratic solutions for which Australia has an inclination and special talent. This in turn introduces other costs in terms of adverse impacts on diversity, choice and economic efficiency.[19]

6.2 Economic efficiency and equity criteria

In order to understand the rationale for HFE from an economic perspective, it is relevant to define the concepts of economic efficiency and equity.

[17] Walsh, C. (2014), Fixing Fiscal Federalism, p. 59 in Carling. R., The Centre for Independent Studies, Where to For Australian Federalism.

[18] Garnaut, R., and V. Fitzgerald (2002), "Issues in Commonwealth-State Funding, Australian Economic Review, 18 December, Vol. 35, September, pp. 290-300 for a review of effects in Australia.

[19] This is a theme in several chapters in Coleman, W., (2016), Only in Australia The History, Politics, and Economics of Australian Exceptionalism, Oxford University Press. See in particular Ergas, H., "Tocqueville, Hancock and the Sense of History", and Nethercote, J.R., Australia's talent for Bureaucracy and the Atrophy of Federalism".

6.2.1 Economic efficiency

Economic efficiency is attained when no feasible changes in prices, production or consumption can benefit society as a whole while abstracting from equity considerations. Consideration of economic efficiency is essential in assessing policy from an economic perspective. Economic development and taxation systems that facilitate economic activity contribute to economic efficiency.

6.2.2 Equity

It is reasonable to conclude that the primary rationale for horizontal fiscal equalisation is mainly based on a particular type of fiscal equity objective i.e. achieving the fiscal capacity to deliver the same or a reasonable standard of government services. However, this principle applies at the level of a whole jurisdiction when comparing jurisdictions and not at the individual level which is the focus for the main concepts of equity that are discussed in the literature.

The concepts of horizontal and vertical equity used in tax policy have broader relevance and are focused on equity for individuals. Horizontal equity refers to the principle of treating individuals in similar circumstances equally while vertical equity refers to the principle of treating individuals in different circumstances taking due account of their different circumstances. These concepts have their origins in Aristotle's proportionality principle (the oldest formal principle of distributive justice):

> "Equals should be treated equally, and unequals, unequally in proportion to relevant similarities and differences".[20]

Another approach to equity is to focus on the least well off members of society which is a feature of much of Australia's social welfare system. The work of philosopher John Rawls is often cited in support of this social welfare principle. Rawls proposes that all other things being equal, society is to act so as to make the least favoured member of society as well off as possible.[21]

6.3 Economic efficiency effects

6.3.1 Potential effects

The issue is whether intergovernmental fiscal transfers in effect improve economic efficiency or worsen it.

[20] Moulin, H. (2002). "Axiomatic Cost and Surplus Sharing", in Handbook of Social Choice and Welfare, v.1, K. Arrow, A. Sen and K. Suzumura (eds.): 356-422.

[21] Rawls, J. (1971), A Theory of Justice, Harvard University Press, Cambridge, Massachusetts.

There are a number of different theories some of which suggest transfers could improve aspects of economic efficiency and some which provide support for the view that they lower economic efficiency.[22]

Buchanan[23] proposed an early theory that provided some support for an economic efficiency rationale for some form of fiscal equalisation. However, his theory did not propose equalisation of revenue capacity but rather focussed on what Buchanan described as the 'fiscal residuum' which he defined as 'the balance between contributions made and the value of public services returned to the individual.' This means consideration of both the government services provided and the tax prices paid for them.

The idea is that some States may have a higher proportion of rich people who are prepared to pay more per capita for public goods that all citizens enjoy without the same tax contribution and this may induce migration that is not based on productivity. To elaborate if, for example, one state provides certain services to the others, but has the capacity to do so at lower tax burdens per capita, at least some people might be induced to move there even though their employment would be less productive. The net fiscal benefits may be sufficient to more than offset lower incomes and induce migration.

Thus some form of fiscal equalisation can deter the migration and preclude a reduction in economic efficiency. However, Buchanan's proposal was to equalise the fiscal residuum on a horizontal basis for similar individuals in different jurisdictions. With different services provided this would require different tax rates across jurisdictions for the services.

A strong counter argument to the fiscal residuum concept is that fiscal transfers could reduce economic efficiency by discouraging the movement of mobile factors of production based on genuine productivity and cost differences.

It should also be noted that Buchanan's views evolved considerably over time to eventually advocating competitive federalism as a means to restrict the failures of Leviathan governments.[24] This view of fiscal competition is consistent with

[22] See Garnaut, R., and V. Fitzgerald, "Issues in Commonwealth-State Funding, Australian Economic Review, 18 December, Vol. 35, September, pp. 290-300 for a review of effects in Australia.

[23] Buchanan, J. (1950), "Federalism and Fiscal Equity", American Economic Review, 40, 583-599.

[24] Feld, L. P. (2014), "James Buchanan's Theory of Federalism: From Fiscal Equity to the Ideal Political Order", Working Paper No. 14/06, Department of International Economic Policy, University of Freiberg.

the seminal paper by Tiebout[25] of the benefits from people moving in terms of detection of inefficiencies in government services and tax policies. However, substantial movement of individuals as per the Tiebout hypothesis can lead to fiscal externalities as tax burdens change as a result of migration.

Positive externalities in the form of spillover benefits to other jurisdictions can also support a case for investment in certain public goods that benefit citizens in other jurisdictions e.g. education and highways.[26] If the full benefits cannot be realised within a jurisdiction then there may be underinvestment in certain public goods. This can justify specific purpose payments but not fiscal equalisation.

The foregoing theories depend on the mobility of different taxpayers but for most individuals it is likely to be the case that job opportunities for the working population, family connections and general amenities for retirees typically play larger roles then government services and tax prices in inter-regional migration decisions in Australia. Nevertheless potential mobility of people in response to different services and tax can still play a role in constraining government; with a prominent example being the elimination of death duties for all States in response to the initial elimination of these duties in Queensland.

Another aspect of economic efficiency is the extent to which fiscal transfers affect economic development policy. This will depend on both the objectives of a fiscal transfer system and the allocation mechanism. As explained below the fiscal equalisation approach that has been implemented in Australia entails disincentives for States to develop their resource sectors or support other sectors with strong growth prospects given the substantial sharing of benefits but not costs that occurs. This is likely to continue despite the recent changes in prospect for the CGC.

A final aspect of economic efficiency is the overhead and transactions costs of managing the system of transfers. The current system is complex and opaque and entails the resources of both the CGC and State and Treasury bureaucracies. Reflecting the complexity and level of detail involved, the CGC's 2015

[25] Tiebout, C.M. (1956), "A Pure Theory of Local Expenditures", Journal of Political Economy 64, 416- 424.

[26] Externalities in economics refer to situations where prices do not reflect the total benefits or costs for a unit of supply while public goods refer to situations where a service provides benefits irrespective of individual consumption and it is not possible to identify and price individual consumption.

methodology review comprised two volumes that totalled over 800 pages.

6.3.2 Productivity Commission findings

The Productivity Commission in its recent review of HFE examined the effects on economic efficiency including State and Territory incentives to undertake tax and service delivery reforms and promote economic development and the evidence for whether HFE influenced interstate migration. The main conclusions were as follows:

- HFE's influence on economic efficiency has been a secondary and subsidiary concern for the CGC given its focus on fiscal equity.[27]
- For tax efficiency:[28]
  - Changes in tax rates generally have a small impact on GST shares but the effect can be substantial if a State departs from the average or has a significant influence on the tax base.
  - A prominent example of incentives to avoid efficient tax reform is in relation to the issue of replacing stamp duty on property transactions with a new broad-based tax on residential land. This is widely recognised by economists as improving economic efficiency but the Commission estimated a reduction in GST payments for any State that pursued this reform, in isolation from a nation-wide approach. New South Wales, Victoria and Queensland were estimated to each experience reductions of $1 billion on an annual basis.[29]
  - The potential for HFE to distort State policy is pronounced for mineral and energy resources. States that increase mineral production or royalty rates will lose much of the additional revenue to equalisation — such that they retain as little as their population share of any increase in revenue or bear as little as their population share of any decrease.
- For economic development:[30]
  - Views varied on the extent to which HFE discourages economic development. One view is State Governments may be discouraged from developing or approving (contentious) mining or other industry activity because they would bear the full social and political cost but

[27] Productivity Commission (2018, p. 151).
[28] Ibid, p. 99.
[29] Ibid, pp. 108-109.
[30] Ibid, pp. 124-129.

retain only part of the revenue benefits after equalisation.[31] Queensland and Western Australia submissions supported the view that the way royalties are assessed discourages resource development Nut Tasmania, South Australia and the Australian Capital Territory argued that HFE is not a core consideration for mining policy. The Productivity Commission concluded that while there is limited direct evidence that GST effects have influenced specific policy decisions, the incentive effects for some States are palpable and have the potential to undermine State policy neutrality,

    - Another weakness is that a significant portion of own-source revenues are not differentially assessed, including gambling revenues which means that States retain all their revenues from gambling which contrasts with mining where they lose most of it.
- For government expenditure:[32]
    - There is no compelling case that HFE biases State expenditure policy. A State that reduces its actual expenditure below its assessed expenditure needs — whether by lowering the level of services provided, cutting the costs of delivering those services, or both — retains the full savings from doing so (and vice versa). However, this conclusion does not apply to structural factors that affect a State's assessed capacity where addressing a structural disadvantage would mean that it only retained its population share of the fiscal benefits but it would bear all the costs of its efforts.
- For migration:[33]
    - There is no clear evidence on whether HFE's influence on migration enhances or reduces economic efficiency and the impact of HFE on interstate migration of labour is small.
    - Fiscally induced migration may become more apparent if State fiscal capacities were to diverge over a sustained period but the differences in fiscal capacity would need to be substantial to have a material influence on migration decisions.

6.4 Equity effects

6.4.1 Potential effects

Providing transfers based on equalising fiscal capacity for States and Territories does not focus on equity concerns at the level of the individual. It is possible

[31] Ergas and Pincus (2011, p. 8), Garnaut and FitzGerald (2002b, p. 9).

[32] Ibid, p. 99 and p. 115.

[33] Ibid, p. 151.

that fiscal transfers may be effective in promoting economic development in lower income jurisdictions but this will depend on the economic efficiency incentives of the fiscal transfer arrangements.

The approach to HFE, as implemented since the early 1980s to date, has focused on equalising fiscal capacity to deliver a relatively high standard of service at the State or Territory level. This does not mean equality of access to services at the household or individual level. Jurisdictions are not required to achieve uniform service delivery standards or access within a region or even to spend revenues they receive on specific services that form the benchmark for determining service standards.

Other equity or fairness questions that arise include: the impacts on vertical and horizontal equity i.e. the interpersonal income distribution effects, compared to other Commonwealth policies; the existence of substantial transfers to the Territories where average incomes are well above the average for Australia as a whole and whether it is fair to aim at equal fiscal capacity which provides no scope for States to benefit from above average performance in their operations.[34]

6.4.2 Productivity Commission findings

The Productivity Commission's key findings for equity were as follows:[35]

- HFE achieves almost complete fiscal equalisation; it enables all States to provide the average national level of services and mostly adjusts for fiscal disadvantages that are out of States' control. But it does not provide for State Governments to retain a reasonable share of the fiscal dividends of their policy efforts (without them being equalised away), raising concerns about fairness in relation to policy and performance incentives.
- In giving States autonomy with respect to expenditure, HFE cannot achieve interpersonal equity.
- The objective of HFE should be reframed to allow for trade-offs to be made between equity and efficiency. The system should enable State Governments to provide a 'reasonable' standard of services, rather than the 'same' as under the current system.

[34] See Garnaut and Fitzgerald (2002) for further discussion of issues arising in the assessment of equity of Commonwealth-State funding and Productivity Commission (2018) p. 5.
[35] Productivity Commission (2018, p. 163).

7 Evaluation of the prospective changes

7.1 Background

The approach that has applied since a CGC review in 2015 has been to equalise fiscal capacity based on the strongest state and then add an equal per capita amount for any remaining GST.[36]

In the latest update for 2019-20, the CGC has retained this approach and noted that in addition to GST revenue, the Commonwealth will be making supplementary payments under its horizontal fiscal equalisation (HFE) reform package, to deliver an outcome equivalent to a relativity of 4.66 to the Northern Territory, and an outcome equivalent to a relativity of 0.7 to Western Australia.[37]

The prospective changes to the fiscal equalisation objectives and their implementation by the CGC were described in Section 4. They are to be implemented in a transition phase starting in 2021-22 and to be completed by 2026-27.

Once the transition is complete, the key components in terms of affecting economic efficiency are setting the benchmark for equalisation as the fiscal capacity of the stronger of New South Wales and Victoria (effectively likely to be the second strongest jurisdiction) and introducing a minimum GST revenue sharing relativity that may be determined by the Treasurer for any individual State or Territory (with an initial relativity factor of 0.7).

7.2 7.2 Fiscal and economic efficiency impacts

It is possible to gauge the impact of these changes, relative to the current approach of equalising fiscal capacity to the strongest State, by reference to some of the scenarios examined by the Productivity Commission in its 2018 report.[38] The following tables summarise key material from that report. This is followed by further analysis of the option of an equal per capita distribution and discussion of some broader considerations with respect to more competitive federalism.

---

[36] Note this is equivalent to allocating the entire GST pool on an equal per capita basis and then adding or subtracting GST to reflect whether a State has ab above or below average fiscal capacity. CGC (2015), Report on GST Revenue Sharing Relativities 2015 Review, Volume 1 – Main Report, Box 1,p. 79.

[37] CGC (2019), Report on GST Revenue Sharing Relativities 2019 Update, p. 2.

[38] Productivity Commission (2018, Chapter 8).

Four options are assessed:

1. Equalisation to the fiscal capacity of the second strongest State.
2. Equalisation to the average fiscal capacity of States and Territories.
3. Distribution based on equal per capita amounts.
4. Distribution based on a 0.7 relativity floor.

Options 1 and 4 will be applied in the prospective changes by the CGC but option 4 would be redundant if the relativity in applying option 1 was higher than 0.7. Table 1 presents the fiscal impacts of the options based on estimates for 2018-19.

Table 1 shows the current relativities, total GST payments in $m and $ per capita terms, and the change in GST payments in $ terms, $ per capita terms and as a per cent of total State or Territory revenue for each of the options and also the relativity for each option. The options are assumed to be implemented without a transition period.

All of the options have significant fiscal impacts in terms of increasing revenues for Western Australia with the largest fiscal impact being for an equal per capita distribution. Equalisation to the second strongest State and distribution to ensure a relativity of at least 0.7 each have relatively small impacts relative to total State revenues (averages of less than -1.0 and around -0.5 per cent respectively).

Equalisation to the average has stronger effects on revenue than either of the former two options with declines for all States and Territories (except New South Wales and the Northern Territory) averaging about -2.5 per cent of total State revenue. Since New South Wales has a stronger fiscal capacity than the average it experiences an increase in State revenue of 1 per cent while the Northern Territory experiences a decline in State revenue of -1.2 per cent.

Distribution of GST revenue on an equal per capita basis has some very large impacts as a percentage of State revenues. Northern Territory (-39.2), Tasmania (-17.7) and South Australia (-11.4) experience large declines, with Western Australia (12.2) and New South Wales (3.7) experiencing material increases. Queensland (-2.3) and the ACT (-3.6) experience moderate declines.

Notice that for option 1, equalization to the second strongest State, the relativity for Western Australia is 0.82 which is above the minimum threshold of 0.7 making option 4 redundant.

It is worth noting that Queensland has historically fluctuated above and below a relativity of 1.0, largely due to the influence of natural disasters.[39] For example, Queensland's relativity is estimated by the GCG to decline from 1.1 in 2018-19 to 1.05 in 2019-20.[40]

[39] Productivity Commission, p. 227.
[40] CGC, 2019, p. 2.

Table 1: Fiscal impacts of equalisation alternatives (no transition - 2018-19 estimates)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Current relativities	0.86	0.99	1.10	0.47	1.48	1.77	1.18	4.26
Total GST payments under current system								
$m	18,030	16,830	14,447	3,255	6,751	2,434	1,298	2,755
$ per capita	2,246	2,591	2,878	1,242	3,879	4,640	3,100	11,181
Change in GST payments relative to current system								
1. Equalisation to the second strongest State								
$m	-842	-681	-526	2,357	-182	-55	-44	-26
$ per capita	-105	-105	-105	899	-105	-105	-105	-105
% Revenue	-1.0	-1.0	-0.9	8.0	-0.9	-0.9	-0.8	-0.5
Relativity	0.82	0.95	1.06	0.82	1.44	1.73	1.14	4.22
2. Equalisation to the average								
$m	833	-1,570	-1,368	2,903	-474	-143	-114	-67
$ per capita	104	-242	-273	1,108	-273	-273	-273	-273
% Revenue	1.0	-2.3	-2.4	9.8	-2.5	-2.4	-2.0	-1.2
Relativity	0.90	0.90	0.90	0.90	1.38	1.67	1.08	4.16
3. Equal per capita distribution								
$m	3,021	201	-1,284	3,618	-2,188	-1,059	-200	-2,109
$ per capita	376	31	-256	1,380	-1,257	-2,018	-479	-8,559
% Revenue	3.7	0.3	-2.3	12,2	-11.4	-17.7	-3.6	-39.2
Relativity	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
4. 0.7 relativity floor								
$m	-556	-450	-348	1,556	-120	-36	-29	-17
$ per capita	-69	-69	-69	594	-69	-69	-69	-69
% Revenue	-0.7	-0.7	-0.6	5.3	-0.6	-0.6	-0.5	-0.3
Relativity	0.83	0.96	1.07	0.7	1.45	1.74	1.16	4.24

Source: Productivity Commission (2018, Chapter 8).

Table 2 summarises the fiscal effects and the effects on incentives to pursue economic efficiency.

Table 2: Fiscal and economic efficiency effects of different options for allocation of GST revenues

	Fiscal effects	Economic efficiency effects
Equalisation to the second strongest State	Fiscal gain for WA of 8.0 per cent of total State revenue. Decline in GST payments in other states average -0.9 per cent all similar except Northern Territory (-0.5 per cent).	Improved incentives of strongest and to a lesser extent the second strongest state. No change for other States.
Equalisation to the average	Fiscal gain for WA of 9.8 per cent of total revenue and 1 per cent for NSW. Other States experience an average decline in revenue of -2.1 per cent (-2.4 in Queensland and -1.2 in the Northern Territory).	Almost full reduction in disincentives for strongest three States – a materially stronger effect than for equalisation to the second strongest State. Modest reduction in disincentives for fourth strongest State (Queensland). Small reduction in disincentives for remaining States.
Equal per capita distribution	Fiscal gain for WA of 12.2 per cent of total revenue and 3.7 per cent for NSW. South Australia (-11.4), Tasmania (-17.2) and Northern Territory (-39.3) experience large to very large per cent reductions in revenue. Queensland (-2.3) and the ACT (-3.6) experience moderate percentage reductions in revenue. This option does not recognise that the principle of fiscal equalisation should apply at all.	A State's share of the population would be the sole determinant of the allocation of GST payments. This would remove the impact of the GST allocation in incentives to pursue economic efficiency for all States and Territories. It would also remove the need for administrative resources to determine allocations based on fiscal capacity assessments. So this option has the maximum impact in terms of promoting economic efficiency.
Relativity floor	Fiscal gain for WA of 5.3 per cent of total revenue. Other States lose revenue of -0.3 to -0.7 per cent.	The relativity floor would reduce the disincentive for Western Australia to promote economic efficiency but would not address disincentives for other States. It is also arbitrary and introduces complexity in conjunction with other arrangements.

Source: Productivity Commission (2018, Chapter 8).

All of the options offer some reduction in disincentives to pursue economic efficiency. Scenarios where equalisation is to a lower average will reduce disincentives to pursue economic efficiency for those States above the average, since they will not lose by having better fiscal capacity than the average. This is because States above an equalisation benchmark receive an equal per capita share of the residual GST pool that is not linked to their policies.[41]

Equalisation to the average will have a more material impact in reducing disincentives to pursue efficiency than either equalisation to the second strongest State or setting a relativity floor of 0.7.

Disincentives for pursuing economic efficiency will be the strongest with an equal per capita distribution. This is because a State's population share would be the sole determinant of the allocation of GST payments and not policies or performance with respect to revenue and service delivery capacity. An equal per capita allocation would also remove the need for administrative resources to determine allocations based on fiscal capacity assessments.

However, the Productivity Commission considered that the option of an equal per capita distribution of the GST was precluded because it was incapable of achieving an objective of providing States with the fiscal capacities to deliver a reasonable standard of services.[42] Further, the Productivity Commission preferred the option of equalising to the average as it provided a better balance with respect to economic efficiency and impacts on fiscal equality.

But this raises the issue of why the particular objective of a reasonable equalisation of fiscal capacity i.e. a 'fiscal equity' objective is an appropriate 'equity' objective and in effect the predominant consideration for distribution of GST revenues.

7.3 Equal per capita allocation with supplements

A key issue that receives little attention in the Productivity Commission review is the impact of the fiscal equalisation policy on the inter-personal distribution of income. As discussed in section 6.2.2 'equity' is normally considered at the individual level using the concepts of horizontal and vertical equity. Furthermore, the concept of achieving equity in fiscal capacities – a fiscal equity objective – is not linked to these notions of horizontal and fiscal equity in the

[41] Productivity Commission, p. 247.
[42] Productivity Commission, 2018, p. 225.

treatment of individuals.

A notable feature of the current GST distribution is that the two Territories have disposable incomes well above the Australian average and yet receive distributions of GST per capita that are also above the average.

Table 3 presents data on population, GST relativities, GST per capita, average disposable incomes per capita and the effects on disposable income of an equal per capita GST distribution.

Table 3: Effect on disposable income of equal per capita GST distribution

	Population '000 31/12/18	GST relativity 2018-19 (actual)	GST $ per capita 2018-19 (actual)	Disposable income $ per capita 2018	Effect on Disposable income of equal per capita GST distribution % change
NSW	8,046.1	0.86	2,269	50,653	0.76
Vic	6,256.4	0.99	2,729	42,625	-0.19
Qld	5,052.8	1.10	2,895	45,550	-0.56
WA	2,606.3	0.47	1,255	53,681	2.61
SA	1,742.7	1.48	3,911	48,564	-2.63
Tas	531.5	1.77	4,645	44,683	**-4.53**
ACT	423.8	1.18	**3,119**	**91,336**	-0.53
NT	245.9	4.26	**11,354**	**64,559**	**-13.44**
Aus	25,180.2	1.0	**2,646**	**48,426**	0.0

Source: ABS 3101.0, 5220.0, CGC 2019.

The average disposable income the ACT in 2018 at $91,336 was well above the Australian average of $48,426. The average disposable income in the Northern Territory at $64,559 was also well above the Australian average. The geographic dispersal of the small population and relatively large indigenous population share in the Northern Territory drive the high cost of government services there and create a very large disability as reflected in a disability factor of 4.26. The ACT also experiences a considerable disability in costs but average disposable incomes are almost twice the national average and from and interpersonal equity perspective it does not seem reasonable that the ACT receives an above average per capita distribution. The case for the Northern Territory is different given social conditions for the indigenous population.

If as a starting point, the GST distribution was implemented on an equal per capita basis, the impact on disposable incomes in the ACT would be quite small at about -0.5 per cent. However, the impact in the Northern Territory at -13.44 per cent is very large. Adverse impacts in in Tasmania at -4.53 per cent and in South Australia at -2.63 per cent are also significant. The impacts in the three largest states are relatively small and could all be positive with relatively small changes in GST relativities.

An alternative to an equal per capita allocation would be to return revenue based on State-of-Origin basis. This would mean greater revenue for the four largest States. Some may argue that this option would have stronger economic efficiency effects compared to distribution on a per capita basis as it would encourage the States to grow their economies more. However, exports are exempt from the GST so export development would not be directly encouraged but there would be an indirect boost to GST. In addition, the equal per capita option tends to be offered more in submissions when presenting options for reform and helps to achieve some equity across jurisdictions while being simple to implement and also having similarly strong positive effects on economic efficiency.

As discussed in Section 6 there is also no consideration, in the implementation of the current and prospective arrangements, of what happens within a State or Territory in terms of access to government services and impacts on sub-regions and individuals.

An equal per capita distribution or a State-of-origin option has the strongest impacts in terms of eliminating disincentives to improve economic efficiency. These options would in effect create incentives for States to pursue economic development and more efficient tax systems They would represent a move towards a more competitive form of federalism where States in effect compete with each to provide residents with a preferred mix of public goods and taxation levels, consistent with the theories of Tiebout and Buchanan. In this respect there is a view that the pursuit and realization of equality in various aspects of federal-state relations is at the expense of federalism; as well described by Nethercote:[43]

> The crucial point about federalism in Australia is the pervasiveness of doctrines of equality and equalization, combined with a preference for the use of the word 'national', often a cover for 'central', and the decline of the word 'federal'. Although rarely recognised, realization of 'equality' in practice takes the form of standardization, homogenization, and even uniformity. It is the antithesis of diversity, variety and choice. The quest of equality is at the expense of federalism.

However, it is recognised that the existence of vertical fiscal imbalance itself creates separate governance issues because revenue raising responsibilities are not directly linked to expenditure responsibilities and this reduces the scope for and effectiveness of 'competitive federalism'. This issue could be addressed with tax reform that might be more likely if the GST was distributed on an equal per capita basis.

As a final point, there would be a need to effectively address the problems of service delivery costs in the Northern Territory and to a lesser extent Tasmania. South Australia should be able to perform better given its resource endowment. The program of Specific Purpose Payments could be developed as an alternative to the current GST distribution arrangements to provide assistance to the Northern Territory in particular. Such an arrangement could supplement an allocation based on an equal per capita share. It would avoid the complex and opaque existing system, while having a near maximum effect in terms of promoting economic efficiency and also providing better scope to better target equity issues within a jurisdiction. The Grants Commission and State bureaucracies could also be streamlined to reflect the removal of the need to assess fiscal capacities for each jurisdiction. However, there would still be difficulties in designing and funding effective policies to support service delivery in the Northern Territory in particular.

7.4 Estimating the economic efficiency effects from Federalism

In its recent review the Productivity Commission[44] provided a brief summary of computable general equilibrium, economy-wide studies of the efficiency effects of migration but did not undertake its own modelling of economic efficiency effects associated with HFE. It noted that different studies adopted different

---

[43] Nethercote, J.R., Australia's talent for Bureaucracy and the Atrophy of Federalism", p. 115 in Coleman, W., (2016), Only in Australia The History, Politics, and Economics of Australian Exceptionalism, Oxford University Press.

[44] Productivity Commission (2018, Chapter and Appendix D).

assumptions about migration incentives and arrived at different results but that all found the effects to be generally small. It also noted that the studies had limited scope in terms of behavioural responses, for example, fiscal and economic development policies which are very difficult to model.

In this respect, an important point noted in a submission to the Productivity Commission Inquiry by Jonathan Pincus[45] is that if a model is underpinned only by the assumption that HFE removes incentives for labour to respond to differences in States' fiscal capacities (as per the Buchanan fiscal residuum hypothesis), without taking account of any opposing forces, including State policy responses, then the modelling must show that HFE improves economic efficiency. Pincus notes this is a common if not universal basic assumption of computable general equilibrium, economy-wide models of HFE and that he understands that no such model has parameterized the impacts on incentives for tax reform or mining development. Pincus also draws attention to the inconsistency in arguing there is an efficiency dividend from preventing migration while at the same time arguing that HFE is needed to address adverse income effects based on immobility of populations.

Turning to a wider consideration of 'federalism' an empirical study by Twomey and Withers[46] is of interest as it focuses on the overall economy-wide benefit from a federal system and the extent of fiscal decentralisation. Using growth regressions, they estimated the impact on per capita economic growth of the fact of being a federal or unitary state and the extent of fiscal decentralisation for 21 OECD countries covering the 50 year period from 1950 to 2000. The extent of fiscal decentralisation was measured as the share of own tax revenue for state, regional and local governments in total public tax revenue.

They found the fact of federation and the extent of fiscal decentralisation to be statistically significant, when considered alone at the 10 and 5 per cent statistical significance levels and that both measures contribute to materially higher GDP growth per capita. The results also confirm that fiscal decentralisation by itself contributes positively and significantly to per capita growth in unitary States.

For Australia they found that the present Federation produced a net benefit of

[45] Pincus, J., (2017), Submission on the Productivity Commission's Draft Report on Horizontal Fiscal Equalisation.

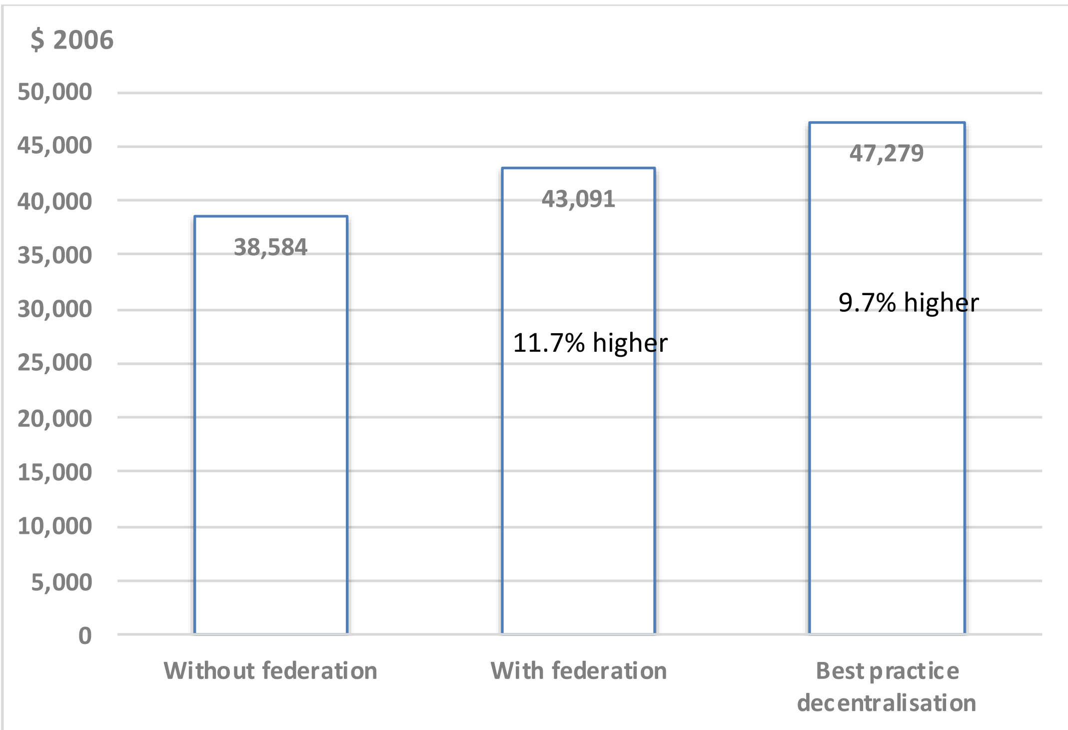
[46] Twomey, A., and G. Withers (2007), A Report for the Council for the Australian Federation, April.

$4,507 per capita of $11,492 per household in 2006 prices. However, they noted that Australian federalism has become quite centralised and they used their regression results to estimate that Australian per capita GDP could increase by a further $4,188 if the decentralisation of revenue matched the 'best federal practice' defined by Canada, Germany and Switzerland. Their estimates of Australian GDP per capita, in $A 2006, without and with Federation and with best practice are shown in Figure 2 below.

These results are not directly focused on the issue of horizontal fiscal equalization but with a high degree of fiscal decentralisation own source revenue would be higher and HFE would then entail considerable direct cross subsidies across States which is less likely than under the current arrangements.

Furthermore in support of their statistical findings Twomey and Withers report data that shows general government spending as a proportion of GDP is higher in unitary States then Federal States[47] and unemployment rates[48] are similarly higher in unitary States.

Figure 2: Australian GDP per capita under alternative systems



Source: Twomey and Withers (2007, p. 42)

[47] For the period 1988-2000.
[48] Based on data for 2004.

8 References

Buchanan, J. (1950), "Federalism and Fiscal Equity", American Economic Review, 40, 583-599.

Coleman, W., (2016), Only in Australia The History, Politics, and Economics of Australian Exceptionalism, Oxford University Press.

Commonwealth Grants Commission, (2019), Report on GST Revenue Sharing Relativities 2019 Update.

Commonwealth Grants Commission, The GST Distribution Model – A Mathematical Treatment, https://www.cgc.gov.au/about-us/fiscal-equalisation, accessed on 26 June 2019.

Commonwealth Grants Commission, (2015), Report on GST Revenue Sharing Relativities 2015 Review, Volume 1 – Main Report.

Commonwealth Grants Commission (2010), Volume 1 — Main Report, Report on GST Revenue Sharing Relativities: 2010 Review, Canberra.

Commonwealth of Australia, 2019-20, Federal Financial Relations, Budget Paper No. 3, Government Printer, Canberra.

Coppel, J., (2018), The Economic Impacts of HFE: Lessons from Australia, Background Paper, 14th Annual Meeting of the Network on Fiscal Relations Across Levels of Government.

Ergas, H., "Tocqueville, Hancock and the Sense of History", in Coleman, W., (2016), Only in Australia The History, Politics, and Economics of Australian Exceptionalism, Oxford University Press.

Ergas, H., and J. Pincus, (2011), Submission to the GST Distribution Review, September.

Feld, L. P. (2014), "James Buchanan's Theory of Federalism: From Fiscal Equity to the Ideal Political Order", Working Paper No. 14/06, Department of International Economic Policy, University of Freiberg.

Garnaut, R., and V. Fitzgerald (2002), "Issues in Commonwealth-State Funding, Australian Economic Review, 18 December, Vol. 35, September, pp. 290-300 for a review of effects in Australia.

Moulin, H. (2002). "Axiomatic Cost and Surplus Sharing", in Handbook of Social Choice and Welfare, v.1, K. Arrow, A. Sen and K. Suzumura (eds.): 356-422.

Nethercote, J.R., (2016), "Australia's Talent for Bureaucracy and the Atrophy of Federalism", in Coleman, W., Only in Australia The History, Politics, and Economics of Australian Exceptionalism, Oxford University Press.

Pincus, J., (2017), Submission on the Productivity Commission's Draft Report on Horizontal Fiscal Equalisation.

Productivity Commission (2018), Horizontal Fiscal Equalisation, Inquiry Report No. 88, 15 May,

Rawls, J. (1971), A Theory of Justice, Harvard University Press, Cambridge, Massachusetts.

The Senate Economics Legislation Committee (2018), Treasury Laws Amendment (Making Sure Every State and Territory Gets Their Fair Share of GST) Bill 2018 (Provisions).

Tiebout, C.M. (1956), "A Pure Theory of Local Expenditures", Journal of Political Economy 64, 416- 424.

Twomey, A., and G. Withers (2007), A Report for the Council for the Australian Federation, April.

Walsh, C. (2014), Fixing Fiscal Federalism, p. 59 in Carling. R., The Centre for Independent Studies, Where to For Australian Federalism.

9 Appendix 1 Data

Table A1: Population, GST relativity, GST allocations, 2018-19

	Population '000 31/12/18	GST relativity 2018-19 (actual)	GST share 2018-19 (actual)	GST $m 2018-19 (actual)	GST $ per capita 2018-19 (actual)
NSW	8,046.1	0.85517	0.274	18,257	2,269
Vic	6,256.4	0.9867	0.256	17,074	2,729
Qld	5,052.8	1.09584	0.22	14,630	2,895
WA	2,606.3	0.47287	0.102	3,271	1,255
SA	1,742.7	1.47727	0.049	6,815	3,911
Tas	531.5	1.76706	0.037	2,469	4,645
ACT	423.8	1.1807	0.03	1,322	3,119
NT	245.9	4.25816	0.042	2,792	11,354
Aus	25,180.2	1.0	1..0	66,630	2,646

Source: ABS 3101.0, 5220.0, CGC 2019.

Table A2: Gross State Product, disposable income, GST per capita. 2018

	Gross State Product per capita $	Disposable income per capita $	GST Actual distribution per capita $	GST equal per capita distribution $
NSW	76,362	50,653	2,269	2,646
Vic	67,415	42,625	2,729	2,646
Qld	70,285	45,550	2,895	2,646
WA	100,367	53,681	1,255	2,646
SA	62,144	48,564	3,911	2,646
Tas	58,759	44,683	4,645	2,646
ACT	95,674	91,336	3,119	2,646
NT	106,802	64,559	11,354	2,646
Aus	74,605	48,426	2,646	2,646

Note: Gross state product and disposable income as of 30/6/2018.

Source: ABS 3101.0, 5220.0: CGC 2019.

Table A 3: Effects on Gross State Product, disposable income and general government operating expenditure of equal per capita GST distribution, 2018-19

	Effect on Gross State Product of equal per capita GST distribution %	Effect on Disposable income of equal per capita GST distribution % change	Effect on General Government Operating Expenditure of equal per capita GST distribution % change
NSW	0.5	0.76	3.88
Vic	-0.12	-0.19	-0.83
Qld	-0.36	-0.56	-2.25
WA	1.4	2.61	12.16
SA	-2.05	-2.63	-11.29
Tas	-3.45	-4.53	-17.62
ACT	-0.5	-0.53	-3.66
NT	-8.13	-13.44	-33.87
Aus	0.0	0.0	0.0

Note Gross state product, disposable income and general government operating expenditure as of 30/6/2018.

Source: ABS 3101.0, 5220.0, 5512; CGC 2019.