



**Australian Government**  
**Productivity Commission**

# Horizontal Fiscal Equalisation

## Productivity Commission Draft Report

October 2017

This is a draft report prepared for further public consultation and input. The Commission will finalise its report after these processes have taken place.

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### **The Productivity Commission**

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website ([www.pc.gov.au](http://www.pc.gov.au)).

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# Opportunity for further comment

You are invited to examine this draft report and comment on it by written submission to the Productivity Commission by Friday 10 November 2017 and/or by attending a public hearing. Further information on how to provide a submission is included on the inquiry website: <http://www.pc.gov.au/inquiries/current/horizontal-fiscal-equalisation>

The final report will be prepared after further submissions have been received and public hearings have been held, and will be submitted to the Australian Government in January 2018.

## Public hearing dates and venues

Location	Date	Venue
Perth	14 & 15 November 2017	Four Points by Sheraton 707 Wellington Street, Perth
Melbourne	17 November 2017	Productivity Commission 530 Collins Street, Melbourne
Sydney	22 November 2017	Sydney Masonic Centre 66 Goulburn Street, Sydney

Public hearings may be held in other locations if needed, and you may also participate via teleconference. Please visit the inquiry website to register your interest in participating in a public hearing.

## Commissioners

For the purposes of this inquiry and draft report, in accordance with section 40 of the *Productivity Commission Act 1998* (Cwlth) the powers of the Productivity Commission have been exercised by:

Karen Chester

Deputy Chair

Jonathan Coppel

Commissioner

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# Terms of reference

I, Scott Morrison, Treasurer, pursuant to Parts 2 and 3 of the *Productivity Commission Act 1998*, hereby request that the Productivity Commission undertake an inquiry into Australia's system of horizontal fiscal equalisation (HFE) which underpins the distribution of GST revenue to the States and Territories (States). The inquiry should consider the influence the current system has on productivity, efficiency and economic growth, including the movement of capital and labour across state borders; the incentives for the States to undertake fiscal (expense and revenue) reforms that improve the operation of their own jurisdictions, and on the States' abilities to prepare and deliver annual budgets.

## Background

HFE has been a feature of Commonwealth-State financial relations since Federation and is Commonwealth Government policy. HFE involves the distribution of Commonwealth financial support to the States so that each State has the capacity to provide its citizens with a comparable level of Government services. Under the current approach to HFE, the GST is distributed to the States on the basis of relativities recommended by the independent Commonwealth Grants Commission (CGC). In calculating the relativities, the CGC assesses each State's fiscal capacity, including its capacity to raise revenue and its costs of providing government services.

In recent years, some States and commentators have suggested Australia's approach to HFE does not sufficiently recognise the differences between States' individual circumstances nor States' efforts to manage those circumstances thereby creating disincentives for reform, including reforms to enhance revenue raising capacities or drive efficiencies in spending. In commissioning this inquiry, the Government seeks an examination of the issues underlying these claims and concerns that any gains from reform are effectively redistributed to other States.

## Scope of the inquiry

The Commission should consider the effect of Australia's system of HFE on productivity, economic growth and budget management for the States and for Australia as a whole. In doing so, the Commission should, in particular, consider:

- Whether the present adoption by the CGC of a HFE formula to equalise states' revenue raising and service delivery capacities is in the best interests of national productivity; or whether there may be preferable alternatives. On this matter the Productivity

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Commission should enquire as to whether this aspect of the CGC formula or any other aspect of it may restrict the appropriate movement of capital and labour across State borders to more productive regions during times of high labour demand;

- Policies affecting energy and resources, noting the uneven distribution of natural resources across the nation; whether sufficient consideration is given to the different underlying and structural characteristics of different revenue bases;
- State laws and policies restricting the development of energy resources;
- Whether the present use by the CGC in its HFE formula of rolling three year averages provides the most appropriate estimate of real state revenue raising abilities, particularly for those States heavily reliant on large and volatile revenue streams. Particular analysis should be given to whether the lagged fiscal impacts that result from averaging and non-contemporary data leads to GST relativities which accentuate rather than moderate peaks and troughs in state economic cycles;
- Whether the present HFE formula, may have the effect of producing a disincentive for a State to develop a potential industry or raise a royalty rate for an existing industry at an appropriate time; and
- Whether the present HFE formula in its stated aim of comprehensively equalising States' fiscal capacities places too great a reliance on broad indicators and insufficient relevance on specific indicators which recognise States' different circumstances.

The Commission should take into account previous reviews of the HFE process, including the 2012 GST Distribution Review report as well as international approaches to fiscal equalisation within federations.

The Commission should also consider implications for equity across jurisdictions, efficiency and simplicity.

## **Process**

The Commission should undertake appropriate public consultation, including holding hearings, inviting public submissions and releasing a draft report to the public. It should consult widely, including with State and Territory governments.

The Commission should provide a final report to the Government by 31 January 2018.

SCOTT MORRISON  
Treasurer

[Received 5 May 2017]



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# Acknowledgments

The Commission is grateful to those who provided feedback on the matters discussed in this draft inquiry report.

In particular, the Commission wishes to thank the staff of the Commonwealth Grants Commission, who provided data and answers to questions raised during the course of the inquiry.

During the course of consultations, the Commission met with the panel members of the 2012 GST Distribution Review — Bruce Carter, the Hon. John Brumby, and the Hon. Nick Greiner — and extends its thanks to these individuals.

The Commission also wishes to thank the Commonwealth Treasury and State Treasuries for providing data used in this report, as well as the Organisation for Economic Cooperation and Development.

The conclusions and views reached by the Commission on the basis of these data and feedback are those of the Productivity Commission. They should not be attributed to other organisations.

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# Abbreviations and explanations

## Abbreviations

APC	Actual per capita
ATO	Australian Taxation Office
CGC	Commonwealth Grants Commission
COAG	Council of Australian Governments
EPC	Equal per capita
HFE	Horizontal fiscal equalisation
IGAFFR	Intergovernmental Agreement on Federal Financial Relations
GDI	Gross disposable income
GDP	Gross domestic product
GSP	Gross state product
GST	Goods and services tax
HFE	Horizontal fiscal equalisation
NCOA	National Commission of Audit
NP	National Partnership
OECD	Organisation for Economic Cooperation and Development
PBO	Parliamentary Budget Office
PC	Productivity Commission
PCU	Passenger car equivalent units
RBA	Reserve Bank of Australia
SPP	Specific Purpose Payment
VFI	Vertical fiscal imbalance
VKT	Vehicle-kilometres travelled

## Explanations

Billion	The convention used for a billion is a thousand million (10 <sup>9</sup> ).
States	Unless otherwise specified, this refers to the six States and two Territories of Australia.

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# Glossary

*Note: the terms in this glossary are defined with respect to their application to an Australian context, and hence may differ from international usage.*

Disability	An influence beyond the control of a State that results in it having to either: spend more per capita than average to provide the average level of service (cost disability); provide certain services to a higher proportion of its citizens than average (use disability); or make a greater effort than average to raise the average amount of revenue per capita (revenue disability).
Discounting	A reduction in the value of a revenue or expenditure item for the purpose of a fiscal capacity assessment (for example, where the Commonwealth Grants Commission only includes 50 per cent of the actual value of a Commonwealth payment in a State's assessed total revenue). A discount factor will most often be applied where a conceptual case has been established for including a disability or revenue stream in a category, but measurement is affected by imperfect data or methods, or the measurement may not be policy neutral.
Equal per capita distribution	A GST distribution in which all States receive an equal amount of GST revenue per person.
Fiscal capacity	The ability of a State to fund public services and infrastructure for its residents (that is, whether its revenues are adequate to finance its necessary expenses), assuming it makes the average effort to raise revenue and operates at the average level of efficiency when differences in revenue streams, demographics, and costs are adjusted for.
General revenue assistance	Financial assistance provided by the Commonwealth to the States which is not tied to any specific service area or conditional upon any specific benchmarks. GST revenue makes up the majority of general revenue assistance.

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Goods and services tax (GST)	A value-added tax of 10 per cent on most goods and services sold or consumed in Australia. The tax is collected by the Commonwealth Government and remitted to the States as general revenue assistance, subject to HFE.
Horizontal fiscal equalisation (HFE)	The process whereby the Australian Government distributes goods and services tax revenues so that each state and territory has the fiscal capacity to provide services and infrastructure to the same standard (assuming they each make the same effort to raise revenue and operate at the same level of efficiency).
Materiality	A threshold test used by the Commonwealth Grants Commission to assist determinations on whether a separate assessment of disabilities should be made or when data should be adjusted, based on the effect that change would have on the amount of GST redistributed per capita for any State.
Payments for specific purposes	Payments made by the Commonwealth to the States that must be used for specified types of expenditure in policy areas where the States have primary responsibility. These ‘tied’ payments often carry specific reporting requirements or are conditional upon particular benchmarks.
Quarantine	The treatment of a Commonwealth payment such that it has no effect on the GST relativities calculated by the Commonwealth Grants Commission, because it is excluded from assessments of a State’s revenue-raising capacity.
Relativity	The ratio of a State’s per capita GST allocation to the national average per capita GST distributed for a given year.
Vertical fiscal imbalance (VFI)	The situation where the Commonwealth raises more revenue than it requires for its own direct expenditure responsibilities, whereas States raise less revenue than they require for their expenditure responsibilities.
Zero-sum game	A situation in which the gain or loss experienced by one participant is exactly offset by gains or losses to the other participant(s).



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# OVERVIEW

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## Key points

- The basic premise of HFE — fiscal equity in the Australian federation — has broad support.
- While the specific practice of HFE has always been debated, it is now under significant strain as Western Australia's share of the GST has fallen to an extreme low.
- The practice of HFE has evolved over time, and now embodies an undeliverable ideal: to give States the same fiscal capacity. In other words, all States are brought up to the fiscal capacity of the fiscally strongest State (currently, as assessed by the CGC, Western Australia).
- Notwithstanding anomalies, the current system of HFE has good points.
  - It achieves an almost complete degree of equalisation — unique among OECD countries.
  - The independent and expert CGC is well placed to recommend GST relativities. It has well-established processes that involve consultation and regular methodology reviews.
- And HFE does not result in significant distortions to interstate migration or economic growth.
- But the pure may be the enemy of the good: the current HFE system struggles with extreme circumstances, and this is corroding confidence in the system.
  - Equalising comprehensively and to the fiscally strongest State means that the redistribution task is too great for any jurisdiction to bear; and is volatile at times of significant cyclical and structural change.
  - There is scope for it to discourage desirable mineral and energy resources policies (royalties and development) and State policy for major tax reform (a costly first-mover disadvantage).
  - The system is beyond comprehension by the public, and poorly understood by most within government — lending itself to a myriad of myths and confused accountability.
- The Australian Government should articulate a revised objective for HFE. While equity should remain at the heart of HFE, it should aim to provide States with the fiscal capacity to provide a reasonable level of services.
  - Equalisation should no longer be to the highest state, but instead the average or the second highest State — still providing States a high level of fiscal capacity, but not distorted by the extreme swings of one State.
  - By contrast, relativity floors or discounts for particular revenue streams do not resolve HFE's deficiencies and must prove arbitrary, and likely have unintended consequences.
- Any material change to HFE in the current extreme environment will lead to significant redistributions of the GST. Timing and careful transition are paramount, especially to ensure the fiscally weaker States are not significantly disadvantaged.
- The Commonwealth Treasurer should ask the CGC to recommend relativities consistent with a revised objective. The CGC should also be directed to pursue significant simplification of its assessment process, even if it results in slightly less — or less precise — equalisation.
- The CGC should play a prominent public communication and education role — a much needed objective voice to inform the public dialogue about HFE.
- Reforming HFE will deliver benefits to the Australian community. But ultimately, greater benefits will only come from more fundamental reforms to Australia's federal financial relations: namely, to spending and revenue raising responsibilities and accountabilities.



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# Overview

The Productivity Commission has been asked to undertake an inquiry into Australia's system of horizontal fiscal equalisation (HFE) as the basis for the distribution of GST revenue to the States and Territories (hereafter States). The Productivity Commission is to consider the influence the current system of HFE has on:

- productivity, efficiency and economic growth, including the movement of capital and labour across state borders
- the incentives for the States to undertake fiscal (expenditure and revenue) reforms that improve the operation of their own jurisdictions, and
- the States' abilities to prepare and deliver annual budgets.

Moreover, the inquiry poses the questions of whether the current system of HFE is in the best interests of national productivity and whether there may be preferable alternatives.

Much of the debate about HFE in Australia stems from confusion and disagreement about its objective. Clear specification of objectives is important for policy issues where there are trade-offs, and a clear objective is essential for assessing the effectiveness of the system, now, and for any future changes.

With that in mind, the Productivity Commission has assessed the current HFE system and any proposed alternatives against an objective for HFE that takes account of equity, efficiency and simplicity. Our approach is focused on the Australian community as a whole, and is not framed solely in the interests of any individual State (as required under the *Productivity Commission Act 1998* (Cwlth)).

## What has motivated this inquiry?

There is nothing new about these arguments between the States. This has been going on since 1933. (Peter Costello 2006)

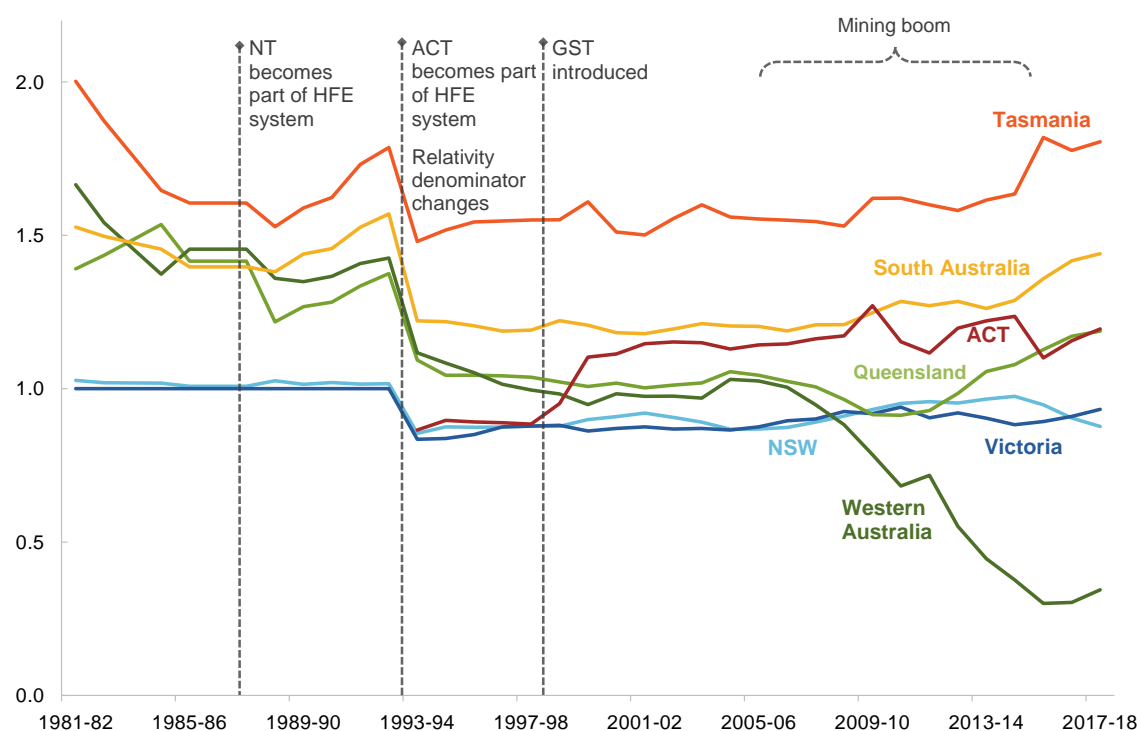
The distribution of the GST has frequently been a point of contention among States, as each State has vied for a larger share of the GST pool. But this friction has increased markedly in recent times as Western Australia's share of the GST has fallen to an unprecedented low (figure 1). This 'new low' has been anticipated since 2011, but arguably not at the time the GST distribution deal was struck in 1999.

A key factor behind this has been the recent mining boom, which had a particularly strong impact on Western Australia's revenue-raising capacity. This saw Western Australia's

relativity start falling from the middle of last decade. The mining boom is fading and Western Australia's economy (and revenue-raising capacity) has significantly weakened. However, Western Australia's share of the GST pool remains historically low, due to the lags involved in the equalisation process.

Many parties have expressed extreme dissatisfaction with Western Australia's low share of the GST. This discontent reflects perceptions about fairness and the extent of equalisation away from Western Australia. There are also concerns about the non-contemporaneity of the distribution — specifically, that it may exacerbate economic cycles instead of smoothing them. Since 2014-15, the Australian Government has provided over \$1.2 billion in infrastructure funding to Western Australia, which has been quarantined from the HFE process, to effectively maintain Western Australia's relativity at 2014-15 levels.

Figure 1 State per capita relativities<sup>a</sup>



<sup>a</sup> The Northern Territory is not shown. Its relativities fluctuated between a minimum of 4.02 and a maximum of 5.91 between 1988-89 and 2017-18.

Source: CGC (2017a).

Some parties have also argued that the HFE system impedes economic growth by acting as a disincentive for State governments to develop particular industries or projects, or by subsidising States that ban mineral or energy extraction. Others have spoken out against these views and emphasise HFE's role in promoting equity across the Australian federation, given the inherent disadvantages some States face in raising revenue or delivering services.

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## What is HFE and why does it exist?

HFE is a common feature across federations. It involves the transfer of funds to or between States to offset differences in revenue-raising capacities and/or the use and costs of providing services and infrastructure.

The primary rationale for HFE is fiscal equity, or the equal treatment of equals — as different regions might expect to be treated under a unitary government. This is an unrealistic expectation in a federation, where the States have significant policy autonomy, so in practice HFE seeks for the equal fiscal treatment of jurisdictions. This equity basis for HFE is largely undisputed even in the current debate.

There is also an efficiency aspect to HFE. The theory argues that, in the absence of HFE, people could move interstate solely due to differences in States' abilities to offer lower taxes or a greater level of services, instead of underlying economic drivers like employment opportunities. HFE is sometimes also seen as a mechanism to insure against adverse economic shocks. The relevance of these other rationales for HFE is more contested.

The Australian federation is characterised by both *horizontal* and *vertical* fiscal inequities (gaps). The latter refers to the fact that the Commonwealth Government raises revenues in excess of its spending responsibilities, while State governments have insufficient revenue from their own sources to finance their spending responsibilities. For the States, some of this 'gap' is of their own volition — how they choose to use their tax bases. The distribution of GST revenues in Australia aims to correct both for the imbalance in taxing and spending powers between the Commonwealth and the States (vertical), and between the States (horizontal).

There is no Constitutional reference to HFE, nor is it explicitly defined in current legislation or in any formal agreement between the Commonwealth and States. The principle of HFE has evolved over time, primarily as a result of the work of the Commonwealth Grants Commission (CGC) (box 1). It also evolved from partial to full and comprehensive equalisation by the late 1970s/early 1980s. Australia is unique among federations in almost completely eliminating disparities in fiscal capacity between States.

HFE also forms the basis of how financial assistance grants are distributed among local governments. These grants are distributed on the principle that '... each local governing body in the State is able to function, by reasonable effort, at a standard not lower than the average standard of other local government bodies in the State'.

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## Box 1      **The evolution of HFE in Australia**

Horizontal fiscal equalisation has a very long history in Australia. Upon federating, the six Colonies of Australia ceded the right to impose and collect customs and excise duties (the dominant source of public revenue at the time) in favour of the Commonwealth. This created a vertical fiscal imbalance (VFI) and led to various general revenue-sharing schemes with the States. In addition, special grants were made to the fiscally weaker States — Western Australia, Tasmania and South Australia, largely on an ad hoc basis.

In 1933, and following the threat of Western Australia's succession, the Commonwealth Grants Commission (CGC) was established to make recommendations on these special grants. This was done on the basis of making it possible for a claimant State 'by reasonable effort to function at a standard not appreciably below that of other States'. The CGC also imposed a 'penalty for claimancy' until 1945.

During the Second World War, the Commonwealth assumed sole responsibility for collecting income tax. This significantly exacerbated VFI and necessitated a greater level of general revenue sharing with the States, via financial assistance grants. In the postwar period, specific purpose payments also became more important as a means of providing financial assistance and influencing the delivery of services and infrastructure within States. In contrast, the significance of horizontal equalisation achieved by way of special grants recommended by the CGC gradually declined. South Australia, Western Australia, Tasmania and Queensland entered and withdrew from claimancy at various times between 1960 and 1975.

A major change occurred in the mid to late 1970s. Financial assistance grants (to address VFI) were replaced by income tax sharing arrangements, and the Premiers Conference decided that revenue under this arrangement was to be distributed on the basis of relativities based on equalisation principles. This meant that the same funding source was being used to address vertical and horizontal fiscal imbalance, and the CGC's recommendations affected the finances of all States, not just the claimant States — that is, full equalisation. By 1985, the allocation to the States had become a zero sum game, albeit initially from a much smaller pool of grants than today (\$10 billion in 1985-86, or about \$28 billion in current dollars).

The full equalisation principle initially referred to '... standards not appreciably different from the standards of government services provided by the other States'. Since then, there have been further revisions by the CGC to the equalisation principle, which now refers to States being able to function at the 'same standard', but essentially the CGC has been recommending relativities based on full equalisation since 1981.

Another significant change occurred with the introduction of the GST in 2000. The GST replaced financial assistance grants and various state taxes, and the GST pool was to be returned to the States according to the principle of HFE. It meant that the Commonwealth no longer had any substantive role in determining the total level of general revenue grants to the States.

... [T]he terms were agreed between the States. This is a very important point. Now, New South Wales will come in here and say it needs more money. That is an argument it is having with Queensland and Western Australia. Not an argument with me. (Peter Costello 2006)

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## The practice of HFE in Australia

Presently, the CGC recommends a distribution of GST revenue according 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.

The CGC also applies a set of four supporting principles to guide its methodology. These are: reflect what States collectively do; policy neutrality; practicality; and contemporaneity. These supporting principles, however, are subsidiary to the primary objective of achieving full and comprehensive equalisation.

The actual formula used by the CGC to calculate the GST relativities is complex and comprehensive. It covers all State general government activities across seven revenue categories (plus Commonwealth payments) and 13 expense categories (plus net borrowing). The CGC's 2015 methodology review comprised two volumes that totalled over 800 pages. This comprehensive scope doesn't mean that all activities are differentially assessed (that is, have 'disabilities' applied to them) or that HFE achieves perfect equalisation. Some disabilities cannot be reliably measured, may be discounted or have an immaterial impact.

Conceptually, the CGC's formula does the following (figure 2):

1. States with relatively low fiscal capacities are raised to the average fiscal capacity of all States
2. all States are then raised to the capacity of the fiscally strongest (currently Western Australia)
3. any remaining revenue from the GST pool is distributed to all States on an equal per capita (EPC) basis.

The size of the equalisation task — that is, the share of the GST pool required to bring all States up to the fiscal capacity of the strongest State — fluctuated between 14 per cent and 17 per cent of GST revenue from 2000-01 to 2007-08, before rising to 70 per cent of the pool in 2016-17. Another way to think about the size of the equalisation task is the share of the GST pool that is distributed away from an EPC distribution. This has increased from about 8 per cent to 12-13 per cent over the same period (figure 3).

Some of the key factors affecting the redistribution of GST revenue (away from an EPC distribution) are mining production, remoteness and regional costs, and Indigenous status (figure 4).

Figure 2 Schema of the conceptual stages of the HFE process

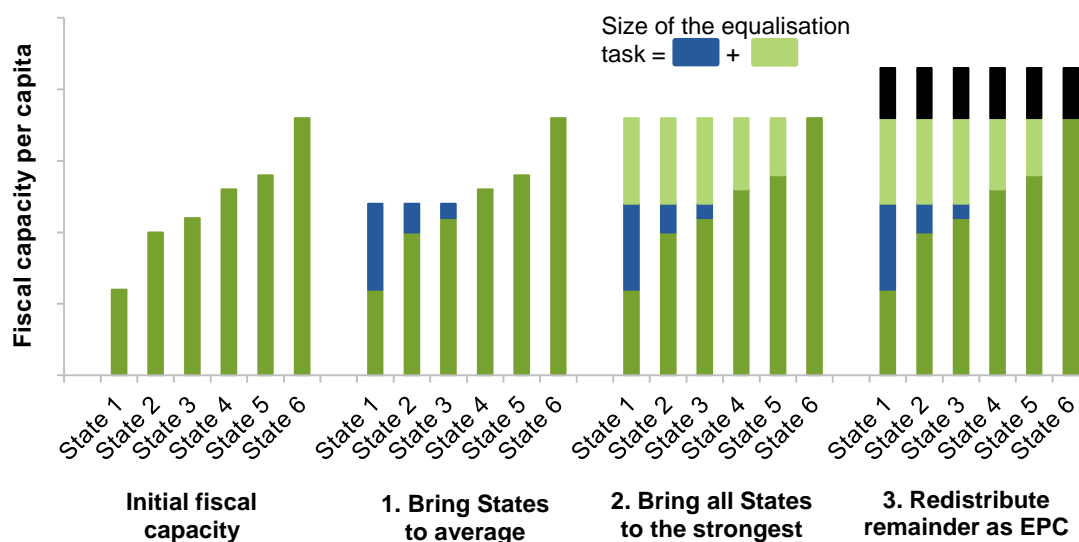


Figure 3 Share of GST pool redistributed away from equal per capita

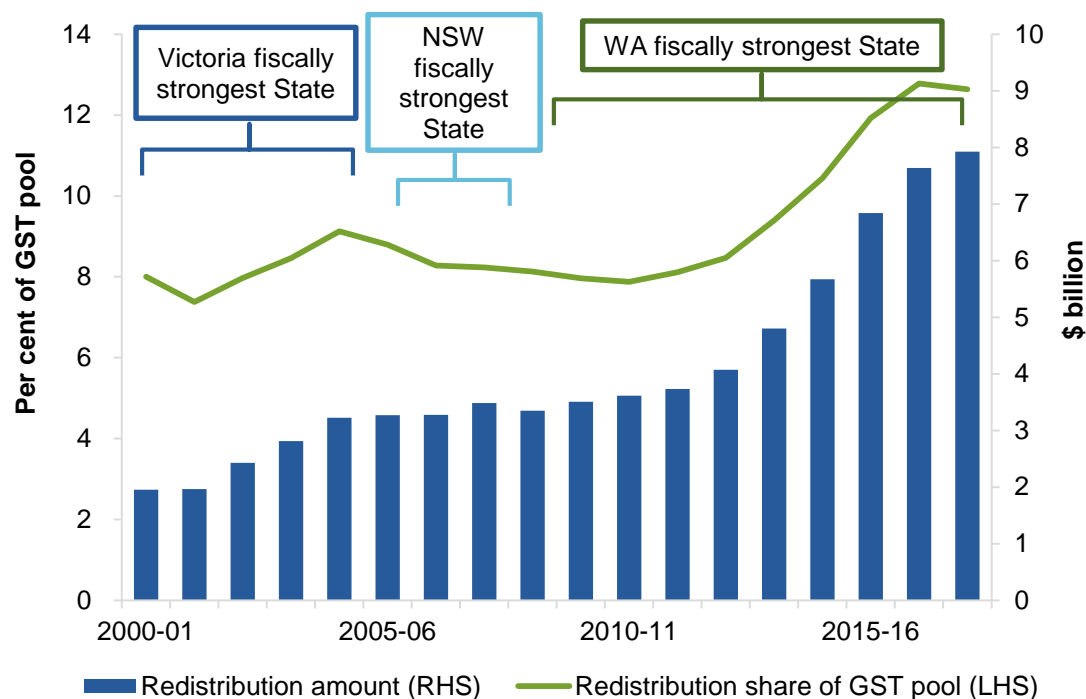
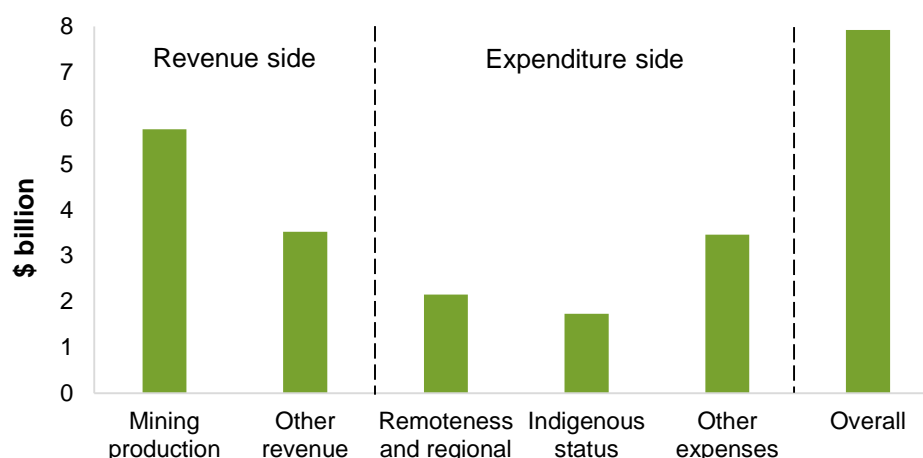


Figure 4 **GST redistribution from equal per capita, 2017-18**



## How does HFE affect State budget management?

GST payments provide States with a substantial share of their overall revenue (table 1). As a result, HFE has considerable scope to influence States' budget outcomes and management.

Table 1 **GST payments and State budgets, 2017-18**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
<b>Total grants revenue (\$b)</b>	31.86	29.82	27.63	9.22	10.66	3.68	2.18	4.26
<b>Total revenue (\$b)</b>	79.89	63.41	55.87	28.46	19.15	5.87	5.34	6.23
<b>GST payments (\$b)</b>	17.68	14.83	14.96	2.35	6.36	2.40	1.23	2.92
% total grants revenue	55	50	54	26	60	65	57	69
% total revenue	22	23	27	8	33	41	23	47

Source: State budget papers (2017); CGC (2017).

Several features of Australia's HFE system promote predictable and stable GST payments. This stability is primarily achieved by applying a three-year moving average to relativity calculations (which has been in place since 2010; prior to that a five-year average was used). A consequence of this emphasis on stability is that equalisation is less contemporaneous.

Less contemporaneous equalisation can exacerbate the budget cycle where State fiscal situations change abruptly — as happened to Western Australia during the mining boom. In this instance, the three-year assessment period and two-year lag in the system resulted in declining GST relativities coinciding with falls in royalty revenue, thereby exacerbating the effects of the economic cycle on Western Australia's budget (box 2).

## Box 2 Western Australia's fiscal position

The mining boom has driven large shifts in Western Australia's revenue raising capacity. From 2000-01 to 2013-14, the WA Government's annual royalty income increased from \$0.7 billion to \$6 billion. In the following years, however, this income declined substantially to \$4.1 billion in 2015-16 and \$5.3 billion in 2016-17, according to the most recent budget papers.

The three-year assessment period and two-year lag have meant that Western Australia's relativity has been slow to respond to changes in the State's fiscal capacity. While Western Australia's royalties were increasing, it received larger payments than it would have received under a fully contemporaneous HFE system. In fact, the CGC has estimated that growth in iron ore royalties resulted in Western Australia retaining an extra \$7 billion in the six years to 2015-16.



More recently, as Western Australia's royalty income has declined, it has received lower GST payments. This situation has contributed to a deteriorating fiscal position. However, Western Australia's falling GST shares were predicted. For example, in its 2011-12 budget, the State projected a fall in its relativity from 0.72 to 0.33 by 2014-15 (its actual relativity for that year was 0.38). However, the WA Government based its spending decisions on the assumption that a 0.75 GST relativity floor would be introduced.

What we reasonably anticipate is that in 2013-14 the CGC will have brought in a new GST system. We expect it will produce a floor of around 75 per cent of our population share of the GST. (Porter 2011, p. 3)

Several inquiry participants have argued Western Australia's poor fiscal predicament is as much a product of the State's own poor fiscal management. In per capita terms, the State's total nominal expenses increased by 94 per cent, compared with 80 per cent for the rest of Australia from 2000 to 2015, and it went from being the second lowest paying State government to the second highest. While the WA Government's increased fiscal capacity likely played a role, market-driven forces (for example, competing with the mining sector and the need to attract workers to more regional locations) were also a significant driver.

Source: WA Government (2016); CGC (2015d); ABS (Cat. no. 5512.0).

However, Western Australia's experience has been an unprecedented outlier, exacerbated by earlier budget decisions of the WA Government. For States with less extreme changes in fiscal capacity, limited contemporaneity has been less problematic, and indeed other States



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preferred an emphasis on stability. Trying to increase the contemporaneity of the assessment could introduce additional complexity and volatility.

## **Does HFE affect State incentives for reform?**

The CGC calculates GST shares by reference to average State policy. On the revenue side, this means calculating how much tax a State could have raised had it applied the national average tax rate. GST is then used to balance out differences between States with stronger or weaker tax bases.

Calculations tend to be more complex on the expenditure side, but in essence the CGC calculates how much it would cost to provide a service if every State spent in line with the national average. States are then adjusted up or down depending on structural factors ('disabilities') that bear on the use and/or cost of providing government services, such as the age profile of their populations or their level of population dispersion.

These methods are intended to be policy neutral — that is, GST shares should not be affected by an individual State's policy decisions. But because average State policy is determined by what States collectively do, there is some tension with the principle of policy neutrality. Most of the concerns about potential incentives for inefficient policy outcomes are on the revenue side, with some unique outcomes in relation to the taxation of minerals and energy.

## **There can be disincentives for State tax reform**

When a State changes its tax *rate* or tax *base*, this policy change can lead to a change in that State's share of the GST — by virtue of how the GST formula works. The direction and size of the effect is not straightforward and depends on where the State sits relative to the average.

In general, where a State changes its tax rate, the subsequent effect on the GST distribution will be small (except for the case of mining royalties). It will be larger for the larger States, as they have a bigger impact on the national average.

However, policy changes that affect the base — for example, approving new mining activity or increasing payroll tax compliance — can have a very significant effect on the GST distribution. This is because changes to the base mean changes to assessed revenue raising capacity (vis-à-vis other States). For example, if a State like Victoria (with 25 per cent of Australia's population), increased its tax base and therefore increased tax revenue by \$100, it would see \$75 (\$100 less its population share) of the additional revenue redistributed to the other States.

The potential to lose GST payments could discourage States from pursuing efficiency-enhancing reforms that are in the national interest. States could also be discouraged from pursuing reforms due to uncertainty about how the CGC will assess their

revenues. These concerns would be significant in the case of a State undertaking major reforms to its tax mix. These incentive effects are illustrated by way of cameos in box 3.

Where the tax reform involves modifying existing taxes (first cameo), there is a distinct first-mover disadvantage. In the (unlikely) case of multilateral reforms (by all States), there would still be effects on the GST distribution, but of a smaller magnitude. In the case of a new tax (second cameo), the results are more ambiguous, and sometimes multilateral reforms can have bigger effects.

### Box 3 Impact on GST payments of hypothetical reform ‘cameos’

The Commission has analysed two reform ‘cameos’ to illustrate how GST payments can be affected by changes in State policy. The cameos are hypothetical and show the GST impact only for a single year. Yet they highlight how sensitive GST shares can be to individual State policies.

In the first cameo, a State unilaterally cuts its rate of stamp duty on property in half. The lost revenue is replaced by introducing a new broad-based land tax that applies to all residential land. While the direct impact is revenue neutral, any State that does this would likely end up losing GST payments — with New South Wales and Victoria potentially losing up to \$1 billion, and Queensland and the ACT facing the biggest per-capita losses.

In the second cameo, a State unilaterally introduces a new congestion tax in its capital city. This raises revenue equivalent to \$200 per capita, which is then hypothecated to public transport. The impact on GST payments is a lot smaller in this cameo, though in practice there would be considerable uncertainty about how the CGC might treat the new tax and hypothecated spending.

#### Impacts on GST payments, unilateral reform, 2015-16

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Baseline annual relativity	0.84	0.93	1.14	0.60	1.44	1.83	1.20	4.28
<b>Cameo 1: Stamp duty halved with revenue replaced by new land tax</b>								
<i>Lower-bound</i>								
Change in GST payments (\$m)	-317	-319	-302	-159	-83	-22	-30	-12
Change in GST payments (\$pc)	-41	-53	-63	-61	-49	-43	-76	-47
New GST relativity	0.82	0.91	1.11	0.57	1.42	1.81	1.17	4.26
<i>Upper-bound</i>								
Change in GST payments (\$m)	-1233	-1125	-920	-472	-250	-74	-103	-39
Change in GST payments (\$pc)	-161	-188	-191	-181	-147	-143	-263	-161
New GST relativity	0.77	0.85	1.06	0.52	1.38	1.77	1.09	4.21
<b>Cameo 2: New congestion tax introduced and hypothecated to public transport</b>								
Congestion tax revenue (\$m)	1534	1200	962	521	341	103	79	49
Change in GST payments (\$m)	69	6	-36	3	-3	-2	0	0
Change in GST payments (\$pc)	9	1	-7	1	-2	-3	-1	-2
New GST relativity	0.84	0.93	1.14	0.60	1.44	1.83	1.20	4.28

Source: Appendix C.

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Whether such GST effects — or uncertainty about their occurrence or magnitude — actually influence policy decisions is harder to discern. Some inquiry participants argued that the GST effects of tax reform have no influence at all on State behaviour; others suggested that the effects can be pervasive and accumulate over time. The 2012 GST Distribution Review found that ‘the current system creates perverse theoretical incentives in some instances, but there is little evidence that they have any effect in the real world’.

However, absence of evidence is not equivalent to evidence of absence. Such disincentives to desirable policies, as presented in the cameos (box 3), when viewed cumulatively over time, could be at significant cost to the Australian economy.

### **Mining poses particularly large problems for policy neutrality**

Mineral and energy resources are very unevenly distributed across States. For example, over 98 per cent of all iron ore production is in Western Australia. In such extreme situations, Western Australia’s policy is average State policy — and the mining assessment is not policy neutral because the State’s own choices directly influence the level of GST payments Western Australia receives. The WA Government has estimated that if it raised royalties on iron ore, it would lose about 88 per cent of the additional revenues to other States.

Due to these outsized effects, some have argued that States have an incentive to under-tax mineral rents or extract rents through other means. Several participants strongly criticised the HFE system as a major disincentive to States developing their mineral and energy resources. Any State that developed contentious mining activity would bear the full political cost of the development, but only retain its population share of the royalties. And there are perennial concerns that the equalisation process does not fully account for industry development expenses, though this inquiry has not been presented with new or convincing evidence that changes are required.

Similarly, several participants argued that the HFE system effectively rewards States for restricting resource extraction. For example, New South Wales and Victoria — which have banned coal-seam gas exploration — will benefit from the equalisation of Queensland’s gas royalties. Essentially, policy decisions to *restrict* extraction are not treated symmetrically with policy decisions to *facilitate* extraction. This is often contrasted with the assessment of gambling revenue, which is treated as entirely a product of policy, and therefore has no effect on the GST distribution.

The potential for HFE to distort State policy is therefore pronounced for mineral and energy resources. While there is no direct evidence that GST effects have influenced specific policy decisions, the incentive effects are large and have the potential to undermine State policy neutrality over time. Yet there is no obvious and workable alternative for equalising mining revenue in a way that would not affect policy incentives. The current lack of policy neutrality may be an inevitable consequence of pursuing full and comprehensive equalisation with the data available.

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## Efficiency concerns about expenditure-side equalisation are less prevalent

When the CGC assesses State expenditure needs, it considers the *cost* of providing a service and the levels of service *use*. These are equivalent to the rate and base effects on the tax side, and lead to similar incentive effects. Where a State reduces or increases its average costs, it has very little impact on the GST distribution. The current HFE system is unlikely to materially distort State incentives to provide public services cost effectively.

However, where a State addresses its structural disadvantage and therefore affects the use of its services and infrastructure, its GST share would move in line with the structural change, meaning the State would only receive its population share of the fiscal benefits. This could create disincentives for States to address their structural disadvantages, particularly if they would incur high costs to do so. More generally, there are long-running concerns that HFE leads to grant dependency in the smaller States and a failure to pursue economic development. Again, these in-principle incentive effects are hard to substantiate in practice.

A related concern is that the HFE process redistributes significant funds due to Indigeneity, but that some States are not spending that money on Indigenous services nor delivering better outcomes. Such concerns are often accompanied by the suggestion to take Indigeneity out of HFE. However, Indigeneity is a genuine and significant driver of jurisdictional spending, and absent some fundamental reform to roles and responsibilities (and thus accountabilities, discussed later), it remains open to question what taking Indigeneity out of HFE would achieve.

In sum, the potential for HFE to distort State policy is much lower on the expenditure side than it is on the revenue side.

## Does HFE affect productivity and economic growth?

There are longstanding academic debates about the effect of HFE on productivity and economic growth. Some researchers contend that HFE improves economic efficiency by reducing incentives for labour and capital to move because of different levels of taxes and services between States. Others argue that HFE can harm economic growth by dulling the incentives for labour and capital to move where they would be most productive.

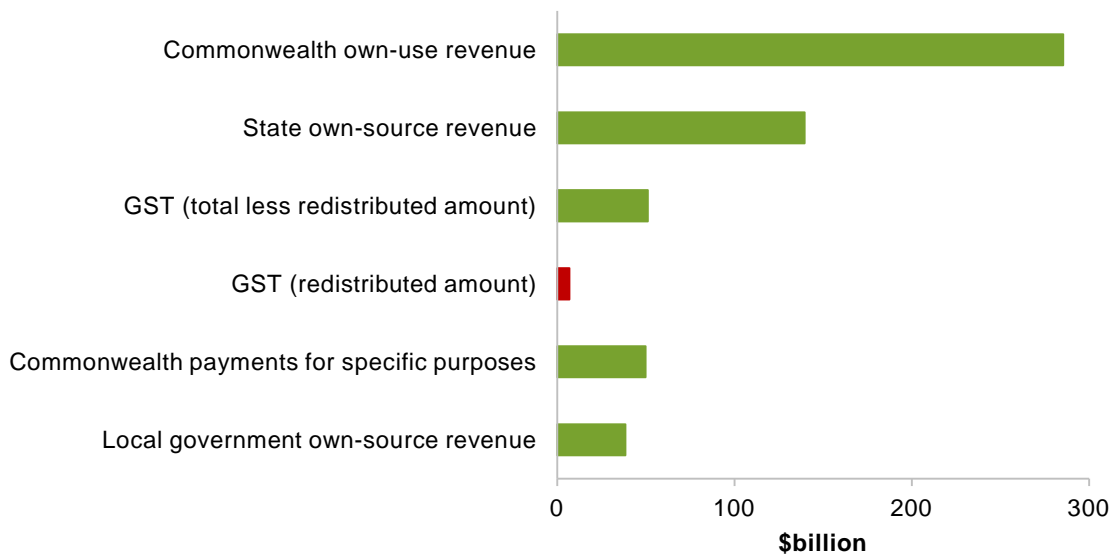
In practice, it is hard to tell whether Australia's HFE system has helped or hindered productivity and growth. People move interstate for a range of reasons — often for work or family — though the evidence shows that they do not respond to the full extent of work opportunities available in other States. Fiscal differences by jurisdiction are unlikely to play a significant role. The magnitude of fiscal redistribution that arises from HFE is small relative to total government revenue (just over 1 per cent) (figure 5). HFE is thus unlikely to have a significant effect on interstate fiscal differences either way — and hence on incentives to relocate.

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The main concerns for productivity and growth over time would arise from HFE discouraging major State revenue and development reforms, as discussed above.

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Figure 5      **The relative size of the GST redistribution, 2015-16**



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Attempts to quantify the efficiency impacts of HFE have not proved compelling. Some modelling exercises find that HFE improves economic efficiency, whereas others find that it detracts from it. But the effects are relatively small, and the results of these models are largely driven by the assumptions fed into them. For these reasons, the Productivity Commission has not pursued its own general equilibrium modelling of HFE.

## **In summary, how is the current system performing?**

The Productivity Commission's overall assessment in this Draft Report is that the current HFE system is functioning reasonably well in regard to:

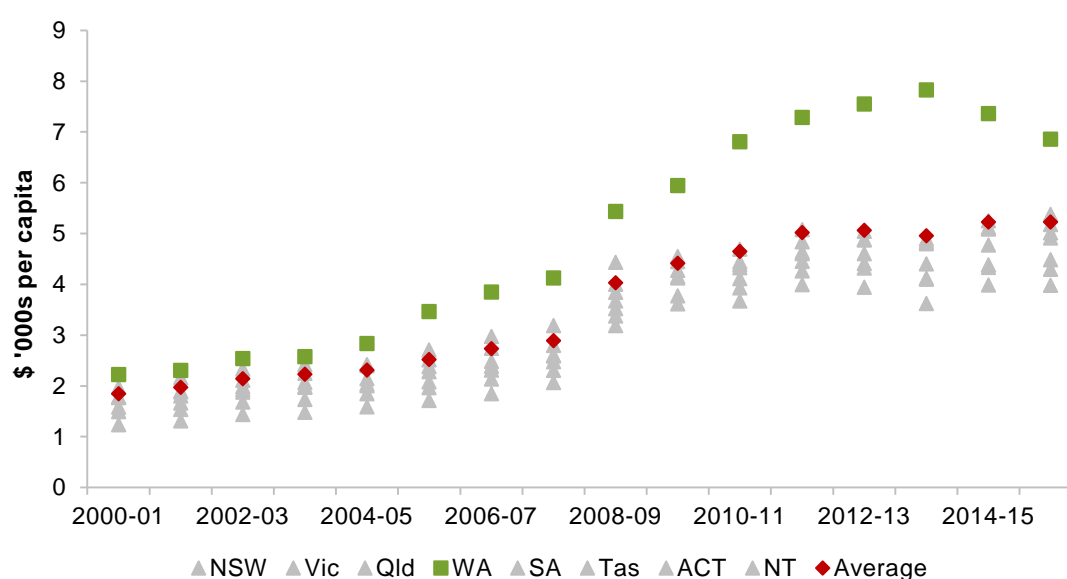
- *equity*: the principle of fiscal equalisation is strongly supported and Australia's HFE system achieves an almost complete degree of equalisation — this is unique among OECD countries with federal governments
- *an independent and transparent process*: the CGC, as an expert agency independent from governments, is well placed to conduct the HFE distribution process. It has well-established processes that involve consultation and regular methodology reviews
- *stability*: HFE results in reasonably stable GST payments and a level of predictability for (most) States regarding budget outcomes.

However, there are deficiencies in a number of areas, which have become particularly pronounced recently. These include:

- *equalisation is taken too far*: equalising comprehensively and to the fiscally strongest State means that when there is an outlier, the redistribution task is considerable and the standard being equalised to is potentially volatile (figure 6)
- *policy neutrality*: the current HFE system struggles with State circumstances that differ markedly from the other jurisdictions. The potential for HFE to distort State policy is pronounced for major tax reform exercises (especially first-movers) or in relation to mineral and energy resources (including royalty policies and restrictions on extraction)
- *simplicity and comprehensibility*: the CGC's drive for full and precise equalisation has meant that there has been an increase in system complexity over time. This has led to the system being poorly understood by the public, and even by many within government.

In terms of overall national efficiency and growth, Australia's HFE system has typically been found to have little direct effect. However, the current redistribution is historically high, which may be elevating any efficiency effects.

Figure 6 **WA is an outlier due to its assessed revenue capacity**



## A need for a revised objective

Overall, the current HFE system goes too far in the pursuit of equalisation and much beyond what other federations do. Arguably it also goes beyond what a unitary government would do, which is providing a level of services to all residents that is relatively consistent from one year to the next, and which is likely closer to the average across the nation. In contrast,

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equalising to the strongest State — particularly when the strongest State is so much stronger — has meant equalising to a benchmark that is relatively volatile.

This volatility, combined with little consideration of efficiency, a complex and misunderstood system and an absence of government accountability, is currently undermining the otherwise strong social consensus for HFE. The subjective notion of ‘what is fair’ means trying to find the age old balance between fair inequality and unfair equality. This is compounded by the reality that when the States agreed to give up some of their own-source revenues in exchange for the GST, distributed on the basis of HFE, it is doubtful any anticipated the extreme outcomes we are observing today.

The Productivity Commission considers that a revision to the objective of HFE would be in the best interests of national productivity and wellbeing.

*The primary objective of the HFE system should be to provide the States with the fiscal capacity to allow them to supply services and the associated infrastructure of a reasonable standard.*

*This objective should be pursued to the greatest extent possible, provided that:*

- *it does not unduly influence the States’ own policies and choices beyond providing them with fiscal capacity*
- *it does not unduly hinder efficient movement of capital and people between States*
- *the process for determining the distribution of funds is transparent and based on reliable evidence.*

Like the current approach to HFE, the Productivity Commission’s proposed objective puts equity at the heart of HFE. However, our revised objective for HFE acknowledges that there is a trade-off between full and comprehensive equalisation on the one hand, and efficiency and simplicity on the other hand.

Moreover, the Commonwealth Government should take on a greater leadership role in specifying the objective, and reflecting it in the terms of reference it issues to the CGC for its yearly updates and five-yearly methodology reviews. While the Commonwealth Government can do this unilaterally, the Productivity Commission anticipates this would be pursued through a collaborative process with the States to create an environment of mutual accountability.

The Council on Federal Financial Relations — the COAG council that oversees the financial relationship between the Commonwealth and the States, including the Intergovernmental Agreement on Federal Financial Relations — would be the appropriate body through which to consult with the States. This body could also provide input to the Treasurer on the appropriate benchmark to which the States should be equalised.

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## Are there preferable alternatives?

The Productivity Commission has considered alternative approaches to the current HFE arrangements. Some involve making adjustments to the current methodology, while other options involve more fundamental change.

Each approach variously trades off equity, efficiency and simplicity — the trade-off between equity and efficiency is inescapable — and has its advantages and disadvantages. To be ‘preferable’ to current arrangements, alternative approaches would need to meet the Productivity Commission’s objective for HFE and address some of the concerns identified in the assessment above.

### Adjustments to current methodology

A persistent criticism of the current HFE system and its underlying methodology is that it does not deal well with extreme circumstances. This often leads to views that there is a need to move to a system involving — in the words of the 2012 GST Distribution Review — either less equalisation, or less precise equalisation.

#### Approaches that lessen policy neutrality concerns

The CGC’s supporting principle of ‘what States do’ can come into conflict with the principle of policy neutrality. Also, the very significant level of detail that underpins the CGC’s assessments creates complexity and even perhaps a false sense of precision (GST relativities are calculated to five decimal places).

One approach is to adopt a much simpler assessment based on ‘broad indicators’. For example, assessments of revenue capacity or expenditure needs could be based on a broad macroeconomic indicator such as gross state product or household disposable income. This approach has been used for some transfers in the United States but is otherwise not commonly found in equalisation schemes overseas. A further, less drastic option is a move to more highly aggregated assessments, but drawing in the first instance on the current approach used by the CGC.

A key benefit of the broad indicators approach is greater simplicity and transparency. Most importantly, the use of broad indicators provides for a genuinely policy-neutral measure of fiscal capacity. In this way, the use of broad indicators should avoid most of the incentive effects discussed earlier. But there are also a number of genuine concerns with broad indicators — namely about the quality of the available data and whether these indicators accurately reflect particular circumstances within States. The Productivity Commission’s own calculations also throw up some complications for this approach.

On balance, a broad indicators approach, while potentially delivering benefits in terms of simplicity, would have significant costs in terms of material loss of accuracy, and may not



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achieve a ‘reasonable’ level of equalisation. The broader the indicators that are used, the more such risks may arise. A more intermediate approach, involving application of broad indicators to the various revenue and expenditure categories, would appear to be a less extreme approach with greater probability of balancing accuracy and simplicity.

There is merit in further exploring whether broad indicators may prove more fruitful at the revenue and expenditure category levels. This is ideal fodder for the CGC’s five-yearly methodology reviews. However, the CGC is unlikely to pursue such simplification absent of direction to do so and while it remains singularly focused on achieving full equalisation.

The Productivity Commission also explored whether the equalisation methodology could make greater use of efficient or ‘model state’ standards, for example, based on notions of efficient service delivery and optimal taxation policy. But the Commission is not drawn to such ‘external’ standards, as they would invite a significant degree of complexity and subjective judgment.

### Discounting mining

A common proposal among inquiry participants has been to impose discounts of 25 per cent or 50 per cent on the mining revenue assessment. Canada applies a 50 per cent discount to mining revenues in its revenue equalisation formula (although Canada’s HFE approach is not full equalisation to begin with). Applying a mining discount would deliver significant benefits to Western Australia, Queensland and the Northern Territory.

Proponents of this option argue that applying a discount would reflect the uncertainty and lack of policy neutrality inherent in the current mining assessment. There is some merit in this argument. The mining assessment has always thrown up problems, due to the dominance of select minerals and particular States, and has been subject to significant change in methodology reviews. Moreover, the CGC already applies discounts to select assessments where data quality is patchy, where uncertainty exists regarding fiscal capacity, or where the CGC’s view is that a methodology requires further development (in 2015 these discounts resulted in a total redistribution of \$503 million relative to a case where no discounting was applied).

The Productivity Commission is not attracted to this option. A discount does not sit well with the main equity objective of HFE. Mining revenue is a prime example of a source-based advantage — one a State benefits from by virtue of where its borders happen to be drawn — and should *prima facie* be included in the equalisation process. Further, there is a possibility that introduction of such a discount would herald calls for other carve outs. The proposal of a discount points to a legitimate problem in the HFE process, but provides a less than robust solution.

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## Relativity floors

A further commonly suggested change to HFE is to introduce a relativity floor. A State whose relativity fell below the floor would be lifted up to that floor. This could be achieved using funds from the GST pool (meaning it would come at the expense of the other States) or some external funding source. The additional infrastructure payments the Commonwealth has made to Western Australia are already providing a de-facto floor.

An HFE system with a relativity floor would result in partial equalisation where a State's underlying relativity goes below this boundary, but full equalisation at other times. The most common proposal is for a relativity floor of 0.7, but there were also suggestions of a staged or gradual introduction of a relativity floor over coming years. While Western Australia's relativity is forecast to increase over the next few years, it is nonetheless likely that a relativity floor of 0.7 would bite in the future.

The concept of a floor has some initial attraction. It acknowledges that the current system works in a satisfactory way *on average*, and when jurisdictions are similar, but has difficulty with extreme circumstances. At the margin, a floor may also provide greater incentives to States to pursue further development. Furthermore, an *explicit* floor would be more transparent than the *implicit* floor that has emerged through the additional payments to Western Australia. However, the introduction of a relativity floor is unlikely to provide a holistic fix to the various complexity and efficiency concerns identified earlier, and may even increase uncertainty and unpredictability. A floor is targeting a symptom, and ultimately, prevention is better than cure.

## More fundamental changes to how GST revenue is distributed

The alternative approaches considered offer a departure from the CGC's full equalisation principles, and draw on practices used overseas or proposed in submissions.

### Equal per capita

Under an EPC approach, each State would receive a share of the total pool of GST revenue equal to its share of the national population. Participants proposing a change to an EPC allocation argued that it would be a 'fairer' system of distributing GST revenues.

In the current environment, an EPC distribution would see more GST revenue flow to New South Wales, Victoria and Western Australia, and less to the remaining States, with the Northern Territory experiencing the largest reduction.

An EPC approach would be extremely simple, and would have no adverse effect on States' incentives to pursue increased prosperity (and revenue) or improved efficiency in providing services. However, an EPC approach would fail to meet the core equity objective of HFE, and is therefore not a viable option.

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## Equalisation to less than the fiscally strongest State

This approach involves first lifting States up to some agreed level of fiscal capacity (a standard the Productivity Commission views as ‘reasonable’) — but not bringing them up to the level of the fiscally strongest State as presently occurs — and distributing the balance of the GST pool on an EPC basis.

In principle, and subject to views on what is considered a reasonable standard of fiscal capacity, this approach could be used to bring States up to *any* level of fiscal capacity less than that of the fiscally strongest State. For example, this could be the average fiscal capacity, the average of the ‘donor’ States, or the fiscal capacity of the second strongest State. It could also be based on the efficient or model state standard discussed above.

This equalisation approach avoids the full equalisation that occurs under the current system, and addresses the volatility introduced in the case of an extreme outlier State. For example, in a world of equalising to the average, the low for Western Australia’s relativity (during the period 2000–2017) becomes 0.87 as opposed to 0.30.

This approach would also make way for consideration of efficiency issues where material — for example, it should lessen the disincentives for significant State tax reform or mining development and royalties — and it would be consistent with the Productivity Commission’s revised objective of HFE. However, this approach on its own is unlikely to deliver significant improvements to simplicity.

## Equal per capita with ‘top-up’ funding

This approach would see the entire GST pool distributed to the States on an EPC basis, but with the Commonwealth Government providing ‘top-up’ funding to the fiscally weaker States to ensure that no State was worse off than under current arrangements.

The National Commission of Audit in 2014 considered and recommended a model in which the GST was distributed to the States on an EPC basis, with the Commonwealth providing top-up funding to the fiscally weaker States (with the distribution of that additional equalisation grant from the Commonwealth being determined by the CGC). This recommendation was part of a broader suite of recommendations to reform federal financial relations.

Were this approach applied for 2017-18, Queensland, South Australia, Tasmania, the ACT and the Northern Territory would require top-up funding. But realistically, advocates of such a model typically have Queensland as an EPC-only recipient (being a State whose relativity fluctuates around 1.0), with the top-up funding being provided only to the other States whose relativity is persistently above 1.0.

The key benefit of this approach is that it seemingly breaks out of the zero-sum game. It would also highlight the scale of the transfers required to address horizontal fiscal inequity

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(the top-up component), which may improve transparency and accountability in the Federation. The OECD has found that systems that mix both horizontal and vertical equalisation are less transparent and accountable because they blur responsibility between financing and funding.

Further, by making the big four States' GST grants contingent only on their population, this model would have no adverse effect on their incentives to increase revenue or pursue improved efficiency in providing services. But it may create another set of moral hazard concerns among the fiscally weaker States, and may not reduce the complexity of any assessment process. And most importantly, this model is reliant on additional funding from the Commonwealth Government. This funding has its own opportunity costs and is unlikely to be forthcoming in the current environment. Given the 'cost' of this approach, it should only be pursued in the context of broader reform to federal financial relations that may be able to generate some compensating benefits.

## **Is there a way forward?**

One thing that emerges from the assessment of different approaches is that none of the approaches are perfect, and none is universally supported by participants. All approaches (including the current one) come at a cost, whether to equity, efficiency or simplicity, or some combination of these.

Equalising to the fiscally strongest State is not desirable or fair when that State is such an outlier, and when the pursuit of full equalisation may be resulting in broader (albeit in most instances small) costs to the economy. The Productivity Commission believes HFE should aim for a different — 'reasonable' — level of fiscal capacity and is seeking participant views on what level would be considered reasonable.

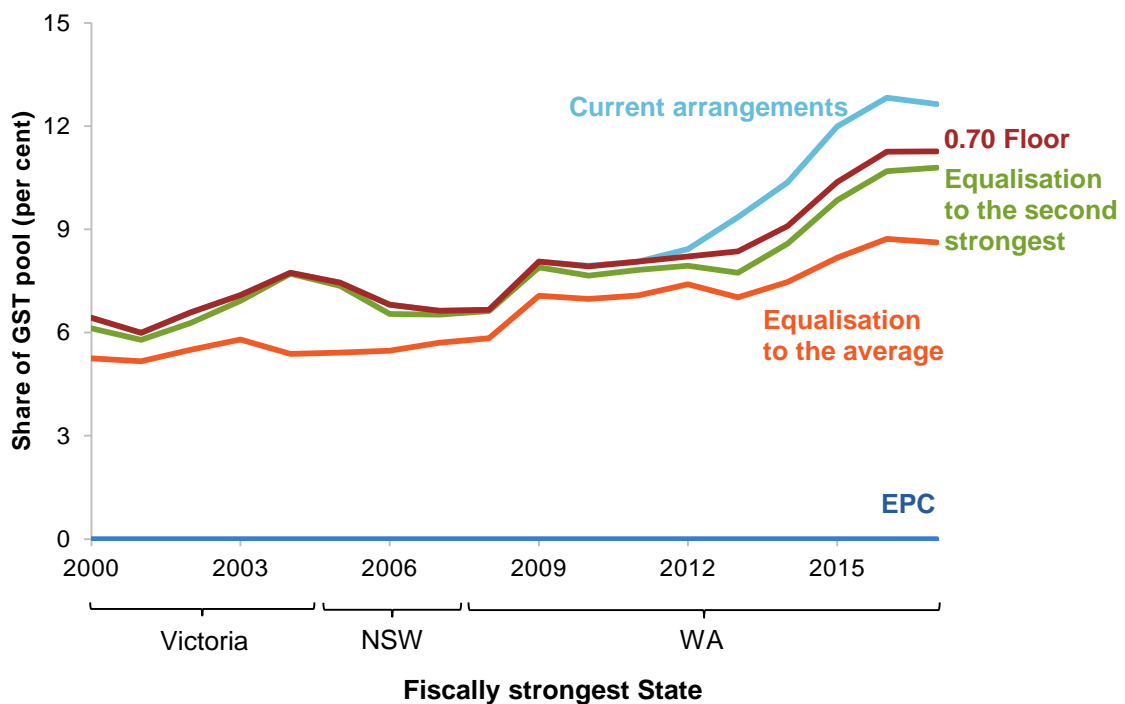
The Commonwealth Treasurer should articulate a revised objective for HFE, as envisaged in this Draft Report, and ask the CGC to recommend relativities consistent with this objective. The benefit of this approach is that it vests HFE/federal financial relations policy responsibility with government, and leaves implementation to the CGC. This retains many of the positive features of the current system, such as the CGC's independence and regular methodology reviews. And by not specifying a specific model, it makes this approach more time-neutral and amenable to changing circumstances over time.

Further, the Commonwealth Treasurer should direct the CGC to pursue significant simplification of the assessment process where it can still deliver 'good enough' equalisation results — that is, giving the CGC explicit permission to tolerate less or less precise equalisation where it has benefits for simplicity (and policy neutrality).

Any changes to HFE arrangements in the current extreme environment will result in a smaller amount redistributed away from EPC (figure 7), and commensurately a significant redistribution of GST payments to Western Australia at the expense of all the other States.

Reducing GST payments especially to the fiscally weaker States would be undesirable. Any changes would therefore need to be timed and implemented carefully, especially to ensure that fiscally weaker states are not disadvantaged. For example, changes may be implemented in the future, when Western Australia's relativity is expected to be higher, and could be introduced gradually over a number of years. The CGC's 2020 methodology review may be a good vehicle for considering and consulting on the most appropriate way to transition to any new approach.

Figure 7 The equalisation task under alternative approaches<sup>a</sup>



<sup>a</sup> The pool used for these calculations includes Health Care Grants in earlier periods.

## What complementary reforms would be needed?

Reforms to improve governance and accountability are also needed — and have merit under any system of HFE. Most importantly, as identified above, there is a need for the Commonwealth Government to assume leadership here and articulate the objective of HFE. Vesting too much or all responsibility with an independent agency can lead to mission creep and creates incentives for greater complexity.

There is a dearth of public understanding of how HFE works, and this is compounded by the lack of a strong neutral voice in public discussion. The CGC can and should take on a more

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prominent public communication and education role. This would involve clearly explaining its processes and the reasons for its decisions, and how this is meeting the objective of HFE.

The CGC could also engage better with governments. It should build on its extensive consultation practices by establishing a formal process to provide States with ‘draft rulings’ on the possible GST implications of a change in State policy (for example, a major tax reform). This can help to reduce some of the fiscal uncertainty that States face when considering reforms.

Greater accountability is needed too. GST funding should continue to be provided on an untied basis. That said, there is scope to improve accountability through the CGC making the data provided by the States (as well as its calculations using these data) publicly available. This will create greater transparency of how HFE is applied in practice and make the system less of a ‘black box’. There are also broader national interest benefits (for example, to researchers) from making data available. It will ultimately improve government decision making and the efficiency of service delivery. And it will help to hold States accountable for their own policies and spending.

This accountability is already blurred by the patchwork of payments from the Commonwealth to the States. While the general principles applied to Commonwealth payments in the HFE formula appear reasonable and internally consistent with the CGC’s overall approach to HFE, they may not always be consistent with governments’ other, more direct, objectives for those payments. This is another one of the inescapable trade-offs inherent in HFE. Perhaps as a result of this, there has been a growing tendency to quarantining some Commonwealth payments purely on political grounds. There is clearly a need for a holistic assessment of how different kinds of payments interact with each other.

The patchwork of payments is symptomatic of broader problems with federal financial relations, the roots of which lie in the very high degree of vertical fiscal imbalance between the Commonwealth and the States and the unclear delineation of responsibilities for service provision across governments. Ultimately, reform to HFE will only go part of the way to improving outcomes within federal financial relations.

There is a need to revisit and renew efforts to reform federal financial relations in the broad, a process that should be led by the Council on Federal Financial Relations. In the first instance, governments should work to a well-delineated division of responsibilities. In particular, responsibilities and accountabilities for Indigenous policy — a policy area where there continues to be little improvement despite significant expenditure — should be given priority.

Genuinely reforming federal financial relations may then allow consideration for more fundamental reforms to HFE in the future and afford a greater focus on the needs of the fiscally weaker states.

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# Draft findings and recommendations

*States refers to States and Territories in the following draft findings and recommendations.*

## Objective of HFE

### DRAFT FINDING 2.1

While it has a number of strengths, there are also several deficiencies with the objective of Australia's horizontal fiscal equalisation (HFE) system. In particular, equalisation is always to the fiscally strongest State; it provides for limited consideration of efficiency; and it results in a complex system.

The primary objective of the system may be better refocused to provide the States with the fiscal capacity to allow them to supply services and the associated infrastructure of a reasonable standard.

This objective should be pursued to the greatest extent possible, provided that:

- it does not unduly influence the States' own policies and choices beyond providing them with fiscal capacity
- it does not unduly hinder efficient movement of capital and people between States
- the process for determining the distribution of funds is transparent and based on reliable evidence.

### DRAFT RECOMMENDATION 2.1

The Commonwealth Government should clearly articulate the objective of HFE. This objective should aim for reasonable rather than full equalisation (as envisaged in draft finding 2.1).

The objective should be established through a process led by the Commonwealth and involving consultation with the States, and should be reflected in the Intergovernmental Agreement on Federal Financial Relations.

The objective should also be reflected in the terms of reference which the Commonwealth Government issues for the yearly update and five-yearly methodology review. The *Commonwealth Grants Commission Act 1973* (Cwlth) should also be updated to reflect the adopted objective.

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## HFE and equalisation

### DRAFT FINDING 3.1

Australia achieves a high degree of horizontal fiscal equalisation and to a much greater extent than other countries.

### DRAFT FINDING 8.1

Fiscal equalisation to address disparities in the fiscal capacity of sub-central governments is common among OECD countries. But other countries' approaches to fiscal equalisation are inextricably linked to their unique institutional frameworks — this limits those schemes' applicability to Australia.

Despite this, overseas experience provides lessons that can inform the elements of our system in order to better meet the objectives of our fiscal equalisation scheme.

Australia is the only OECD country with a federal government that totally eliminates disparities in fiscal capacity between sub-central governments.

## HFE and State policies

### DRAFT FINDING 4.1

For the most part, States considering tax reforms would generally not be deterred by the effects on GST redistribution. However, there are circumstances where the GST effects can be material — such as for a State undertaking large-scale tax reform — and act as a significant disincentive to States implementing efficient tax policy. These disincentives are likely to be exacerbated where the State is a first mover on reform or where there is uncertainty about how significant tax changes will be assessed by the CGC.

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### INFORMATION REQUEST

*What further 'cameos' would usefully illustrate how particular State reforms can influence GST shares?*

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#### DRAFT FINDING 4.2

Changes in State service delivery policies can impact on GST payments, but the impacts are mostly trivial. HFE is unlikely to discourage — nor encourage — States from pursuing growth strategies or addressing their structural disadvantages given the broader and more significant benefits of doing so to the community.

#### DRAFT FINDING 4.3

The potential for HFE to distort State policy is pronounced for mineral and energy resources. While there is no direct evidence that GST effects have influenced specific policy decisions, the incentive effects are large and have the potential to undermine State policy neutrality over time.

However, making adjustments to the HFE system specifically to *add* incentives for resource exploration policies that are deemed to be desirable would be an intentional breach of policy neutrality and State autonomy; be a source of additional complexity; and come at the expense of equity.

## HFE and State budgets

#### DRAFT FINDING 5.1

Features of Australia's HFE system detract from its contemporaneity. While this works to smooth out changes in GST payments, it can exacerbate the fiscal impact of economic cycles when States experience large economic shocks. Such a situation has occurred in Western Australia in recent years.

However, offsetting cyclical factors is not the primary objective of HFE, and alternative approaches do not offer unequivocal improvements. Reducing the length of the assessment period would have mixed impacts across States, and reducing the lag due to delayed data availability would introduce additional scope for dispute, volatility and the potential for unintended consequences.

#### DRAFT FINDING 5.2

GST payments are less volatile than other major sources of State government revenue. While some States have reported difficulty forecasting GST payments, others consider GST payments to be no less unpredictable than other sources of revenue.

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## HFE and migration

### DRAFT FINDING 6.1

The redistribution that arises from Australia's system of HFE is small in magnitude relative to total government revenue for most States. As such, the GST distribution and net fiscal benefits are unlikely to be a significant driver of interstate movement of people.

## Methodological changes to the current system of HFE

### DRAFT FINDING 7.1

Removing mining from the HFE process, or the use of a discount factor within the mining assessment, is inequitable and not justified. However, there is a need to consider potential improvements in the assessment method in light of problems with policy neutrality.

### DRAFT FINDING 7.2

The introduction of a minimum relativity floor would blunt extreme equalisation outcomes and might theoretically introduce greater incentives for States to pursue development opportunities. But a floor will likely prove a band-aid solution as it does not address the identified deficiencies of HFE, and may even introduce greater uncertainty and unpredictability into the HFE system.

### DRAFT FINDING 7.3

The introduction of a broad indicators approach for assessing fiscal capacity could potentially deliver benefits in terms of simplicity, but would also have significant costs in terms of loss of accuracy, and may not achieve a 'reasonable' level of equalisation. The broader the indicators that are used, the more such risks may arise.

### DRAFT RECOMMENDATION 7.1

The Commonwealth Government should direct the CGC, through the terms of reference it receives, to consider approaches to assessment that deliver significant simplification and 'good enough' equalisation outcomes. The use of more highly aggregated assessments should receive detailed consideration as part of the current CGC process.

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#### DRAFT FINDING 7.4

The use of externally defined benchmarks for efficient service delivery within the HFE process would encourage greater efficiency and reduce the potential for gaming the system. However, it faces daunting practical difficulties and involves a high degree of scope for dispute.

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#### INFORMATION REQUEST

*Further views are sought on the potential to apply a simple cost benchmark approach to the expenditure assessments.*

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#### INFORMATION REQUEST

*The Commission seeks further information and views on changes to methodology, both within the current approach to HFE and in any alternative approach, that would deliver significant improvements in simplicity, reduce some of the distortionary effects of the current system, and still deliver a degree of equalisation consistent with the Commission's revised objective of HFE.*

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#### DRAFT RECOMMENDATION 7.2

The Commonwealth needs to develop clear guidelines detailing the basis on which Commonwealth payments are to be quarantined from HFE by the Commonwealth Treasurer, so that they do not unnecessarily erode the efficacy of the CGC's relativities. The guidelines should be based on the principle that quarantining of payments ought to occur only in exceptional circumstances.

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#### INFORMATION REQUEST

*The Commission seeks further views on the principles that should apply with respect to considering which (if any) Commonwealth payments should be quarantined by the Commonwealth Treasurer, and hence would not affect the distribution of GST revenue.*

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## Alternative approaches to HFE

### DRAFT FINDING 8.2

An equal per capita approach to distributing GST revenue is incapable of equalising the fiscal capacities of States. This approach is thus inimical to achieving the core equity rationale underpinning horizontal fiscal equalisation.

### DRAFT FINDING 8.3

An equal per capita with top-up funding approach would provide all States with the fiscal capacity to deliver a similar level of services. While this would meet the equity rationale underpinning horizontal fiscal equalisation, the top-up funding would always be hostage to fiscal constraints faced by the Commonwealth Government and, thus, this approach poses uncertainty for the fiscally weaker States. Such an approach should only be meaningfully considered as part of a broader reform of Commonwealth–State financial relations.

### DRAFT FINDING 8.4

An actual per capita approach (which is similar to the current system except that it uses *actual* revenue and expenses rather than *assessed* revenue and expenses) would provide all States with the fiscal capacity to deliver a similar standard of services and, in doing so, would meet the equity rationale that underpins horizontal fiscal equalisation. However, this approach has significant risks for adverse efficiency effects (less incentive to contain costs and pursue efficient service provision) — and on those grounds is an unacceptable alternative to current arrangements.

### DRAFT FINDING 8.5

Equalisation can be designed to provide a spectrum of fiscal equalisation outcomes — for example, from equalising to the average fiscal capacity across the States up to equalising to that of the strongest State. The extent to which this approach would meet the equity rationale underpinning horizontal fiscal equalisation therefore depends on the level of equalisation this approach is intended to deliver.

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*INFORMATION REQUEST*

*The Commission seeks participant views on what level of fiscal capacity would be consistent with enabling States to provide a ‘reasonable’ level of services? For example, this could be the average fiscal capacity, the average of the ‘donor’ States, or the fiscal capacity of the second strongest State.*

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*INFORMATION REQUEST*

*The Commission seeks participant views on managing transition to any new approach, and the most amenable process for considering the transition path. For example, could it be considered via the CGC’s 2020 methodology review?*

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## **Institutional reforms**

**DRAFT RECOMMENDATION 9.1**

The CGC — through its Chairperson and Commission members — should provide a strong neutral voice in the public discussion on the HFE system.

The CGC should also enhance its formal interactions with the State and Commonwealth Governments. In particular, it could provide draft rulings to State Governments on the potential HFE implications of a policy change.

**DRAFT RECOMMENDATION 9.2**

The CGC should make the data provided by the States publicly available on its website, along with the CGC’s calculations on these data. Where there are risks identified with this approach, mitigating steps should be identified and taken.

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#### DRAFT RECOMMENDATION 9.3

The Commonwealth and State Governments, through the Council on Federal Financial Relations, should develop a process that would work towards a longer term goal of reform to federal financial relations.

In the first instance, it should assess how Commonwealth payments to the States — both general revenue assistance and payments for specific purposes — interact with each other today, given the significant reforms to payments for specific purposes that have occurred in recent years.

The process should also work to a well-delineated division of responsibilities between the States and the Commonwealth, and establish clear lines and forms of accountability. Policies to address Indigenous disadvantage should be a priority in this regard.

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# 1 About this inquiry

The Commonwealth Government has tasked the Productivity Commission to undertake an inquiry into Australia's system of horizontal fiscal equalisation (HFE), which underpins the distribution of Goods and Services Tax (GST) to the States and Territories (hereafter States).

## 1.1 Background to the inquiry

Australia's system of HFE acts to distribute revenue among the States with the aim of equalising States' fiscal capacities to deliver public services. In recent years, it has come under pressure, especially as the mining boom led to significant growth in Western Australia's fiscal capacity and a corresponding reduction in its share of the GST pool. This share reached a historic low in 2015-16 when the State was allocated a 'relativity' (the State's allocated share of GST, divided by its share of the national population) of 0.30, while no other State's relativity fell below 0.89 at that time (CGC 2017a).<sup>1</sup> Prior to the mining boom, Western Australia had consistently received more GST per capita than both Victoria and New South Wales.

Since the end of the boom, Western Australia's economic situation has weakened, but its GST share has thus far remained low (with a current relativity of 0.34) — a well-known byproduct of how HFE relativities are calculated based on several years of past data and with a lag. This has generated dissatisfaction in Western Australia with the HFE system. Some stakeholders in New South Wales have also expressed frustrations with the system, and both States have called for substantial change. The remaining six States are broadly satisfied with the current arrangements.

### What is horizontal fiscal equalisation?

HFE refers to fiscal transfers from the Commonwealth to the States, allocated in differing amounts, with the aim of giving each State the fiscal capacity to deliver public services — such as health, education and justice — and infrastructure at a similar level to the other States (chapter 2). This is achieved primarily through the distribution of GST revenue. The formula for distributing GST revenue is applied annually by the Commonwealth Grants Commission (CGC), which calculates a relativity for each State. This funding is distributed in the form of general revenue assistance, meaning it is not tied to any specific purpose.

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<sup>1</sup> Note that a relativity refers to a State's share of the total GST pool *relative to its share of the national population*. Discussions of HFE frequently (and erroneously) refer to a relativity as the share of GST 'returned' to a State compared to the amount that was 'collected' or 'generated' by, or in, that State; however, this is not a component of the GST distribution, and in many cases is not measurable.

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Some State governments receive less GST from this process than they would have if the GST pool was distributed purely on the basis of population, whereby each State would receive an equal amount of GST per resident (‘equal per capita’ or EPC). This reflects that the State in question is fiscally stronger than the national average. Other States receive *more* than they would with an EPC distribution, due to being fiscally weaker. The overall effect of HFE is to put States’ fiscal capacities on a more level playing field (chapter 2; chapter 3).

HFE is not the only system in which the Commonwealth distributes differential allocations of funding between the States. The Commonwealth also makes fiscal transfers to the States to support the provision of specific public services such as health, education, and infrastructure — in 2017-18, these are expected to constitute \$56 billion of Commonwealth Government expenditure (while GST revenue is forecast to exceed \$62 billion: Commonwealth of Australia 2017b, p. 5). Some of these payments for specific purposes (or ‘tied grants’) also have an explicit equalising element.

Additionally, due to different patterns of individual or household needs and incomes between States, different total amounts of funding are transferred to the residents of each State through the social security and welfare system — which is expected to amount to \$164 billion in 2017-18, or more than one-third of the Commonwealth budget (Commonwealth of Australia 2017a, pp. 6–7).

The HFE system coexists with a vertical fiscal imbalance (VFI), which refers to the Commonwealth Government having a much greater capacity to raise revenue than State governments (currently all income taxes, company taxes, excises and sales taxes are federally collected). At the same time, State governments are responsible for providing — and partially funding — a wide range of public services to their residents (Robinson and Farrelly 2013). The result is that the Commonwealth Government raises revenues in excess of its spending responsibilities, while State governments have insufficient revenue from their own sources to finance their spending responsibilities.

The difference between the States’ own-source revenues and spending responsibilities is mostly made up by fiscal transfers from the Commonwealth Government. The GST is one source of funds used to address this VFI, in addition to its role in supporting HFE. Many other Commonwealth payments to the States — including the aforementioned payments for specific purposes — also address VFI. The complex assortment of federal transfers makes it difficult to distinguish the contribution that each individual transfer makes to addressing vertical and horizontal imbalances (chapter 3; appendix B). Appendix B provides an overview of these payments and their interaction with HFE.

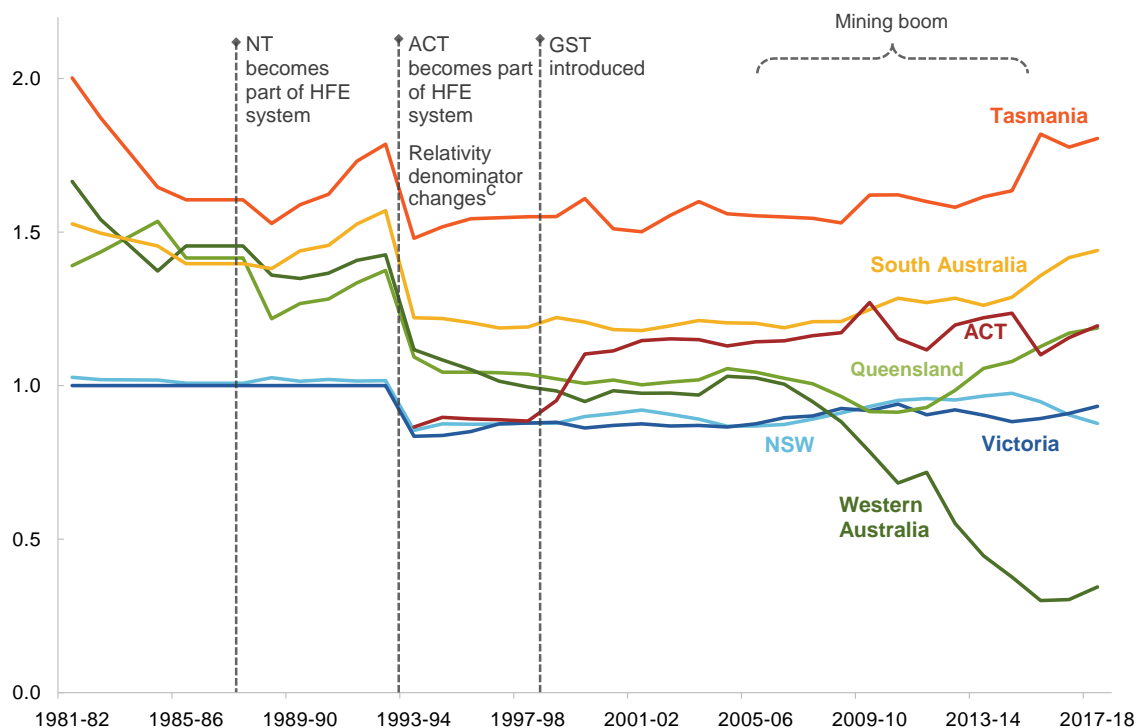
Viewing HFE in this broader context highlights that HFE is but one component part of the much larger architecture of Commonwealth-State financial relations.



## The GST distribution has come under pressure

The general principle of HFE — that no State should, on average, have an appreciably lower capacity to deliver public services to its residents than any other State — has been an aspect of Commonwealth–State funding for decades and predates the introduction of the GST (chapter 3). Some States have fluctuated between being fiscally stronger and weaker over this time (figure 1.1). HFE has frequently been a point of contention among States, as each State has vied for a larger share of the grant pool — though it has not always been a ‘zero-sum game’.

Figure 1.1 State per capita relativities, 1981-82 to 2017-18<sup>a,b</sup>



<sup>a</sup> A relativity is the ratio between a State's actual GST share and the share it would receive under an EPC distribution. It is derived by dividing the State's allocated share of GST by its share of the national population.

<sup>b</sup> The Northern Territory is not shown for reasons of scale. Its relativities fluctuated between a minimum of 4.02 and a maximum of 5.91 between 1988-89 and 2017-18. <sup>c</sup> For the 1993-94 update, the CGC stopped calculating State relativities according to Victoria's share of grants, and moved to a per capita basis. That is, before this update, a relativity of 1.0 represented the pool of funds allocated to Victoria. Afterwards, a relativity of 1.0 represented a share of the pool equal to a State's share of the Australian population.

Source: CGC (2017a).

In recent years — as some States' relativities have diverged markedly from each other — friction around HFE has increased. The aforementioned mining boom, which lasted from roughly 2002 to 2014, has been a key driver of this increased friction. The mining boom had a particularly strong impact on Western Australia's economy, given that it is home to most of Australia's iron ore deposits. The influx of mineral and energy royalties (along with

increases in payroll tax and stamp duty revenue) saw Western Australia experience a steep increase in assessed revenue-raising capacity, and move from being a ‘recipient’ (relativity greater than 1.0) to a ‘donor’ State (relativity less than 1.0) in 2007-08 (CGC 2017a). For the past several years, the CGC has assessed Western Australia as having by far the strongest fiscal position of any State, and the HFE system has accordingly seen all States equalised to this high (and volatile) fiscal capacity.

The winding down of the mining boom over the past few years has seen Western Australia’s economy (and revenue raising capacity) weaken. However, partly as a consequence of the CGC using a lagged assessment period to assess State revenues and expenditures, Western Australia’s share of the GST pool remains historically low (for example, for 2017-18, it was allocated a relativity of 0.34) — reflecting the revenue-raising capacity of a State still experiencing a boom, not one in a post-boom downturn. Meanwhile, States experiencing above-average growth, such as New South Wales and Victoria, received much higher relativities than Western Australia (0.88 and 0.93, respectively, for 2017-18: table 1.1).

**Table 1.1 2017-18 GST distribution**

	<i>Relativities</i>	<i>Population share (per cent)</i>	<i>GST distribution<sup>a</sup> (\$m)</i>	<i>GST share (per cent)</i>	<i>Equal per capita distribution (\$m)</i>	<i>Difference from equal per capita distribution (\$m)</i>
NSW	0.877	32.1	17 680	28.2	20 111	-2 431
Vic	0.932	25.3	14 829	23.6	15 862	-1 033
Qld	1.188	20.0	14 963	23.8	12 565	2 398
WA	0.344	10.9	2 354	3.8	6 818	-4 464
SA	1.440	7.0	6 360	10.1	4 405	1 955
Tas	1.805	2.1	2 403	3.8	1 328	1 075
ACT	1.195	1.6	1 230	2.0	1 026	204
NT	4.660	1.0	2 921	4.7	625	2 296
Total	1.000	100.0	62 740 <sup>b</sup>	100.0	62 740 <sup>b</sup>	na

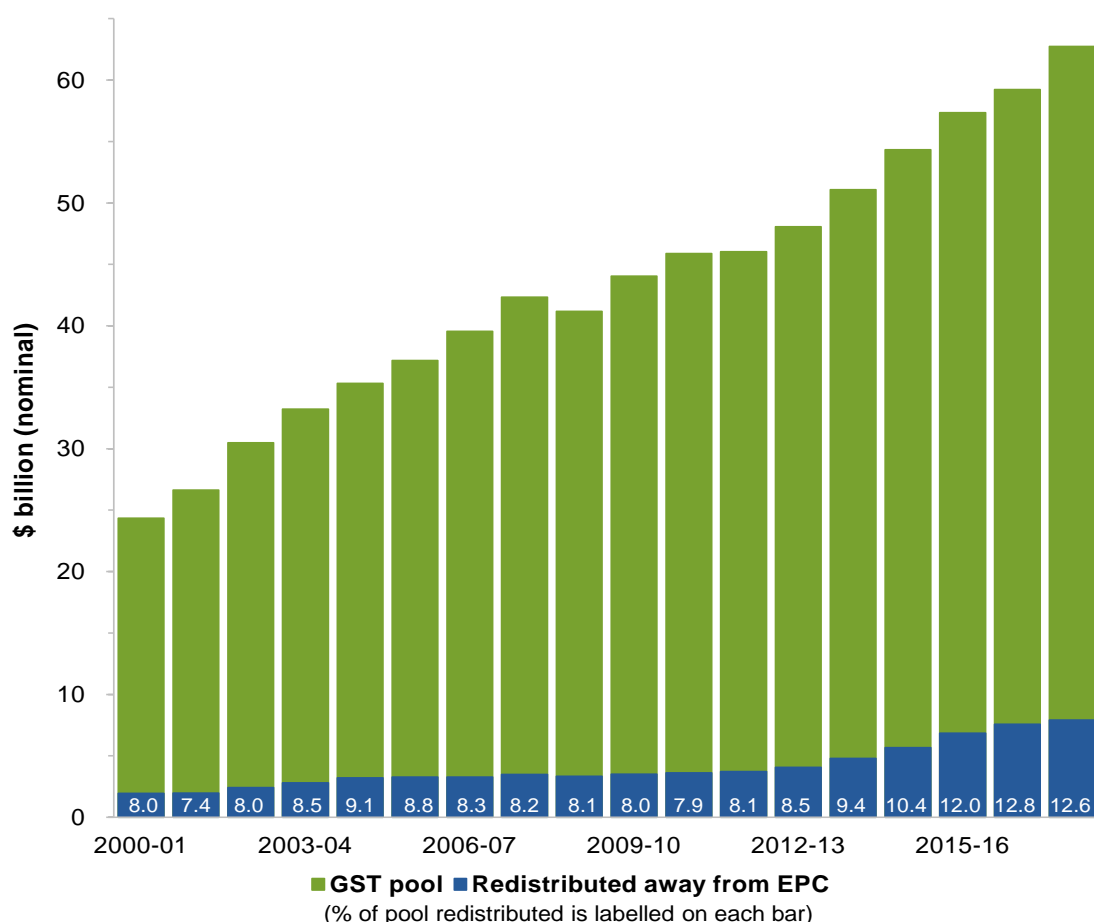
<sup>a</sup> A State’s GST distribution is calculated according to the equation:  $AGSTR_i = G_S \times (P_i f_i / \sum P_i f_i)$  where  $AGSTR_i$  denotes assessed GST revenue for State  $i$ ,  $G_S$  is the total pool of GST revenue,  $P_i$  is the population of State  $i$  and  $f_i$  is the relativity for State  $i$ . <sup>b</sup> Forecast.

Source: CGC (2017a, 2017h, p. 2, 2017j).

Figure 1.1 illustrates some sharp movements in relativities over the years. The proportion of the GST pool explicitly transferred for equalising purposes has also increased over time (as the differences between States’ fiscal capacities have widened), depending on both the total GST revenue raised in a given year and the circumstances of individual States (figure 1.2).

Many have expressed extreme dissatisfaction with Western Australia’s low relativities, and have called for changes to the HFE system to ensure that individual States’ relativities will not fall below a certain point in future. There are also concerns about the effect of the three-year averaging period — specifically, that it may exacerbate economic cycles instead of smoothing them.

Figure 1.2 Value of GST pool; proportion distributed away from EPC<sup>a,b</sup>



<sup>a</sup> 2016-17 and 2017-18 figures are based on Commonwealth of Australia estimates of total GST revenue.

<sup>b</sup> The pool includes Health Care Grants in estimates made before 2009.

Source: Calculated using CGC (2017a, 2017d, 2017h); Commonwealth of Australia (2016, 2017b).

Since 2014-15, the Commonwealth Government has provided over \$1.2 billion in payments for infrastructure projects to Western Australia, which have been quarantined from the HFE process (table B.1). These payments are generally perceived as compensation for that State's low GST relativity, and Western Australia's effective relativity is, therefore, higher than the headline relativity provided by the GST pool alone (chapter 3).

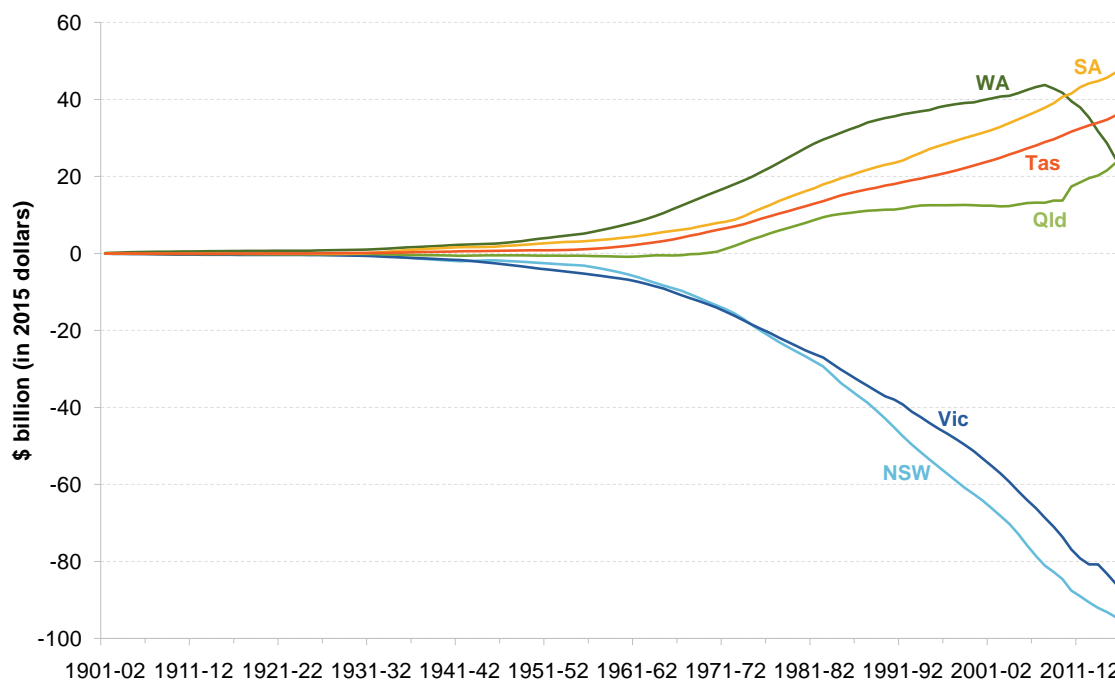
Some stakeholders have also argued that the HFE system impedes economic growth by acting as a disincentive for State governments to develop particular industries or projects, or by subsidising States that ban mineral or energy extraction. This concern heightened recently, in light of issues around the domestic availability of natural gas.

Others have countered these views by emphasising HFE's role in the equity of the Australian federation, given the inherent disadvantages some States face in raising revenue or delivering services. As noted by some parties, for most of Australia's post-federation history, this included Western Australia (as a consequence of — among other factors — its vast

geography and low, dispersed population): figure 1.3 illustrates the cumulative effect of equalisation grants on the States (minus the Territories) since federation.

Criticisms have also been raised around the institutional settings of the current system, particularly with regard to governance and oversight of the CGC’s decision-making process. Some inquiry participants contended that the CGC’s complex methodology hinders transparency and renders the HFE process a ‘black box’, and argued that the current arrangements — whereby the CGC defines its own objective without substantive input from the States, and the Commonwealth Treasurer tends to accept the full set of the CGC’s recommendations on relativities — result in a lack of accountability for HFE’s operation.

**Figure 1.3 Cumulative distribution of Commonwealth grants to States<sup>a,b</sup>**  
1900-01 to 2015-16



<sup>a</sup> ‘Commonwealth grants’ includes general revenue assistance, Specific Purpose Payments (SPPs), National Partnership (NP) payments, and capital grants. <sup>b</sup> The years 1994-95 and 1995-96 used estimates (not actual data) for NP and SPP data. No data were available for the 1996-97 SPP and NP components so the averages of past and future years were used.

Source: Victorian Government (sub. 53); calculations by Department of Treasury and Finance (Vic) (pers. comm., 14 September 2017), based on Commonwealth Budget Papers.

This inquiry will therefore address how HFE copes with extreme circumstances such as those experienced by Western Australia (as an outlier from the other States). In doing so, the Commission will inevitably put to bed a handful of myths that have emerged around HFE and the GST pool more broadly, mindful that extreme circumstances, coupled with ill-informed public debate, can unwittingly undermine community acceptance of HFE itself.

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## 1.2 What has the Commission been asked to do?

The terms of reference for this inquiry essentially present two broad issues for the Productivity Commission to address:

- First, how does the current HFE system impact the Australian community, economy and State and Territory governments?
  - What are the effects on economic activity, national productivity, incentives for State revenue and expenditure reforms, and on States' budgeting activities? Does HFE produce disincentives for States to develop a potential industry (particularly in energy or resources) or to alter tax arrangements for an existing industry?
  - Does HFE restrict the appropriate movement of capital and labour across State borders to more productive regions during times of high labour demand?
- Second, what preferable alternatives are there, if any, to the current HFE system? What improvements could be achieved by changing particular aspects of the existing system?
  - How do other federations internationally approach fiscal equalisation, and how might those different approaches translate to the Australian context?

The terms of reference also ask the Commission to consider some specific aspects of the operation of the CGC's relativity formula, such as the lagged, rolling three-year average. And there is a heavy emphasis on mining and energy resources, reflecting the genesis of the inquiry in the aftermath of the mining boom and the current political climate around energy and resource extraction.

The terms of reference direct the Commission to take into account previous reviews of the HFE process, including the CGC's five-yearly Methodology Reviews and the 2012 GST Distribution Review (Brumby, Carter and Greiner 2012a). Box 1.1 summarises the findings of these, and other, past reviews.

The 2012 GST Distribution Review was the most recent independent review of HFE specifically. In the Final Report, the Review Panel found that, overall, the practice of HFE between States had served Australia well, but made several recommendations around improving simplicity, transparency, stability and governance arrangements (for which this inquiry has also produced draft recommendations). Though the Commonwealth Government did not release a formal response to the Final Report, several of the Panel's recommendations were incorporated into the terms of reference issued by the Commonwealth Treasurer for the CGC's 2015 Methodology Review, indicating in-practice acceptance.

This process resulted in some methodological changes to the CGC's approach, with the most notable being increases in materiality thresholds and changes to the assessment of mining revenue, mining-related infrastructure expenses and the Indigenous population. A number of other material recommendations were also considered by the CGC pursuant to the terms of reference but were not implemented (including rounding of relativities, as discussed in chapter 2, and a simplified assessment method).

## Box 1.1 Findings from previous reviews

### Review of Commonwealth–State Funding (Garnaut and FitzGerald 2002)

This Review was commissioned by the Governments of New South Wales, Victoria and Western Australia. It recommended a move to a ‘partial EPC’ GST distribution, having concluded that:

- the Commonwealth–State funding system rewarded inefficiencies and cost disabilities, encouraged gaming of the system, disincentivised growth, and otherwise distorted State policy decisions;
- the system’s main objective should be interpersonal vertical equity (transferring funds, on average, from richer to poorer households), not equity of State fiscal capacity — it was also concluded that the CGC’s methods did not improve vertical equity, but rather may have worsened it slightly.

### GST Distribution Review (Brumby, Carter and Greiner 2012a)

The Australian Government directed this Review to consider whether the HFE system would assist Australia in responding to pronounced, long-term structural change in the economy.

While the Review found that the practice of HFE between States had served Australia well overall, the Panel also expressed concerns about the long-term sustainability of Commonwealth–State funding arrangements in the face of increasing social service demands and cost pressures. It contemplated future tax reform as needing to bring about a fall in the size of the VFI and a corresponding reduction in the amount of redistribution through HFE. In particular, a GST distribution model of EPC, plus Commonwealth-funded top-ups for fiscally weaker States, was contemplated (p. 173).

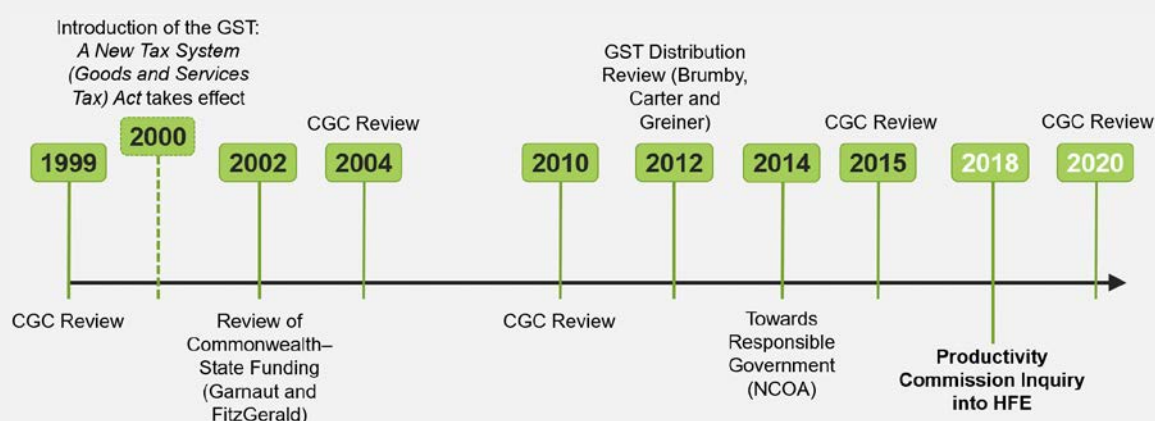
### Towards Responsible Government: Phase One (National Commission of Audit (NCOA) 2014)

The NCOA was commissioned to examine Australia’s public sector expenditure, with a focus on ‘making spending sustainable’ by identifying opportunities for savings. It concluded that Australia’s federal system was ‘not working as it should’ and reform was necessary — specifically, that the Commonwealth should withdraw from certain policy areas and in return, the States should access and control more (and bigger) tax bases, such as income tax. Similar to the GST Distribution Review, the NCOA (2014, p. 74) recommended a GST distribution of EPC, plus Commonwealth-funded top-ups for the fiscally weaker States.

### CGC Methodology Reviews (1999, 2004, 2010, 2015; 2020 in progress)

The CGC also periodically conducts Methodology Reviews (figure below) in which all components of the equalisation formula are open to modification. The terms of reference normally direct the CGC to focus on particular aims for improvement, such as stability or simplicity. However, since the GST-specific formulation of the overarching HFE objective in the 1999 Review, the terms of reference have not directed the CGC to consider substantial change to the objective itself. Consequently, the changes recommended by Methodology Reviews have chiefly related to specific assessment methods, data sources, or revenue and expenditure categories — mostly outside the scope of this inquiry.

### Reviews and major events in HFE, 1999–present



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The Panel also expressed some concerns over the long-term future of HFE (box 1.1; Brumby, Carter and Greiner 2012a). However, the terms of reference for that Review were constrained by the current — CGC-established and -interpreted — objective of HFE, and gave the Panel less scope to consider and recommend alternative models. This inquiry thus has an opportunity to consider the HFE system more broadly and in a practical sense.

## 1.3 The Productivity Commission's approach

### A focus on objectives

Under the *Productivity Commission Act 1998* (Cwlth), the Commission must have regard to the living standards for all members of the Australian community (section 8(1)). This remit is a core tenet of the approach taken to this inquiry: our draft recommendations are designed to offer benefits to the Australian community as a whole, and are not framed solely in the interests of any particular group or individual State jurisdiction.

With that in mind, the Productivity Commission has built this inquiry around a framework for assessing the effectiveness of HFE models (current and alternative) based on an overarching objective of the HFE system for Australia (chapter 2):

The primary objective of the HFE system should be to provide the States with the fiscal capacity to allow them to supply services and the associated infrastructure of a reasonable standard.

This objective should be pursued to the greatest extent possible, provided that:

- it does not unduly influence the States' own policies and choices beyond providing them with fiscal capacity
- it does not unduly hinder efficient movement of capital and people between States
- the process for determining the distribution of funds is transparent and based on reliable evidence.

In short, the Commission's assessment criteria are **equity**, **efficiency** and **simplicity** — from most to least important. Throughout this report, the current HFE system and a range of alternatives are analysed using these criteria and against the Commission's proposed objective.

Chapter 2 discusses the objectives and general principles underpinning HFE, while chapter 3 provides a discussion of the history and practice of HFE in Australia. The history of HFE is important for this inquiry. The way in which the practice of HFE has evolved reveals much about the broader context within which HFE operates — that is, the complex field of Commonwealth-State financial relations and the supporting institutional arrangements.

### Evidence base

Claims about the effects of HFE on the incentives of individuals, firms and governments are often made in theoretical terms. However, there is sparse evidence of these incentives having

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actually impacted past behaviour. This is partially due to HFE not existing in a vacuum, such that there are generally many other factors simultaneously contributing to a particular economic or policy decision. The Productivity Commission has, therefore, placed weight on inquiry participants and submissions providing evidence of their claims. And as in any inquiry, the Commission's findings are also driven by economic principles and consideration of the incentives generated by HFE, especially where evidence has not been forthcoming or behavioural impacts are too difficult to reliably measure.

The incentive effects of HFE are examined in chapter 4 (in terms of States' incentives for reform), chapter 5 (for budget management) and chapter 6 (in terms of interstate labour and capital mobility, and economic efficiency more broadly). To support its analysis, the Commission has constructed a set of quantitative 'cameos' (appendix C). These illustrate the effects of hypothetical State policy changes on GST shares in order to indicate the distributional impacts, and possible incentive effects, of the current system of HFE.

The Productivity Commission has not undertaken economy-wide modelling of the impacts of HFE (through, for example, the development of a computable general equilibrium model). This is in part because extensive work has already been carried out in this field (Dixon, Picton and Rimmer 2005; Independent Economics 2012, 2015; Murphy 2015). It also reflects the reality that such a model is not well-suited to predict, on its own, whether HFE affects discrete decisions such as interstate migration or State government taxation and spending. Any modelling would therefore need to make a host of assumptions about these effects, which risks rendering the modelling assumption-driven and — particularly where evidence is sparse — of little predictive value (chapter 6). Appendix D elaborates on the challenges presented by modelling the effects of HFE, and summarises the major work undertaken in this field so far.

## Scope of the inquiry

In line with an objective-driven approach, the Productivity Commission has focused primarily on the consequences of HFE for the equity of State fiscal capacities and for efficiency. There is also some limited discussion of the actual service delivery outcomes (and interpersonal equity) across States.

The Commission has deliberately avoided replicating the CGC's approach or delving into the minutiae of CGC practice and method. The CGC conducts an in-depth Methodology Review every five years; the next such Review, to be released in 2020, is underway. While this results in parallel consultation processes, this inquiry and the 2020 Review are complementary and co-operative, and the Productivity Commission has drawn extensively on supporting material published by the CGC.

As such, this inquiry does not — *for the most part* — consider specific assessment methods, the use of particular data sources or data adjustments, or the treatment of individual revenue or expenditure categories. These issues are only addressed where they carry implications for



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State incentives. Where State governments have raised other concerns about these issues, it is expected that the CGC will take account of these in the course of its 2020 Review.

This inquiry has drawn extensively on past inquiries and reviews (box 1.1), limiting the need to revisit the same ground. The terms of reference, by explicitly inviting the consideration of the impacts of HFE, and whether alternative approaches may be preferable, allow this inquiry to take a broader approach to the subject.

Accordingly, chapter 7 considers whether there are in-system changes that can improve the current system of HFE, while chapter 8 explores a range of different systems used to implement HFE across OECD countries, along with possible alternative approaches to distributing GST revenue in Australia. The scope for reforming Australia's HFE system is summarised in chapter 9.

## **1.4 Conduct of the inquiry**

The terms of reference for this inquiry were received on 5 May 2017. Given time constraints and the specialised nature of the subject, the Productivity Commission did not release an issues paper, but rather published a brief guidance note to help participants prepare initial submissions. In response, the Commission received 56 submissions and 8 brief submissions. A list of the individuals and organisations that made submissions is provided in appendix A, and submissions are available on the Commission's website.

The Productivity Commission also received a large number of (essentially identical) submissions expressing individuals' concerns about the link between HFE and State policies on gas exploration (more than 5600 in total). The large volume has made it impractical to list the names of all individuals who made these submissions; however, the full text of the submission is available on the Commission's website (linked below).

The Commission visited all State and Territory governments for consultation, and also consulted with the CGC, the 2012 GST Distribution Review Panel members, several State grants commissions, a number of business groups, several past State Under-Treasurers, and a range of academics and others specialising in federalism and tax policy. The Commission also consulted with individuals who have worked on previous reviews of the HFE process. In total, 43 meetings were held with external parties in the course of putting together this draft report. Appendix A provides details.

As part of this inquiry, the Productivity Commission also commissioned a paper on *Accountability in the Australian Federation* (Gray 2017), which is available on the inquiry webpage.

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## **Further opportunities for participation**

Interested people and organisations are invited to examine and comment on this draft report by written submission to the Productivity Commission. Participants should provide evidence to support their views, including data and specific examples, where possible. Submissions should be provided to the Commission no later than 10 November 2017 for consideration in the final report.

Further information on how to provide a submission is included on the inquiry webpage at [www.pc.gov.au](http://www.pc.gov.au). Further consultations with States and Territories, public hearings, and (potentially) roundtables will be undertaken following the release of this report (details of public hearings are provided in the preliminaries to this report). The final report will be forwarded to the Australian Government by 31 January 2018 and released on the Productivity Commission's website after being tabled in the Parliament of Australia.

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## 2 What is the objective of HFE?

### Key points

- Horizontal Fiscal Equalisation (HFE) is a common feature of federations. It involves the transfer of funds across jurisdictions to offset differences in revenue raising capacities and/or the costs of supplying services and infrastructure.
- The primary rationale for HFE is fiscal equity. In practice, HFE seeks the equal fiscal treatment of jurisdictions (and not equal outcomes for individuals across States). Other rationales for HFE are efficiency and insurance against adverse economic shocks, though the relevance of these is disputed.
- The current objective of HFE in Australia — as interpreted and established by the Commonwealth Grants Commission (CGC) — seeks to equalise States' fiscal capacity to provide services and the associated infrastructure at the same standard, if each made the same effort to raise revenue.
  - In practice, this involves raising States' fiscal capacity to that of the strongest State (currently Western Australia, though previously Victoria and New South Wales).
  - HFE equalises States' fiscal capacity, providing them with autonomy regarding how, and on what, the funding is spent.
- The current objective and practice of HFE is problematic.
  - Equalising to the strongest State means that the redistribution task is considerable, and to a potentially volatile standard, at times of significant cyclical and structural change.
  - It does not substantively consider the efficiency effects of HFE.
  - It has evolved over time into a complex system.
  - Its interpretation and practice has been largely left to the CGC, with a marked absence of Commonwealth Government leadership.
- The Commonwealth Government should articulate a revised objective for HFE. While equity should remain at the heart of HFE, it should aim to provide States with the fiscal capacity to provide a reasonable level of services.
  - Equalisation should no longer be to the highest State, but instead the average or the second highest State — still providing States with a high level of fiscal capacity, but not distorted by the extreme swings of one State.
  - It should also take into account potential effects on the efficiency of the Australian economy and system transparency and accountability.

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Much of the debate regarding horizontal fiscal equalisation (HFE) in Australia stems from confusion and disagreement around its objective, exacerbated by its complexity.

Some participants commented that the objective of HFE is not within the remit of this inquiry (for example, South Australian Government, sub. 25, p. 23). But discussing the objective of HFE, or of any policy for that matter, is an inevitable and critical part of an inquiry process. Understanding what HFE is seeking to achieve is a key element of assessing the effectiveness of the system in practice, and for weighing up the merit of any alternatives.

This chapter discusses the rationale of HFE and proposes a revised objective of HFE for Australia. It outlines:

- why countries adopt systems of HFE
- how Australia's HFE system works in principle
- issues with the current objective of HFE
- a revised objective.

## **2.1 Why countries adopt systems of HFE**

Virtually all nations with multiple levels of government feature some form of equalisation transfers from central to sub-central governments, and/or between sub-central governments (Boadway 2004, p. 1). While systems vary across countries, equalisation generally refers to a system by which funds are transferred between sub-central governments in order to offset differences in their revenue raising capacity and/or costs of supplying services and infrastructure (Blöchliger et al. 2007; OECD 2013).

To some degree, HFE seeks to replicate the conditions that might occur under a unitary government. Thus in effect, it seeks to capture the benefits derived from having sub-central governments — particularly subsidiarity of decision making — along with an equality of opportunity that might be provided to all citizens under a unitary government.

Despite being a Federation of States which are nominally autonomous, there are many (and potentially growing) areas within Australian policy where it has been deemed appropriate that members of the community have similar treatment, regardless of the State in which they live. For example, Australia has had a single consumer law since 2011, national quality standards are in place for schools, individuals on the same incomes face the same tax rates, and qualifications are increasingly recognised across State borders.

Generally, fiscal equalisation redistributes between jurisdictions rather than across individuals — it is primarily concerned with disparities in access to, and the costs of, providing services and infrastructure between communities, rather than with differences in individual household income.

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The OECD has commented that disparities in the cost of public service provision, whether arising from differences in population distribution, demographics or welfare status, pose a problem for sub-central governments and require fiscal equalisation only if the sub-central entity is responsible for delivering services in the respective policy area (Blöchliger et al. 2007).

Fiscal capacity is more likely to approximate fiscal outcomes where the responsibility for funding and expenditure resides with the jurisdiction subject to fiscal equalisation, reflecting the twin forces of autonomy in delivery and accountability. This is generally not the case in Australia.

## **The equal treatment of equals**

HFE was originally advocated on the basis of both equity and efficiency (Buchanan 1950, 1952). Buchanan argued that a system of HFE should be constructed so as to allow the ‘equal treatment of equals’ between states both in terms of tax burdens and the supply of public services. In effect, Buchanan’s conception was a policy of providing states with equal capacity to supply equal standards of service when levying equal tax rates. Buchanan (1950, p. 596) argued that under such a system, ‘the resultant inequities in the treatment of “equals” would be due to state political decisions, not to the fact that citizens were resident of the state *per se*’.

The rationale of fiscal equity has generally been accepted within the HFE literature. Brennan and Pincus (2010, p. 348) remark that:

Over the intervening fifty years, there has been virtually no literature that we know of that has taken issue with Buchanan’s [argument for HFE on the basis of horizontal equity]. In that sense, there appears to be a solid consensus within the public finance profession that there is a persuasive general a priori case for fiscal equalization.

There is also an efficiency aspect to HFE. Buchanan argued that an HFE system was justified on efficiency grounds, as it would remove the incentive for a person to migrate to another jurisdiction based on that states’ capacity to provide services or infrastructure. Instead, migration decisions can be based on other factors, such as employment opportunities.

Referring to both the equity and efficiency arguments, Boadway and Shah (2009, p. 326) commented that:

... remarkably, both call for similar types of equalization ... To the extent that households are not mobile, the fiscal equity argument applies. To the extent that they are mobile, the fiscal efficiency one does.

In addition to the equity and efficiency rationales, HFE is sometimes seen as a mechanism to insure against adverse economic shocks. If a region is subject to an asymmetric shock, redistributive grants can serve as insurance against the adverse effects of such an exogenous shock on income or employment (Blöchliger et al. 2007).

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## The efficiency rationale is a contested one

The argument that HFE is justified on efficiency grounds has been questioned, both within the economic literature and in submissions to this inquiry. Indeed, there are some commentators who contend that HFE could result in negative efficiency effects.

Critics of HFE contend that:

- HFE provides perverse incentives for governments. For example, it has been suggested that HFE leads governments to adopt sub-optimal mixes and levels of taxation, deliver services and the associated infrastructure in an inefficient manner, and — over the longer term — not seek to improve the structural factors that reduce their fiscal capacity (chapter 4).
- HFE blunts migration decisions, counteracting the market incentives for individuals to move where they are most productive (chapter 6).

In its submission to this inquiry, the WA Government (sub. 15, pp. 2–3) contended that:

- States that need to increase their revenues currently have an incentive to raise their tax rates above the national average rather than to grow their underlying revenue base. ...
- There is a reduced incentive to undertake difficult microeconomic reform (such as tax reform) that requires compensation for the ‘losers’ from reform. ...
- Resource-rich States are discouraged from getting an appropriate return for minerals as increased royalty rates lead to lower GST grants ...
- There is a large disincentive to develop industry, as most of the fiscal benefits are redistributed to other States but there is no sharing of much of the costs of development. ...
- People have a reduced incentive to respond to market signals and move to areas with better job and income prospects, inhibiting structural adjustment.

There is ongoing debate about the extent to which each of these incentives are borne out in practice. For example, the ACT Government (sub. 49, p. 4) contended that:

... while there are incentives created by the current HFE system that may lead to the States and Territories (the States) avoiding policies that stimulate economic and productivity growth, they are limited in their potential impact on State finances. Further, there are many other factors in consideration when States design economic policy. Consequently, the impact of the HFE system on economic growth at the national level is likely to be minimal.

Indeed, the 2012 GST Distribution Review Panel found that while the current system may create perverse incentives in theory, there was little evidence of those incentives having any effect in the real world (Brumby, Carter and Greiner 2012a). The Productivity Commission considers the effects of HFE on State Government incentives in chapters 4 and 5, and the impact of HFE on labour and capital mobility is discussed in chapter 6.

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## 2.2 How does Australia's HFE system work?

### The principle of HFE

According to the 2011 Intergovernmental Agreement on Federal Financial Relations (IGAFFR), 'the Commonwealth will distribute GST payments among the States and Territories in accordance with the principle of horizontal fiscal equalisation' (COAG 2011, p. 7).

The CGC is charged with the task of making recommendations about the distribution of GST revenue, and has interpreted and thereby established the principle of HFE as:

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. (CGC 2015d, p. 2)

A State's 'fiscal capacity' is a measure of its ability to provide average services and infrastructure to its population if it raised revenue from its own revenue bases at average rates and received its actual Commonwealth payments (excluding the GST).

The 'material factors' referred to in the HFE principle are what the CGC has termed 'disabilities'. These are the different circumstances of a State that are outside its control, and that affect a State's capacity to raise revenue and/or that result in differences in the costs of providing services and infrastructure.

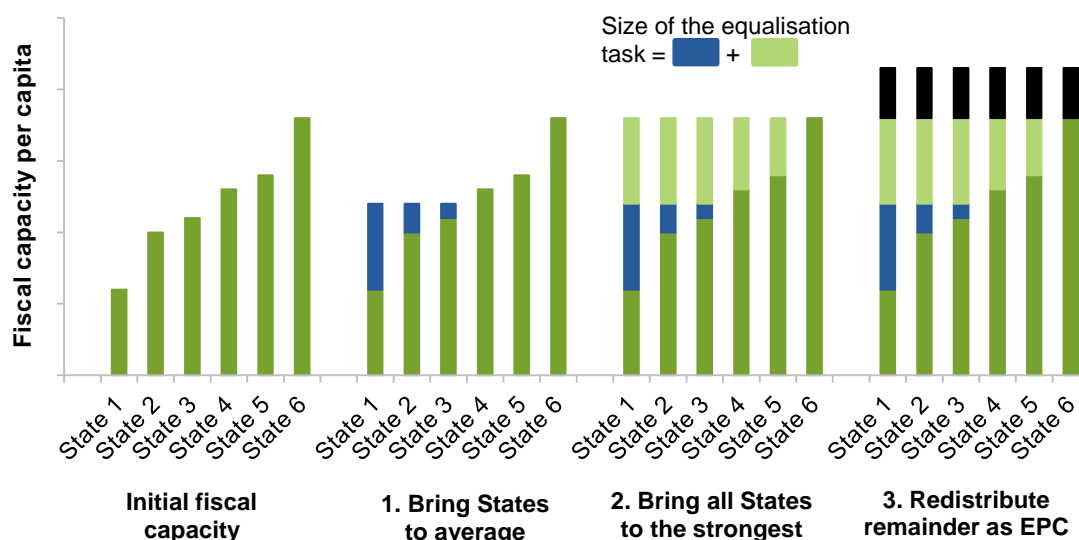
### The system in practice

The HFE system in Australia is complex and comprehensive, but can be broadly thought of as consisting of three steps (these steps are conceptually shown in figure 2.1):

1. Bring States to the average: States with relatively low fiscal capacities (most recently, the Northern Territory, Tasmania, South Australia, ACT and Queensland) are raised to the average fiscal capacity of all States.
2. Bring all States to the strongest: all States are raised to the capacity of the fiscally strongest, currently Western Australia.
3. Redistribute remainder as equal per capita (EPC): any remaining revenue from the GST pool is distributed to all states on an EPC basis (Chan and Petchey 2017, p. 5).

By its own admission, the CGC does not achieve perfect equalisation. Lags in the system, and data and method problems (dealt with through reliability and materiality criteria), mean that ultimately, the equalisation process results in comparable, rather than the same, fiscal capacities across States (Brumby, Carter and Greiner 2012a, p. 62).

Figure 2.1 Schema of the conceptual stages of the HFE process



## The supporting principles of HFE

The CGC has adopted four supporting principles to guide its methodology. These are:

- reflect what States collectively do
- policy neutrality
- practicality
- contemporaneity (CGC 2010).

### Reflect what States collectively do

This principle suggests that, as far as practically possible, assessments made by the CGC should reflect what the States do, on a collective basis. This, according to the CGC, results in the adoption of internal standards that remove the need for judgments about what States could do or should do.

This approach works well when all the States follow relatively similar policies, but can become problematic where States follow different policies. For example, the States have different approaches to regulating gambling activity — Western Australia prohibits gaming machines outside its sole casino, while in other States they are more ubiquitous. The challenges with determining the gambling revenue assessment are discussed further in chapter 4.



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## Policy neutrality

The principle of policy neutrality seeks to avoid the actual policies of a State directly affecting the GST it receives. It also seeks to avoid the GST distribution process providing the States with incentives to vary their policies. This principle is embodied in the CGC's assessment practice of assuming that each State follows the average policies in raising revenue and delivering services. The CGC has itself stated that there is some 'overlap' between this principle and the 'what States do' principle (CGC 2010, p. 36).

## Practicality

Practicality is an overarching principle directing the CGC to only consider factors where there is sufficient information and where they will actually have an effect on the GST distribution. It covers:

- simplicity — assessments should be as simple as possible whilst making sense conceptually
- reliability — methods for assessments should use reliable data, and make use of discounting where there are concerns
- materiality — factors are considered only where they have at least a minimum effect on the GST distribution (a materiality threshold)
- quality assurance — processes are in place to ensure that data and methods are robust and in accordance with the objective of HFE and its supporting principles (CGC 2017k).

## Contemporaneity

The principle of contemporaneity means that, as far as reliable data will allow, the distribution of GST provided to the States in a year should reflect State circumstances in that year. The CGC currently uses data for three historical years as the basis for its assessments, and stated that it:

... has accepted that fiscal equalisation is achieved over a run of years with a lag. While imperfect, this approach recognises that State fiscal capacity in any one year must take account of the operation of the system over a run of years. (CGC 2015d, pp. 71–72)

During the 2010 review, the CGC decided to shorten the averaging period for assessments from five years to three years, on the basis that this would better reflect current conditions. This was a decision not strongly opposed by the States at that time (CGC 2010, p. 54). The issue of contemporaneity is discussed in more detail in chapter 5.

## 2.3 Concerns with the current HFE objective

There are several positive features of the current HFE objective. In particular:

- under the CGC's interpretation, equity is at the heart of the system of GST redistribution

- 
- the process is guided by some recognition of efficiency considerations, particularly through the principle of policy neutrality
  - the focus on fiscal capacity provides the States with autonomy, and enables them to provide services that reflect the specific preferences of their communities (Queensland Government, sub. 32, p. 14).

However, there are four primary shortcomings of the current HFE objective.

## States are equalised to the fiscally strongest

The current HFE principle notes that equalisation should provide States with the fiscal capacity to provide services and infrastructure at the *same standard*, if each made the same effort to raise revenue and operate at the same level of efficiency. As noted above, the practical implication of this is that equalisation is to the fiscally strongest State (in recent years this has been Western Australia, though Victoria and New South Wales have been the strongest State at other points in time), an approach that is considered to be ‘full equalisation’. (Chapter 3 further discusses the evolution of the equalisation process in Australia.)

This is an unusual approach compared to HFE systems in other countries. Australia is the only federation that interprets horizontal fiscal equalisation as the ‘full equalisation’ of both revenue raising capacity and expenditure needs. Other HFE systems around the world have a goal of less than 100 per cent elimination of fiscal disparity among sub-central governments, though they still maintain an equity objective (see further discussion in chapter 8). This is borne out by OECD data that show the degree of equalisation achieved by other OECD nations (table 3.5 in chapter 3).

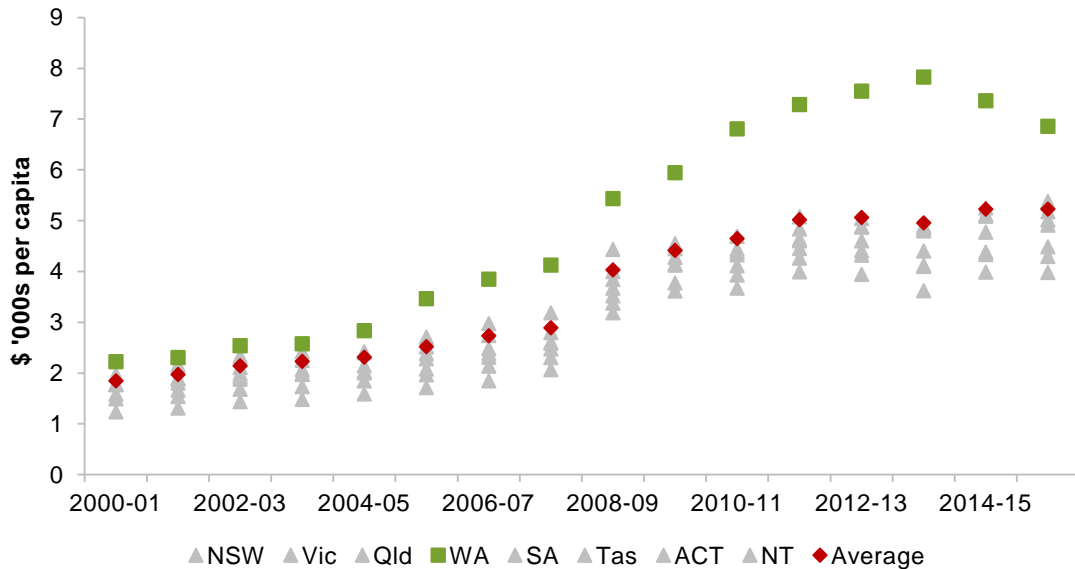
Since the mining boom, Western Australia’s fiscal capacity has been significantly higher than that of the other States, largely due to the contribution of mining royalties to its assessed revenue (figure 2.2, panel a). By contrast, the capacity of the other States to raise revenue relative to each other has remained fairly constant over that time (figure 2.2, panel b).

In years where there is a State with a significantly stronger fiscal capacity compared to other States, the redistribution task becomes a much larger proportion of the GST revenue pool (chapter 3). Participants have raised concerns that equalising to the strongest State — particularly when the strongest State is *so much* stronger — is taking the principle of HFE too far. In particular, the Chamber of Commerce and Industry of Western Australia (CCIWA) noted that:

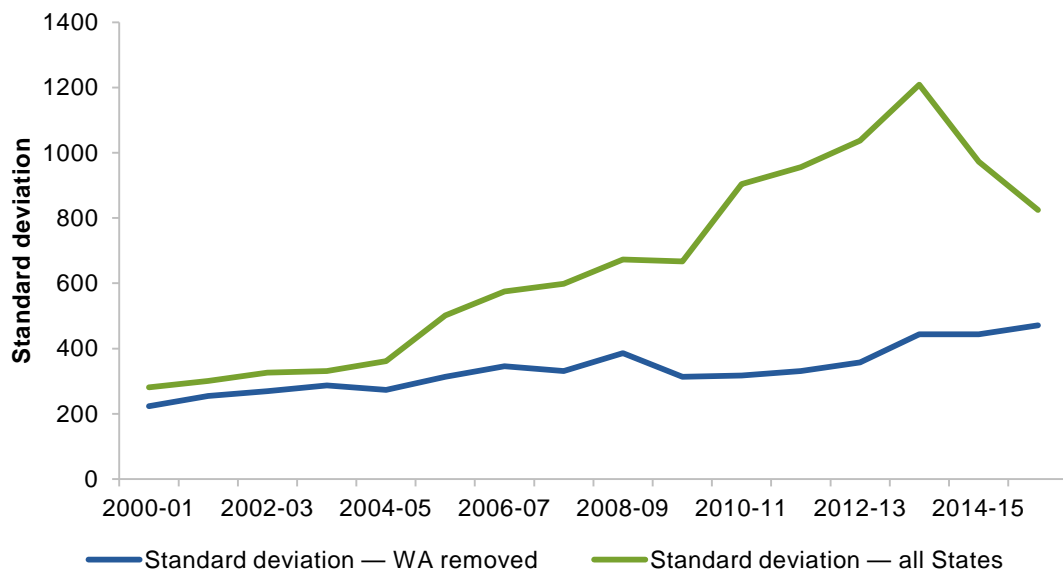
While HFE and full equalisation are intended to promote equality and prosperity across the nation, their application has extended far beyond the original intent, with vastly greater redistribution occurring than was originally envisaged. A more optimal outcome can be achieved by equalising less and incentivising growth more. (sub. 11, p. 2)

Figure 2.2 **WA is an outlier due to its assessed revenue<sup>a</sup>**

a. The distribution of assessed revenue



b. The standard deviation of assessed revenue per capita<sup>b</sup>



<sup>a</sup> Assessed revenue is the revenue a State would raise if it were to apply the average policies to its revenue base, and raised revenue at the average level of efficiency. It excludes differences from the average due to policy choices under the control of that State, for example, a higher or lower tax rate applied by a State compared to the average. <sup>b</sup> The standard deviation shows the amount of variation in a set of data values. A lower standard deviation indicates that the fiscal capacity of the States are closer to the average fiscal capacity.

Source: Commission calculations, CGC Relativity Update reports 2002-03 to 2016-17.

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Taking the concept of HFE as replicating a unitary government, it is unlikely that any unitary government would raise and lower the level of services it provided based on revenue fluctuations in only one part of the country. Instead, it would likely provide a level of services to all residents that remained relatively consistent from one year to the next, and which may likely be closer to the average across the nation. Yet equalising to Western Australia has meant equalising to a benchmark that is relatively volatile.

## **Limited consideration of efficiency**

While efficiency is partially considered by way of the supporting principle of policy neutrality, it is secondary in the CGC's consideration and thus takes a back seat to equity. Where the CGC's principles run counter to the equalisation objective, they effectively cease to apply. As the CGC noted in its 2015 methodology review:

... the principles remain subsidiary to the Commission's primary objective of achieving HFE and they should not override that objective. We do not agree with the view of some States that these principles should take precedence over HFE. We use them as guidance in how HFE should best be achieved in practice. (CGC 2015d, p. 29)

Chapters 4, 5 and 6 of this report consider the extent to which the current HFE system has an efficiency effect.

## **There is an absence of leadership on the HFE objective**

Since the late 1970s, when all States were brought into the HFE system (chapter 3), the objective of HFE has largely evolved through CGC processes, with the Commonwealth Government providing only implicit approval through the yearly update and five-yearly methodology review terms of reference (box 2.1). Indeed, the *Commonwealth Grants Commission Act 1973* (Cwlth) provides little guidance on the objective of HFE, as it has not been updated to keep pace with what the CGC does in practice. It defines special assistance to the States as: '... the grant of financial assistance to a State for the purpose of making it possible for the State, by reasonable effort, to function at a standard not appreciably below the standards of other States' (s. 5(1)). Yet, the current approach of the CGC is to equalise to materially the same standard.

Typically, Commonwealth Governments have distanced themselves from the HFE system, on the basis that the CGC is charged with making decisions on the GST distribution. For a program involving significant funding (the distribution of around \$60 billion of Commonwealth GST revenue to the States), with material implications for most State budgets, the Commonwealth Government has provided little guidance in both setting the objective of HFE, and in communicating its purpose and workings to the broader community. As noted by Williams (sub. 2, p. 1):

It is no longer clear what purpose is served by this scheme. It has been in existence a very long time, and has been the subject of extensive commentary, but very few people understand its

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operation or why [it] is in place. This serves to undermine public confidence in the scheme, as well as its effectiveness.

Broader governance issues are discussed further in chapter 9.

### **Box 2.1      The evolution of the objective of HFE**

The Commonwealth Grants Commission's (CGC) first task on creation in 1933 was to devise consistent principles for the special grants paid to the financially weaker (or claimant) States. It initially considered that special grants should enable the claimant States 'with reasonable effort, to put their finances in about as good order as that of the other States' but they were not aimed at equalising incomes or living standards of individuals in the States. This was further refined for the 1936 Report such that special grants '... make it possible for that State by reasonable effort to function at a standard not appreciably below that of other States'.

In 1973, a 'grant of special assistance' was defined in legislation — the *Commonwealth Grants Commission Act 1973* (Cwlth) — as one made 'for the purpose of making it possible for a State, by reasonable effort, to function at a standard not appreciably below the standards of other States'. This has remained unchanged in the CGC Act, despite the practices of the CGC evolving.

With the change to Commonwealth-State financial arrangements in the late 1970s, the CGC began to assess the financial capacities of all States. For the Review following these changes in 1981, State shares were to be based on equalisation principles defined in the *States (Personal Income Tax Sharing) Amendment Act 1978*, which is no longer in force:

- (i) ... payments ... should enable each State to provide, without imposing taxes and charges at levels appreciably different from the levels of the taxes and charges imposed by other States, government services at standards not appreciably different from the standards of government services provided by the other States;
- (ii) taking account of: differences in the capacities of the States to raise revenues; and differences in the amounts required to be expended by the States in providing comparable government services.

Similar definitions were adopted in subsequent CGC Reviews in 1982, 1985, 1988 and 1993. However in the course of the 1993 Review, there were calls for greater precision in the aims of equalisation. The 1999 terms of reference subsequently outlined equalisation to involve grants that:

... should enable each State to provide the average standard of State-type public services assuming it does so at an average level of operational efficiency and makes the average effort to raise revenue from its own sources.

However this was subsequently rephrased in the 1999 Review (and applied in the 2004 Review):

State governments should receive funding from the Commonwealth such that, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency, each would have the capacity to provide services at the same standard.

The principle was again modified in the 2010 Review (and was unchanged in the 2015 Review) to the principle still in place today (see above).

The CGC is currently consulting on the definition that it will take to the 2020 Methodology Review.

Source: CGC (2009, 2016b), *Commonwealth Grants Commission Act 1973* (Cwlth), s. 5(1).

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## It leads to a highly complex system

Finally, the pursuit of comprehensive assessments of own-source revenue and assessed costs of providing similar services has led to the development of a very complex system. For example, the 2015 Methodology Review was made up of more than 800 pages of reports, 57 worksheets containing supporting data, and a range of supporting and discussion papers on which the States provide feedback to the CGC. Many participants to the inquiry expressed concern with the complexity of the system (box 3.3), suggesting it leads to inconsistencies, unpredictable budget outcomes and barriers to accountability (for example, WA Government, sub. 15; the Association of Mining and Exploration Companies, sub. 23; Business Council of Australia, sub. 47).

It also conveys a false sense of precision — an issue that was picked up in the 2012 GST Distribution Review (Brumby, Carter and Greiner 2012a, p. 43). Despite the recommendations of that Review, State relativities are still reported to five decimal places, even though the relativities are in many cases dependent upon the judgment and assumptions made by the CGC. Complexity is discussed further in chapter 3.

## 2.4 A revised objective

### The focus remains on equity

In the Productivity Commission's view, horizontal fiscal equity should remain the core objective of HFE.<sup>2</sup> This is a view shared by most participants in the inquiry (box 2.2).

What this means in practice is more contested, and inquiry participants expressed a range of views around equity and fairness (box 2.3). In particular, several participants to the inquiry have expressed the view that Western Australia's allocation is not 'fair' (Put Western Australia First, sub. 12; WA Government, sub. 15; Parliamentary Liberal Party of WA, sub. 22).

These concerns are not invalid, as the concepts of fairness and equity can have several interpretations. For example, participants have interpreted 'fairness' to mean that:

- every State should be treated the *same* — entailing funding being distributed equally per person, regardless of their personal circumstances
- every State should receive the funding it *deserves* — based on the amount of GST that is 'raised' in that State
- every State should be treated on the basis of *need* — those States that are fiscally stronger should assist those that are less able.

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<sup>2</sup> Equity is often referred to as fairness of the distribution of society's resources and opportunities among its people, and a distinction can be made between 'vertical' and 'horizontal' equity. Vertical equity refers to the fairness of the treatment of people in different circumstances, such as different income brackets. Horizontal equity refers to the fairness of the treatment of people in similar circumstances.

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## Box 2.2      **State Government views on the objective of HFE**

WA Government (sub. 15, p. 10):

Western Australia does not consider this principle to be a concern in itself and supports a system where financial assistance is available to states with (through no fault of their own) weaker fiscal capacities, so that they can provide an acceptable standard of service to their communities. However, the way in which HFE is implemented in Australia generates disincentives to undertake fiscal reforms and develop state economies.

SA Government (sub. 25, p. 1):

South Australia strongly supports the current objective of Australia's system of HFE which is to provide states and territories with the capacity to provide services and the associated infrastructure at the same standard – or in other words, full equalisation.

Tasmanian Government (sub. 28, p. 33):

Tasmania is strongly of the view that the current objective of HFE best meets community expectations that, as a nation, Australians believe that promoting equality between jurisdictions in terms of the level of services State and Territory governments are able to provide is the primary consideration and is what HFE should achieve.

Queensland Government (sub. 32, p. 3):

The PC should consider the question of how precisely one should seek to equalise — and whether equalising to a 'similar' standard rather than the 'same' is a more useful way of viewing the system.

ACT Government (sub. 49, pp. 20–21):

Moreover, we contend that equity should be the sole objective of HFE and not qualified or diminished by the inclusion of other, secondary objectives. That does not mean that potential adverse impacts of equalisation on other desirable outcomes, such as economic efficiency, should not be considered.

If equivalent equity outcomes can be obtained with either reduced economic loss or increased economic gain, then the design of the HFE system should be altered accordingly.

The NT Government (sub. 51, p. 30):

- ... Equalising the fiscal capacities of states so they have the capacity to deliver the national average level of services is, and should remain, the sole objective of HFE.
- The erosion of equity in favour of efficiency as an objective of equalisation would result in an increase in inequity between states and regions in Australia, and would likely require sustained additional Commonwealth funding ...

NSW Government (sub. 52, p. 2):

A new well designed and carefully targeted system of HFE must be consistent with the following principles:

- Fairness — the distribution of GST revenue should be fair in the eyes of Australians. The system should provide sufficient revenue for states to provide minimum levels of selected critical services ... No single state should bear an unreasonable burden that would detract from their responsibilities towards their own constituents.
- Efficiency — the distribution of GST should not create disincentives for economic adjustment and reform relating to expenditures or taxes.

Victorian Government (sub. 53, p. ii):

Victoria fully supports the principles of equity and policy neutrality at the heart of the system. These operate to ensure that all Australians, regardless of state borders, have the capacity to access an equitable level of services, while allowing sovereign state governments the freedom to pursue their own policy agendas and be accountable to their constituents.

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### Box 2.3      **Comments from participants on equity and fairness**

Pitman (sub. 5, p. 1):

Even Blind Freddy cannot deny that the CGC has outlived its usefulness in distributing GST funds equitably within Australia. All they have achieved is a distorted system of political/financial gerrymander where some States reap the hard earned rewards of another, not for short term either. 'Robbing Peter to pay Paul' was never envisaged as a long term GST policy.

Western Australian Government (sub. 15, p. 80):

To the extent that HFE does improve equity, that equity may be outweighed by its deleterious impact on future economic growth — which is unfair on both current and future generations.

Queensland Government (sub. 32, p. 3):

The equity that underlies this principle is fundamental, and its importance should not be underestimated. While the Productivity Commission (PC) has been asked to look at potential economic costs, particularly in terms of policy disincentives, it should not ignore the high value Australian society places on the concepts of equality of opportunity and the safety net.

Australian Chamber of Commerce and Industry (sub. 40, p. 2):

At the heart of [the suggestions of some commentators] is the concern or dissatisfaction that some States have with their share of GST revenue, with some stating that it is no longer 'fair'. ... What is regarded as 'fair' for one party may not necessarily be regarded as fair for another. Particularly as the process of distributing GST revenues is a zero sum game.

Western Australian Local Government Association (WALGA) (sub. 46, p. 7):

While the Local Government sector is committed to fairness and equality across the Federation, WALGA considers that there are a number of features of the current methodology for HFE that are contributing to poorer outcomes for the economy and the community.

Ultimately, determining whether one situation is more fair than another requires a value judgment about the basis for deciding what is actually fair. Perceptions about what is equitable or fair vary across different sections of society, between societies and over time. Indeed, in the case of HFE, the States' perceptions of fairness have also changed over time. Further, as illustrated in box 2.4, these concepts, and the relationships between them, are not straightforward.

That said, the Commission is of the view that there are strong grounds for HFE to seek equity in the fiscal capacities of the States (whether there is equity across service provision outcomes for *individuals* is a matter for each State in the case of HFE). This will inevitably involve some redistribution from fiscally stronger States to increase the fiscal capacity of the fiscally weaker States.

It is not unusual for funding allocations to be based on need. For example, certain other Commonwealth payments to the States — schools and health funding — recognise that the needs of different population groups can differ significantly, and that the amount of funding required per person to deliver an equivalent outcome will vary.

There are also broader equity implications. Access to high quality services such as childcare and education, or access to health care or housing, can dampen other forms of inequality,



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such as those stemming from differences in incomes. Moreover, it can foster upward mobility and create greater equality of opportunity in the long run (OECD 2015).

#### **Box 2.4 Fairness and equal opportunity**

Concerns that Western Australia's GST allocation is unfair are not invalid. A perception of fairness is something that can have significant value for people's wellbeing. Indeed, many Australians feel happier knowing that they are living in a just and fair society (Argy 2006, p. 57).

As noted by Argy (2006, p. 77), Australians firmly and overwhelmingly believe that all citizens should have an equal opportunity to develop their capacities to the full — the idea of a 'fair go'. People place a value on living in a society where there is not considerable inequality, and where there is equal access of opportunity to services. People also have a preference to avoid things that are a potential consequence of inequality, such as crime, obesity, teenage pregnancy and greater distrust (Starmans, Sheskin and Bloom 2017, p. 5).

However Australians also support self-reliance and individual responsibility, part of the idea that people should 'have a go' (Argy 2006, p. 77). Recent analysis from the US found that humans naturally favour 'fair distributions' (which take into account people's characteristics such as variations in effort, ability and moral deservingness), rather than equal ones, and that when fairness and equality clash, people prefer fair inequality over unfair equality (Starmans, Sheskin and Bloom 2017, p. 1).

As noted by the OECD there is little social consensus around the desirability of tackling inequality of *outcomes*, for example by redistributing wealth. However, there is greater agreement around the necessity of ensuring equality of *opportunities* — that all should have the same life chances, regardless of their initial conditions. In reality, few societies come close to ensuring such equality of opportunities (OECD 2015, p. 27).

### **But there is a case for less than full equalisation**

While equity should remain the primary focus, it may be preferable to less fully equalise the fiscal capacity of States. Recognising that the system already results in a *comparable* standard, it may be more suitable to equalise States' fiscal capacity such that they can provide services and infrastructure of a *reasonable* standard.<sup>3</sup>

This approach would provide greater flexibility compared to the current approach. It would allow for:

- consideration of broader objectives, specifically the efficiency implications of the system of HFE, as well as the risks associated with complexity and poor data
- recognition of States' different circumstances, and particularly whether the strongest State provides an optimal benchmark.

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<sup>3</sup> The 2012 GST Distribution Review was unable to reach a consensus on whether the wording of the principle of HFE should be changed to 'comparable' or remain the same (Brumby, Carter and Greiner 2012a, p. 62).

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## Broader objectives

While equity remains the focus, pursuit of equity may not be desirable should it result in broader costs to the economy — costs which ultimately impact on community wellbeing.

In particular, an optimal HFE system should seek to ensure it does not unduly impact upon economic efficiency with regards to:

- State incentives, and the choices that States make regarding their tax mix, delivery of services and infrastructure and longer term economic reforms
- the efficient movement of people and capital.

Whether an HFE system impacts these considerations is likely to be challenging to assess in practice. For example, it may be difficult to disentangle whether someone moves interstate due to changing employment opportunities, personal reasons, or relative amenity and services. Further, while many critics have alleged that HFE impacts State incentives, it is difficult to point to evidence of this occurring in practice. These questions are further explored in chapters 4, 5 and 6.

In addition, strong processes are important for any HFE system. Transparency and simplicity can create confidence and buy-in for the system, and have important implications for both the integrity of the system and the ability of the States to manage their budgets over the longer term. The output of any HFE system should also be replicable. Thus the HFE system should encompass:

- *accountability* — the CGC must be able to clearly and defensibly explain how it arrived at its results
- *simplicity* — assessments should be sufficiently simple to allow the States to predict, to a reasonable degree of accuracy, the revenues they will receive
- *process stability* — while adjustments are necessary over time, the process for forming assessments should not be so variable year-on-year as to make prediction challenging.

While these broader objectives are important, if there is no clear reason to suppose that pursuing the headline objective (equity) comes at a cost to efficiency and transparency, then equity should be pursued to the greatest extent practical.

## Changing the equalisation benchmark

As noted earlier, the current objective arguably goes too far in pursuit of equalisation. There may feasibly be occasions where the Government would not necessarily aim to fully equalise States' fiscal capacities, such as where the fiscally strongest State is experiencing a volatile change in fiscal capacity or where a State is bearing the majority of the redistribution task.

On such occasions, the Commonwealth Government could elect to equalise to some other benchmark, below the fiscal capacity of the strongest State. This benchmark should still

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provide fiscally weaker States with the capacity to provide, at a minimum, a better than average level of services. It should also allow for relatively smooth year-on-year changes, notwithstanding that there can be volatility in the GST revenue collected. This approach would be more consistent with the idea of HFE replicating a unitary government.

Possible options for this benchmark could include equalising to the average of all States, the second strongest State, or some other point between the average and the strongest State, such as the average of the stronger States.

Equalising States' fiscal capacity to a level less than that of the strongest State still retains the primary focus of HFE on equity of fiscal capacity to provide services and infrastructure — as is the case in other countries that pursue less than full equalisation. As such, while the extent of redistribution may be smaller than under the current system, fiscally weaker States would continue to have the capacity to provide services and the associated infrastructure to at least a reasonable standard.

Indeed, it may be that at times — when State circumstances are relatively similar — the 'reasonable' standard would in fact be very similar to the current, 'same' standard adopted by the CGC.

Determining the benchmark to which States are equalised is ultimately a matter for Governments. Given there is the potential for this benchmark to vary depending upon States' circumstances, it should be specified in the terms of reference provided to the CGC ahead of the yearly relativity update.

## **Clearly articulating the objective of HFE**

Some of the disagreement and confusion around HFE appears to stem from the absence of an agreed and well-articulated policy objective *by governments*. Clear specification of objectives (and sub-objectives) by governments is particularly important for policy issues where there are trade-offs. As well as providing guidance to the CGC, it would help condition the expectations and beliefs of the broader population. Further, a clear objective is essential for assessing the effectiveness of the system, now, and for assessing the merits of any future changes. This is a view that was shared by the 2012 GST Distribution Review Panel (Brumby, Carter and Greiner 2012a, p. 65):

First, it is generally regarded as good governance to have a degree of separation between policy development and implementation, so that one does not dominate or subsume the other. Secondly, it is difficult for the public to have confidence in a system where the goal has not been explicitly endorsed by government. It is therefore important for the Commonwealth to be clear about what HFE is supposed to achieve.

The Commonwealth Government should take on a greater leadership role in specifying the objective, and indeed, altering that objective over time as necessary. However, this should also be done through consultation with the States. As noted more generally by Gray (2017), accountability across governments can be enhanced where arrangements can be agreed in a collegiate manner and create an environment of mutual accountability.

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One mechanism for this process could be through a Council of Australian Governments (COAG) process, led by the Commonwealth and drawing upon the input of the States. In particular, the Council on Federal Financial Relations — the COAG council that oversees the financial relationship between the Commonwealth and the States, including the IGAFRR — would be the appropriate body through which to consult with the States. This body could also provide input to the Treasurer on the appropriate benchmark to which States should be equalised.

Following this process, the IGAFRR should be amended to reflect the objective of HFE, providing greater certainty and clarity for the States. The CGC Act should also be updated, and the objective should be reflected in the terms of reference which the Commonwealth Treasurer issues to the CGC ahead of its yearly update and five-yearly methodology review.

#### DRAFT FINDING 2.1

While it has a number of strengths, there are also several deficiencies with the objective of Australia's horizontal fiscal equalisation (HFE) system. In particular, equalisation is always to the fiscally strongest State; it provides for limited consideration of efficiency; and it results in a complex system.

The primary objective of the system may be better refocused to provide the States with the fiscal capacity to allow them to supply services and the associated infrastructure of a reasonable standard.

This objective should be pursued to the greatest extent possible, provided that:

- it does not unduly influence the States' own policies and choices beyond providing them with fiscal capacity
- it does not unduly hinder efficient movement of capital and people between States
- the process for determining the distribution of funds is transparent and based on reliable evidence.

#### DRAFT RECOMMENDATION 2.1

The Commonwealth Government should clearly articulate the objective of HFE. This objective should aim for reasonable rather than full equalisation (as envisaged in draft finding 2.1).

The objective should be established through a process led by the Commonwealth and involving consultation with the States, and should be reflected in the Intergovernmental Agreement on Federal Financial Relations.

The objective should also be reflected in the terms of reference which the Commonwealth Government issues for the yearly update and five-yearly methodology review. The *Commonwealth Grants Commission Act 1973* (Cwlth) should also be updated to reflect the adopted objective.

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## 3 How does HFE work in Australia?

### Key points

- Since Federation the fiscal power of the Commonwealth relative to the States has increased. Key developments marking this shift were: the introduction by the Commonwealth of uniform income taxation, and the High Court's disallowance of State indirect taxes on the production and distribution of goods.
- The Commonwealth Grants Commission (CGC) plays a prominent role in Australia's system of horizontal fiscal equalisation.
  - It was established in 1933 following numerous ad hoc measures to provide assistance to financially weaker States and the threat of Western Australia's secession.
  - Up until 1981, its role in horizontal fiscal equalisation was to recommend special grants to those States making claims for financial assistance — that is, 'recipient' States only.
  - Since 1981, it has made recommendations on the distribution of a pool of Commonwealth income tax revenue to all States, marking the beginning of full equalisation in Australia.
- Since 2000, GST payments (plus Health Care Grants until 2009-10) has comprised the pool of funds used to directly achieve HFE in Australia.
  - As such, the Commonwealth no longer plays a direct role in determining the amount of revenue to be distributed amongst the States for the purposes of HFE.
  - Most of the pool is effectively distributed on an equal per capita basis, with only about 13 per cent representing redistribution to achieve equalisation.
  - The pool has increased (in real terms) from approximately \$25 billion in 1981-82 to \$36 billion in 2000-01 (GST only), and estimated to be over \$62 billion in 2017-18.
- The definition of equalisation adopted by the CGC has evolved over time, as have its methods. Many of these changes have been driven primarily by the CGC, in consultation with the States.
- Australia's system of HFE aims to comprehensively and fully equalise fiscal capacities across the States.
  - It does not equalise aspects such as living standards across States, regions, communities, or individuals — that is, it does not focus on outcomes.
  - Data and conceptual considerations mean that in practice, equalisation is approximate, rather than perfect.
  - The CGC's methodology and processes for determining the distribution of GST payments amongst the States is technical and complex.
- A combination of structural and cyclical factors influence the distribution of GST payments among the States.
  - The key factors that currently lead to redistribution among the States are mining production, population growth, Indigeneity, remoteness and property sales.
- Australia achieves a higher degree of fiscal equalisation compared with other federations.

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This chapter traces the evolution of Australia's system of HFE. This includes revenue sharing arrangements and special grants in the decades immediately following Federation, to the current system in which the CGC makes recommendations on the GST payments to be distributed to the States (figure 3.1). The chapter also outlines how the current HFE system works, its place within the broader framework of Commonwealth-State financial relations and assesses the extent to which it succeeds in its aim of equalisation.

## **3.1 The evolution of HFE in Australia**

Upon federating, the six Colonies of Australia ceded the right to impose and collect customs and excise duties (the dominant source of public revenue at the time) in favour of the Commonwealth. Granting the Commonwealth exclusive rights to impose customs and excise duties however, resulted in vertical fiscal imbalance (VFI) in which there was a surplus of revenue over expenditure at the Commonwealth level, and vice-versa at the State level. This necessitated a system for managing Commonwealth-State financial relations.

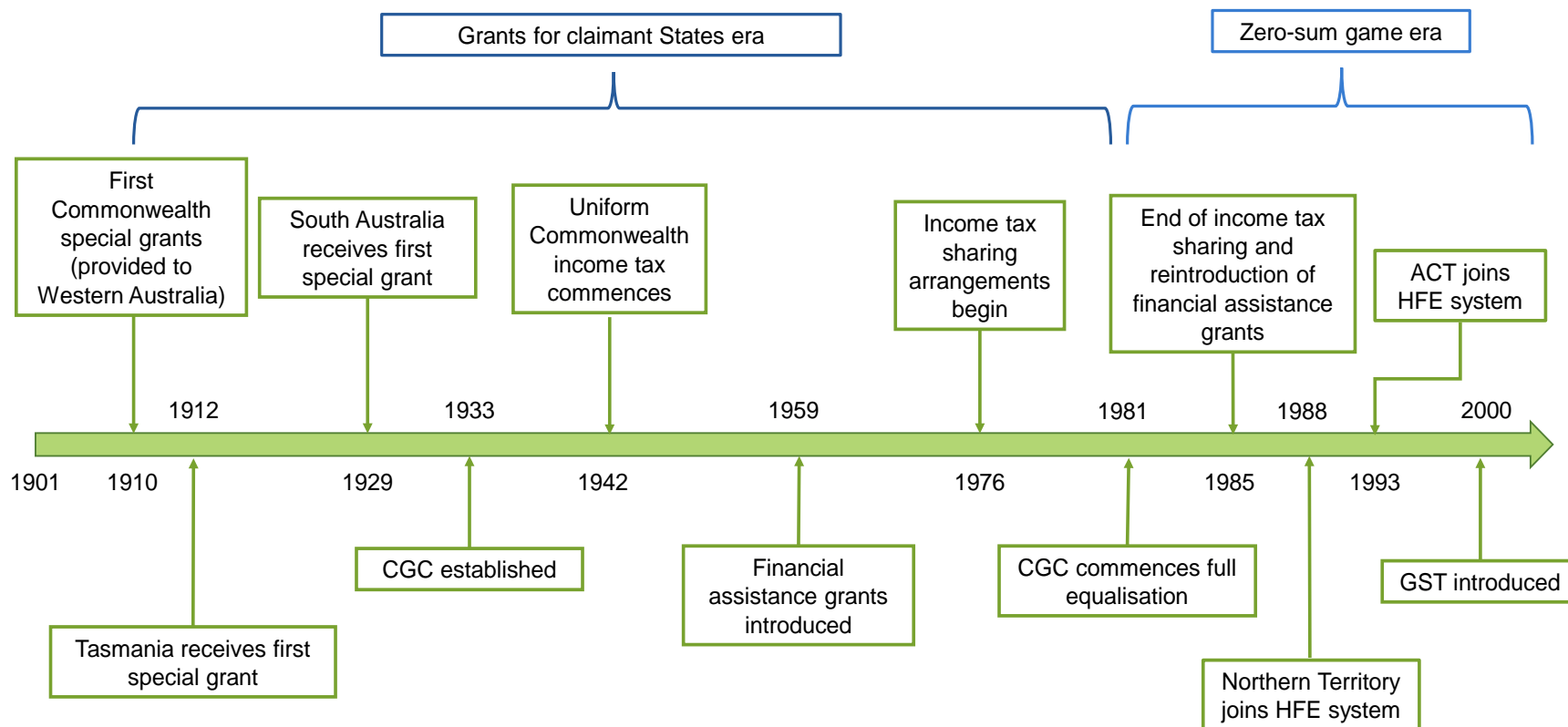
### **Early fiscal arrangements**

In the early decades of Federation, Australia had no formally established framework for pursuing fiscal equalisation between the Commonwealth and the States (vertical), and across the States (horizontal). While State economic development differed markedly at Federation, there was an expectation among those who framed the Constitution that economic conditions would converge towards conditions in the wealthier States (although some acknowledged that there was little evidence to support such an assumption). There was also a belief that the development of revenue bases would be concentrated at the State level (Gray 2017, pp. 4-5).

Various ad hoc schemes for sharing revenue were adopted during this time. Until 1910, at least three-quarters of customs and excise revenue was returned to the States, as required by the Constitution. This was replaced by equal per capita (EPC) grants in 1910, which was in turn replaced by arrangements for the Commonwealth takeover of State debts in 1927. In addition to general revenue sharing arrangements, special grants were made to the financially weaker States — Western Australia received its first special grant in 1910, followed by Tasmania from 1912 and South Australia from 1929 (Williams 2012).

On the taxation side, the Commonwealth had begun encroaching on areas of taxation that had previously been the sole domain of the States. In 1910, the Commonwealth imposed a progressive federal land tax to discourage the acquisition of multiple parcels of land by landholders (Aroney et al. 2015).

Figure 3.1 Evolution of HFE in Australia



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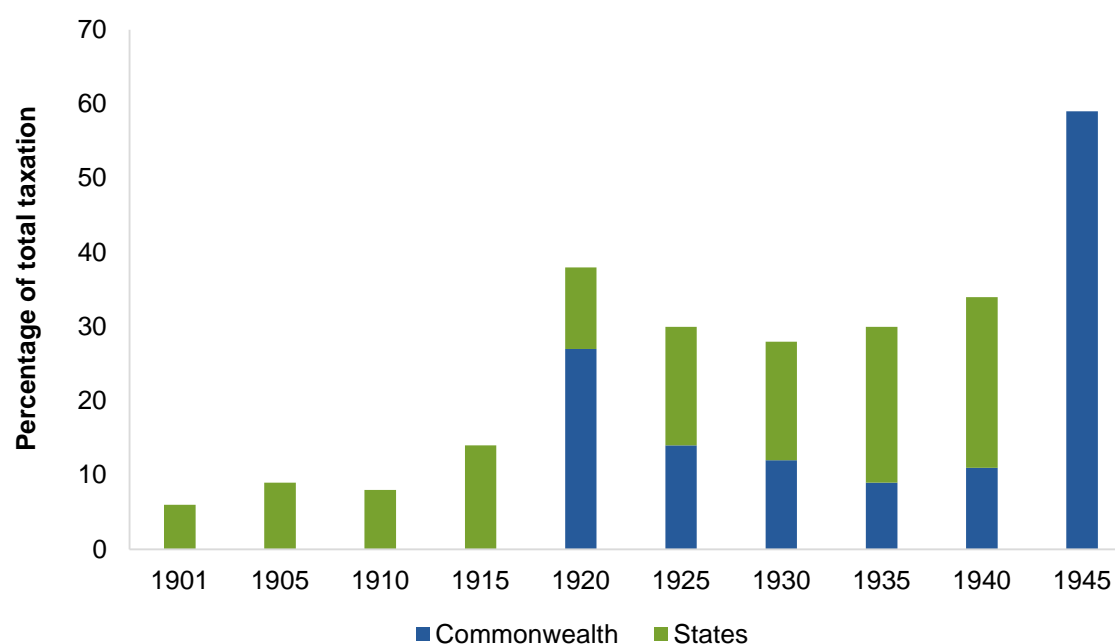
The onset of the First World War prompted the Commonwealth to search for new sources of revenue to finance its war expenses. In 1914, estate duties were introduced, levied on the net value of the estates of deceased persons. This was another area of taxation that had previously only been collected by the States (Reinhardt and Steel 2006).

In 1915, the Commonwealth introduced its own income tax. This tax was progressive, levied at rates that ranged from 3 per cent to 25 per cent, although a relatively high threshold exempted most wage and salary earners. Individuals in the top income quintile accounted for the majority of income tax paid to the Commonwealth (Reinhardt and Steel 2006).

By the end of the First World War, the Commonwealth was collecting almost three times as much taxation as the States collectively. Despite the highly progressive nature of the tax, the Commonwealth collected almost twice as much income tax revenue as the States (James 2001, p. 6). The Commonwealth began to reduce its taxation of incomes from 1922, at the same time State income tax revenues began to expand (figure 3.2), enabling the latter to finance new social spending.

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**Figure 3.2     Income tax share of taxation, 1901–45**



Source: Smith (2015), derived from Barnard (1985).

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With the onset of the Great Depression, Western Australia and Tasmania made more frequent claims for special assistance, and the arbitrary nature of the special grants process became a larger political issue. This culminated in a successful referendum in Western Australia in 1933, in which approximately two-thirds of citizens voted for secession (Foley 2013).



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Anti-federal feeling amongst the financially weaker States was also exacerbated by the offer of the Commonwealth to provide assistance to South Australia in return for part of the State's railway system, and to Western Australia in exchange for the transfer of a northwest portion of the State to the Commonwealth (Gray 2017).

## Efforts towards formal equalisation

The ad hoc nature of financial assistance provided by the Commonwealth and ongoing unhappiness with the outcomes of Federation amongst Western Australia, Tasmania and South Australia created pressure for the development of a more formal and lasting solution. Consequently, the independent CGC was established in 1933, with the objective of inquiring into applications for financial assistance to the States and making recommendations to the Commonwealth on the level of grants to be paid (CGC, sub. 1).

The CGC handed down its first report in the same year as its formation, and in determining grants, essentially followed a principle of financial need, calculating grants such that claimant States would be able '*with reasonable effort* [emphasis added], to put their finances in about as good a position as that of the other States' (CGC 1995, p. 30). Grants were not intended however, to equalise the incomes or living standards of individuals in the States (CGC 2009, p. 31).

The CGC's approach to determining assistance was made clearer in its second and third reports (1935 and 1936 respectively). The second report argued that the only rationale for assistance was the inability of a State to carry on without it, while the third report stated that:

Special grants are justified when a State through financial stress from any cause is unable to efficiently discharge its functions as a member of the federation and should be determined by the amount of help found necessary to make it possible for that State by reasonable effort to function at a standard not appreciably below that of other States. (CGC 2016b, p. 6)

The CGC's second report also introduced the concept of a penalty for claimancy, reflecting the notion that claimant States would have to make a greater effort to raise revenue if they wished to be raised to financial equality with the 'standard' States, or achieve economies in the range and standard of government services. It also acted as a disincentive for making claims. The penalty for claimancy was expressed as a percentage of a State's social services expenditure, and persisted until 1945. During this time, penalties were also imposed for 'past mistakes' arising from what were deemed to be poor policy choices. These penalties were expressed as a percentage of State taxation. Both types of penalties were suspended in 1945, at the behest of claimant States, and were not revived (CGC 1995).

Meanwhile, although the Commonwealth had begun to encroach on areas of taxation that had previously been the sole domain of the States from 1910, a major turning point in Commonwealth-State financial relations occurred in 1942, when the Commonwealth assumed sole responsibility for collecting income tax. Although initially instituted as a

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wartime measure, the Commonwealth continued to be the sole collector of income tax indefinitely after the conclusion of the Second World War (Twomey 2014).

## Postwar taxation and spending arrangements

The introduction of uniform federal income taxation and the abolition of State income tax led to an increase in VFI. Measured by Commonwealth transfers as a share of State revenue, VFI increased from less than 15 per cent in 1938-39 to approximately 55 per cent by 1948-49 (and reached a peak of over 60 per cent in 1958-59) (Koutsogeorgopoulou and Tuske 2015). To address VFI, the Commonwealth paid tax reimbursement grants to all States, until these were replaced by financial assistance grants in 1959. During this era, the significance of horizontal equalisation achieved by way of special grants gradually declined, to a large extent because general revenue grants provided by the Commonwealth included significant elements of HFE (Williams 2012).

After 1959, South Australia withdrew from claimancy, leaving Western Australia and Tasmania as the only claimant States. In 1968, after reaching an agreement with the Commonwealth on increasing its financial assistance grants, Western Australia also withdrew from claimancy (CGC 1995, p. 68).

After the 1970 renegotiation of the financial assistance grants scheme, Queensland, South Australia and Tasmania all became free to apply for special grants, a right they chose to exercise. After receiving increases in their financial assistance grants, Tasmania and South Australia again withdrew from claimancy in 1974 and 1975 respectively, leaving Queensland as the only claimant State (which it remained until 1982) (CGC 1995) (figure 3.3). As Williams (2012) observed, the CGC had, by this stage, ‘become a relatively minor player in the allocation of general revenue grants to the States’ (p. 152) (table 3.1).

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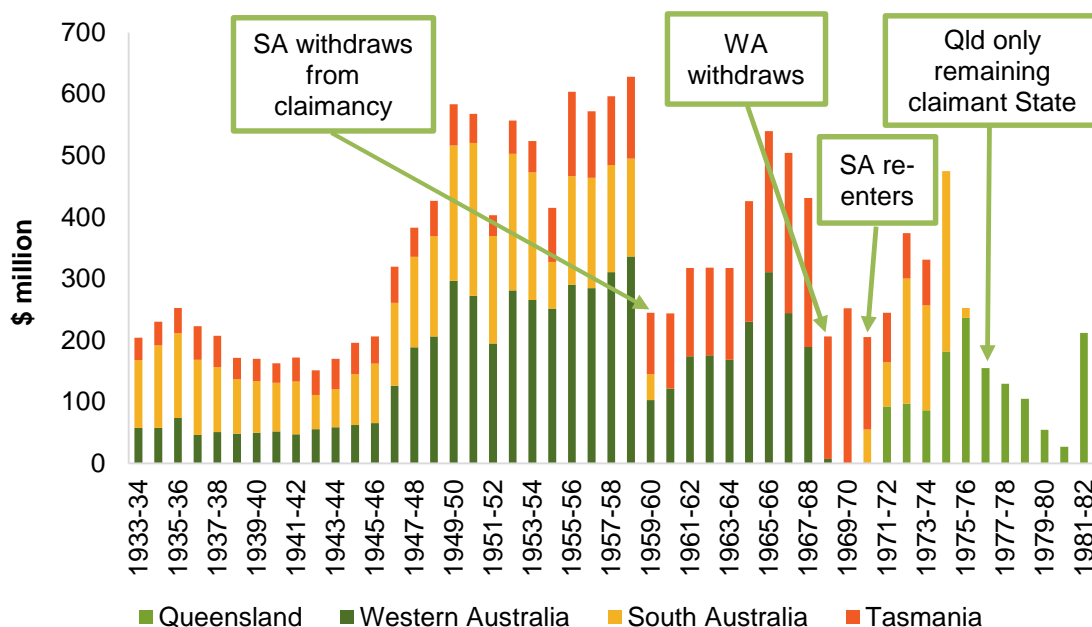
**Table 3.1 Special grants as a share of State revenues**  
Per cent

	<i>Queensland</i>	<i>Western Australia</i>	<i>South Australia</i>	<i>Tasmania</i>
1910-11	0.0	6.5	0.0	0.0
1920-21	0.0	2.2	0.0	4.3
1930-31	0.0	3.5	10.9	9.6
1940-41	0.0	5.7	7.7	13.7
1950-51	0.0	20.2	17.2	12.8
1960-61	0.0	6.2	0.0	15.5
1970-71	0.0	0.0	1.3	8.4
1980-81	1.6	0.0	0.0	0.0

*Source:* Calculated using ABS (*Year Book Australia*, Cat. no. 1301.0, various editions); CGC (2017d).

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Figure 3.3 **Special grants paid to claimant States<sup>a</sup>**  
\$ 2016-17



<sup>a</sup> Figure does not show special grants that were paid to Western Australia, South Australia and Tasmania prior to 1933-34.

Source: Calculated using CGC (2017d); RBA (2017b).

In conjunction with the fluctuating level of special assistance provided through the CGC, specific purpose payments were also increasingly used by the Commonwealth as a means of providing financial assistance to the States and influencing the delivery of services and infrastructure within States (table 3.2). Although the Commonwealth had used section 96 of the Constitution to make tied grants to the States as early as 1923 (for roads), the importance of specific purpose payments increased rapidly in the late 1960s and early 1970s, especially after the election of the Whitlam Government (Gray 2017). Indeed, by 1975-76, recurrent specific purpose payments amounted to over \$2 billion, and were equivalent to two-thirds of the amount payable to the States that year in the form of financial assistance grants (CGC 1995).

This era also saw two tax bases return to the States that were shared with the Commonwealth. In 1952, the Commonwealth ceased collecting land tax, partly because the tax had been ineffective in its original aim of breaking up large estates, and its importance had been diminished by growth in other taxes, notably income tax (Simpson and Figgis 1998). In addition, in 1971, the Commonwealth transferred the ability to impose payroll tax to the States in exchange for a reduction in financial assistance grants (Williams 2012).

**Table 3.2 All Commonwealth payments to States**

Average annual payments, 2016-17 \$million

	<i>General revenue payments<sup>a</sup></i>	<i>Special grants</i>	<i>Specific purpose payments</i>	<i>Total</i>	<i>Specific purpose payments, per cent of total</i>
1934-35 to 1941-42	0.0	175	973	1 148	85
1942-43 to 1945-46	2 369	179	780	3 328	23
1946-47 to 1958-59	9 240	1 010	2 842	13 092	22
1959-60 to 1964-65	8 354	313	2 727	11 393	24
1965-66 to 1971-72	12 744	341	4 955	18 040	28
1972-73 to 1982-83	22 272	135	19 858	42 266	47

<sup>a</sup> Excluding special grants.

Source: Calculated using CGC (2009); RBA (2017b).

## Towards full equalisation and the zero-sum game

Since its establishment in 1933, the CGC had evaluated claims for special grants by the financially weaker States. Its decisions had no bearing on the financial capacities of the standard (or ‘non-claimant’) States.

In 1976, financial assistance grants, which had grown increasingly ad hoc in terms of both size and method of determination, were replaced by income tax sharing arrangements, as part of the Fraser Government’s ‘New Federalism’ policy. New Federalism also permitted each State to impose a surcharge on income tax collected within that State, or to provide a rebate at the State’s own expense, as embodied in the *Income Tax (Arrangements with the States) Act 1978* (Cwlth). No State enacted these arrangements however, and the provisions were later repealed by the Hawke Government (Twomey 2014).

The initial per capita relativities<sup>4</sup> used to distribute revenue under this framework and agreed upon by the Commonwealth and States were obtained by dividing the per capita financial assistance grant received by each State in 1975-76 by the per capita grant received by Victoria (which received the smallest grant). Hence, Victoria’s relativity was set at 1.0, with those of the other States being above this amount. The relativities were used in conjunction with population data to determine the share of tax revenue received by each State. Provision was also made for the relativities to be reviewed, although the agreement between the Commonwealth and States did not specify the body that would carry out the review (CGC 1995, pp. 136–139).

<sup>4</sup> Under current methodology, a relativity is a number summarising a State’s need for revenue (typically from a given pool of funds), compared to the average. For example, a State with a relativity of 0.8 requires only 80 per cent of the average available revenue on a per capita basis.

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The CGC was ultimately given the task of reviewing the tax sharing relativities, under legislation that was approved in 1978. In 1979, the CGC conducted its review of relativities based on equalisation principles outlined in the *States (Personal Income Tax Sharing) Amendment Act 1978* (Cwlth), which specified:

... the respective payments to which the States are entitled ... should enable each State to provide, without imposing taxes and charges at levels appreciably different from the levels of the taxes and charges imposed by other States, government services at standards not appreciably different from the standards of government services provided by the other States;

(ii) taking account of:

- differences in the capacities of States to raise revenues; and
- differences in the amounts required to be expended by the States in providing comparable government services. (s. 5)

The task given to the CGC marked a significant departure from its previous work. From its inception, the CGC had assessed the additional funding needs required by claimant States to bring them up to a standard based on other States; as noted, grants recommended by the CGC had no direct bearing on the financial position of non-claimant States. In the case of distributing taxation revenue amongst the six States however, an amount given to one State meant that the same amount was foregone for the other States — that is, allocation to the States had become a zero-sum game. In Williams' view:

The CGC moved from being a peripheral to a major player in federal-state fiscal relations. (2012, p. 147)

The CGC reported in 1981, and the relativities it calculated suggested that the existing distribution of grants favoured Western Australia, South Australia, and Tasmania, at the expense of the remaining States. The CGC was asked to review its findings, and reported in 1982, with the revised relativities to be phased in over three years, subject to a guarantee that each State would receive a specified minimum increase in its grant each year. That guarantee prevented most of the adjustments to the recommended relativities from actually taking place (CGC 2009).

The CGC produced a new set of relativities in 1985, and recommended a set of relativities closer to pre-existing ones than the reviews of 1981 and 1982, and hence, were less difficult for States to accept. This was the first time that a fully equalised set of relativities from the CGC had been accepted largely intact (Gray 2017). In addition, the Hawke Government replaced tax sharing arrangements with financial assistance grants in 1985 (CGC 2009).

The CGC has continued the practice of periodically reviewing its methodology — after the 1988 review, governments decided that the period between reviews could be extended to five or six years. Hence, there have been reviews in 1993, 1999, 2004, 2010, 2015 and another is scheduled for 2020. Since 1989, there have been annual updates of relativities (CGC 2016b).

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One aspect of equalisation that has evolved through reviews is the definition of the objective itself. Debate during the 1993 review indicated that a more precise statement of the objectives of equalisation might improve understanding of the concept, and by 1999 the CGC revised its definition of equalisation as:

State governments should receive funding from the Commonwealth such that, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency, each would have the capacity to provide services at the same standard (CGC 2009, p. 33).

In the 2010 review, the CGC again revised its definition of equalisation. The intention was to better reflect the scope of State activities examined (for example, by including infrastructure) and provide clarity that only material influences were measured in constructing relativities. The definition applied by the CGC for the 2010 review was:

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. (CGC 2010, p. 34)

The definition of equalisation adopted in the 2010 review remains in current use by the CGC. The CGC submitted that while the wording of the principle of equalisation has evolved over the years, ‘the principle has focused on the provision of financial support from the Commonwealth to ensure that each State has the same capacity to provide an equivalent standard of services to its residents’ (sub. 1, p. 3).

Therefore, 1981 marks the beginning of the system of full equalisation to the highest State that remains in place in Australia (although initial relativities suggested by the CGC in 1981 and 1982 were not fully adopted). Hence, heuristic techniques such as equalising to the State with the strongest fiscal capacity (figure 2.1) and comparing distributions to EPC can be regarded as being applicable from 1981 onwards. Although presentational approaches have changed and methods have evolved over time, the CGC’s overall approach to calculating per capita relativities has remained largely the same since 1981.

## **Introduction of the GST**

The States had started to impose franchise taxes on alcohol, petroleum and tobacco products in the mid-1970s. In 1997, the High Court ruled that business franchise taxes were an excise tax and therefore invalid as imposed by the States. Prior to the ruling, these taxes had collectively accounted for 16 per cent of all State revenue (James 1997), and therefore represented a significant loss of revenue for the States. The Commonwealth responded to the ruling by increasing its own taxes on the affected commodities and distributing the revenue to the States as a stop-gap measure.

The year after the High Court’s decision on State franchise taxes, the Commonwealth proposed the introduction of a GST, with all revenue from the tax to be delivered back to the

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States. In return however, the States would have to abolish a number of existing taxes of their own, including wholesale sales tax, financial institutions taxes, and stamp duties on business, financial and capital transactions.

The Intergovernmental Agreement on the Reform of Commonwealth-State Financial Relations accompanied the reform of Australia's taxation system in 1999–2000. This Agreement made provisions for all GST revenue (less administration costs) to be shared among the States on the principles of equalisation (box 3.1).<sup>5</sup> States would be free to spend GST payments as they wished, thus granting States financial autonomy for this stream of revenue. The GST therefore further cemented the zero-sum game as an element of HFE in Australia.

While this tax reform increased VFI in Australia, it was expected at the time to provide the States with a stable and more robust source of revenue:

Reflecting the strength of GST collections relative to the existing system of Commonwealth grants and narrowly based State indirect taxes, the Budgets of the States are projected to improve by \$1.25 billion in 2004-05, \$2.25 billion in 2005-06, and commensurately larger amounts in subsequent years. The enhanced revenue security of the States will ensure that they can provide a sustainable level of high quality services ... (Commonwealth Government 1998, p. 78)

Importantly, therefore, the tax reforms of 2000 shifted the emphasis from the amount of assistance made available to the States — which was previously a negotiated amount between the Commonwealth and States — to matters of interstate allocation. This reduced the role of the Commonwealth in HFE issues by curtailing its part in determining the overall size of the pool of funds to be redistributed among the States:

... introduction of the GST stabilised the process for determining the size of the pool. It also locked in the role of the CGC in determining the distribution of the pool among the States. At this point, the Commonwealth very clearly shed any responsibility for determining the distribution. (Gray 2017, p. 30)

Indeed, in 2006, the then-Commonwealth Treasurer emphasised the Commonwealth's lack of involvement in the HFE process, in response to disagreements amongst the States about the distribution of GST payments:

There is nothing new about these arguments between the States. This has been going on since 1933. The only difference is they now have more money to argue about and the terms were agreed between the States. This is a very important point. Now, New South Wales will come in here and say it needs more money. That is an argument it is having with Queensland and Western Australia. Not an argument with me. I am not going to be joining into an argument between New South Wales and Queensland and New South Wales and Western Australia and New South Wales and South Australia. (Costello 2006a)

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<sup>5</sup> From 2000-01 to 2008-09, the CGC recommended relativities to distribute the pool of GST payments plus Health Care Grants. Since 2009-10, the pool has comprised GST only.

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### Box 3.1      **The GST and HFE — a case of great expectations?**

In a national address on 29 June 2000, two days before the GST and associated reforms were introduced, the then Prime Minister, John Howard, stated:

Every last cent of GST revenue will go to the States. Every State in Australia, over time, will have more money to fund the roads, police, schools, and hospitals so important to our daily lives. (quoted in ABC News 2015)

On the future distribution of GST payments, the New South Wales Treasurer stated in 1999:

... New South Wales will be contributing about 36 per cent of total Commonwealth tax revenues ... but will be getting back only about 30 per cent. That is also the case under existing arrangements. In other words, New South Wales taxpayers continue to subsidise the other States ... those funds ... go to Queensland, South Australia, Western Australia and Tasmania. (Egan 1999, p. 77)

The Queensland Treasurer argued in May 1999 that:

Already under the coalition's proposed GST package Queensland stands to lose \$465 million in the first three years of the new tax. That is \$465 million of tax money raised in Queensland which will be siphoned off to fund the removal of State taxes in Victoria and New South Wales. (Hamill 1999, p. 98)

In April 2000, the Victorian Premier commented:

... the compromise with the Australian Democrats requiring exemptions from the GST meant that what was delivered by the federal Treasurer ... was a document that showed that the benefits of the GST would not accrue to the Victorian economy until the year 2007-08 — a disturbing prospect. They will accrue to Queensland in the next couple of years. (Bracks 2000, p. 690)

The Victorian Minister for Finance remarked in September 2000:

... all GST payments are being returned to the States, although in the case of Victoria GST payments are less than they should be because of adverse Commonwealth Grants Commission relativities. (Brumby 2000, p. 740)

The Western Australian budget overview for the 2000-01 State budget predicted:

... in the longer term Western Australia is expected to gain significantly from tax reform, as the growth in GST revenues is expected to exceed the growth in the revenues it replaces. (WA Government 2000, p. 12)

In 2006, the then Commonwealth Treasurer argued that the GST had:

... opened up rivers of gold to State governments, more money than they were ever promised. (Costello 2006b)

The WA Government, in its submission to this inquiry, quoted the former Prime Minister, John Howard, as saying:

I always knew that there would be fluctuations. I don't think anybody in 1998 or 2000 had in front of them projections as to how unequal the distribution would become. (quoted in Parker 2013, p. 6)

The WA Government also argued that:

It was never envisaged that GST relativities would fall so low when the 1999 GST agreement was negotiated with States and Western Australia may have never concurred to the agreement if perfect foresight had existed. (sub. 15, p. 11)

Total GST revenue increased from approximately \$24 billion in 2000-01 to over \$60 billion in 2016-17. The average annual growth rate of GST revenue over this period was approximately 6 per cent, roughly the same growth rate as personal income tax, but less than



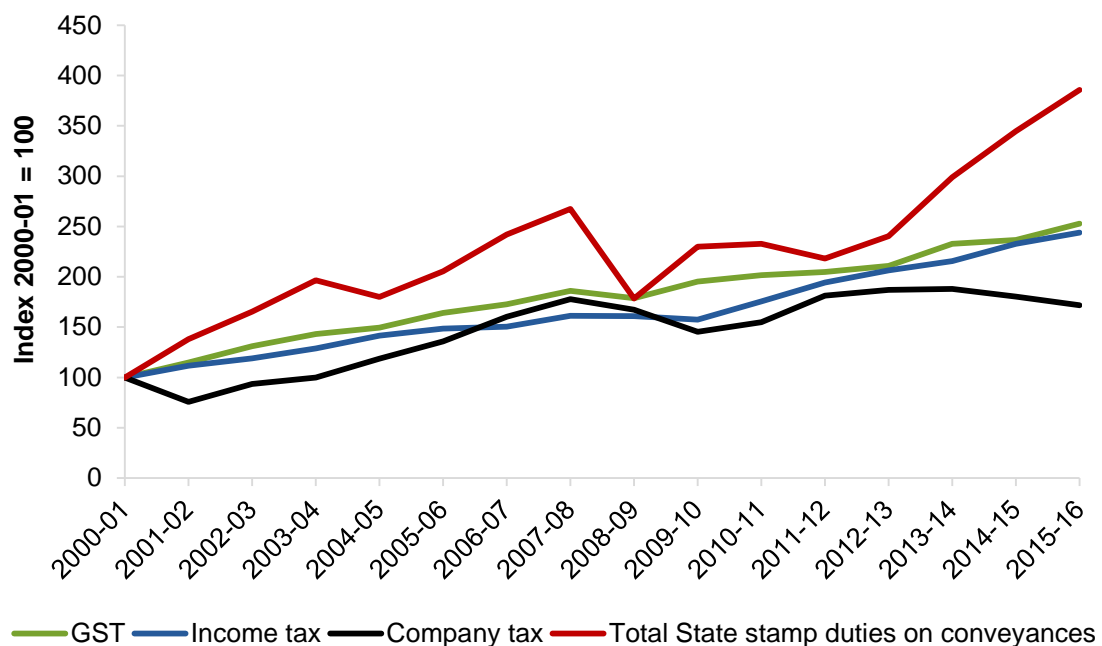
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that for stamp duties on conveyances, which grew at an annual rate of over 9 per cent during the same period (figure 3.4). Williams (2012, p. 153) observed:

Tying general revenue payments to the GST was seen by the States and Commonwealth as providing a growth tax to the States. In practice, the exemptions from the GST have meant that the revenue from it is now growing at a slower rate than personal consumption expenditure.

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**Figure 3.4 Growth in selected Commonwealth and State tax revenues**



Source: ABS (*Taxation Revenue, Australia, 2015-16*, Cat. no. 6606.0).

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## 3.2 Present day context for HFE in Australia

In Australia, HFE today relates to the distribution of a pool of revenue (GST) among the States. The Intergovernmental Agreement on Federal Financial Relations of 2011 governs that GST is paid to the States on the basis of the principle of HFE. Similar to many other countries, this pool is used for two purposes:

1. to partially correct for fiscal imbalances between the Commonwealth and the States (vertical equalisation).
2. to correct for fiscal imbalances between the States (horizontal equalisation).

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## Vertical fiscal imbalance

The Australian federal financial relations landscape is characterised by:

- *relatively strong concentration of power at the Commonwealth level* — the Commonwealth places conditions (albeit loosely) on grants provided to the States, sets national priorities and has a significantly greater share of the tax base available to it (Robinson and Farrelly 2013)
- *comparatively lower taxing powers of the States* — the State taxing powers mainly consist of payroll taxes, mining royalties, stamp duty and land taxes. In addition, States elect to refrain from taxing certain activities and bases, even though they are not highly distortionary (for example, death duties). This partly reflects tax competition between the States, but also the choice of tax base utilisation (discussed below)
- *a co-operative approach to federalism* — there is widespread joint government involvement in many areas, such as in health and education (Gray 2017).

A consequence of this landscape is a severe VFI (figure 3.5). The Commonwealth persistently raises revenue in excess of its expenditure requirements while the States are unable to raise sufficient revenue to meet their expenditure requirements. The ACT Government submitted:

... Australia has a very high level of VFI in international terms, with the Commonwealth raising 74 per cent of total revenue of Commonwealth and States combined, but carrying out only 55 per cent of the combined expenditure. (sub. 49, p. 42)

When compared with other federations in the OECD, Australia features a relatively high VFI. Australia's VFI is higher than Austria, Canada, Germany and the United States, but lower than Belgium and Mexico (Koutsogeorgopoulou and Tuske 2015).

There may be potential for VFI to be lower however, if the States were to alter the utilisation of their own tax bases (chapter 9). In particular, land taxes and payroll taxes have the potential to be imposed more efficiently, as observed by Walsh:

... the ostensible degree of fiscal dependence of the States on the Commonwealth is, at least to some degree, a choice the States have made ... the payroll tax base and the land tax base are potentially very broad.

Land tax is one of the most efficient forms of tax ... The States have chosen to apply it to a narrow base ...

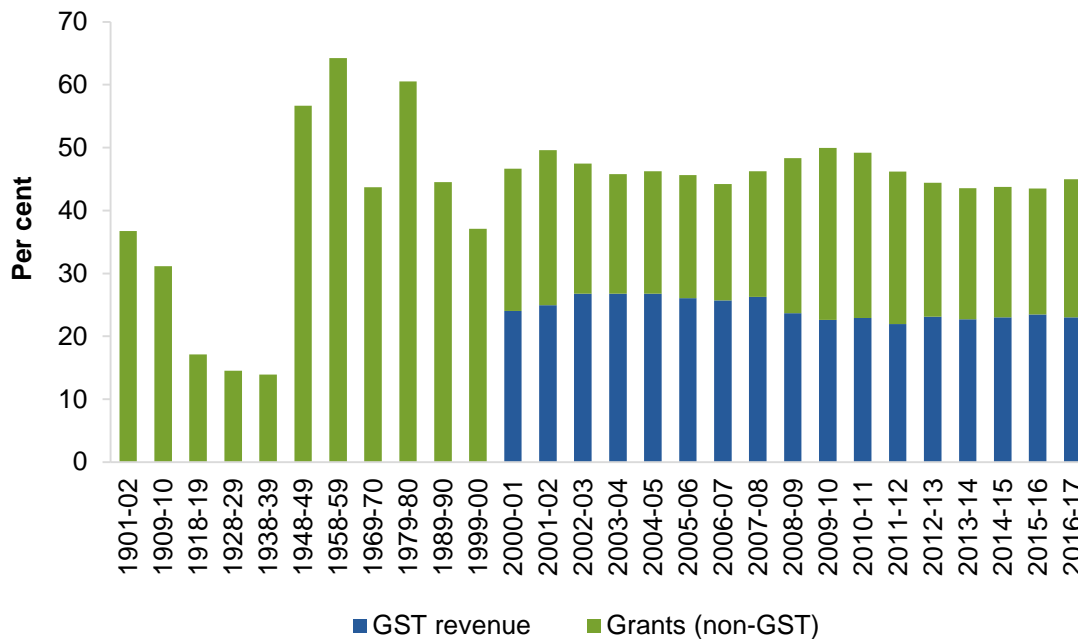
Payroll tax ... also has a potentially much broader base than it is effectively applied to now ... (2008, pp. 56–57)

Gray (2017) concluded that the States' tax base is adequate and highlighted the ambivalence of the States towards levying their own income taxes.

Australia's need for HFE is partly (though not entirely) a function of the VFI that currently exists between the States and Commonwealth. The imbalance is 'corrected' by transfers

from the Commonwealth to the States which are either tied (payments for specific purposes — box 3.2) or untied general revenue assistance — almost exclusively GST payments.

**Figure 3.5 Vertical fiscal imbalance over time**  
Commonwealth grants as a per cent of total State revenue



Source: Treasury (pers. comm., 8 September 2017).

## What role do other Commonwealth transfers play in HFE?

Two parallel developments greatly enhanced the financial power of the Commonwealth relative to the States since Federation (Gray 2017). These were the emergence of the Commonwealth as a major provider of revenue to the States, leading to a large increase in VFI (figure 3.5). The second is the increasing role the Commonwealth has sought to play via the provision of payments for specific purposes.

How payments for specific purposes interact with the HFE system depends on how they are treated by the Commonwealth, as well as the CGC. (This is covered in detail in appendix B.) The CGC's broad approach is that payments which support State services or other Commonwealth activities that affect them, and for which expenditure needs are assessed, will have an effect on relativities (CGC 2015e, p. 49).

The CGC has advised that:

We consider that in exercising our discretion we can be guided only by the objective of the GST distribution which is the principle of HFE. The appropriate treatment of a particular payment where we have discretion is that which improves the HFE outcome.

We are aware there are other policy objectives behind the distribution of Commonwealth payments ... We have no discretion other than that which improves the HFE outcome. (CGC 2015e, p. 36)

### Box 3.2 Other redistributive mechanisms

Along with HFE, the Commonwealth makes a range of other payments to the States in the form of payments for specific purposes:

- *National Specific Purpose Payments* — ongoing payments that are required to be spent in a particular sector, distributed between the States on an equal per capita basis
- *National Health Reform funding* — ongoing payments for spending on hospitals and other public health activities managed by the States, provided on an activity basis
- *Students First funding* — ongoing payments for spending on schooling, distributed according to the Schooling Resource Standard, which includes a per student base amount with loadings for factors including location, size, low socioeconomic status students, and Aboriginal and Torres Strait Islander students
- *National Partnership Payments* — payments to support the delivery of specified outputs or projects, to facilitate reforms or to reward those jurisdictions that deliver on nationally significant reforms.

#### Commonwealth transfers to the States

Estimated values, \$million

	2016-17	2017-18	Distribution basis
National Specific Purpose Payments	4 309	4 375	Equal per capita
National Health Reform funding	18 460	19 563	Activity
Quality Schools funding	17 095	18 218	Needs
National Partnership Payments	15 967	13 742	Negotiation
GST entitlement			HFE
Equal per capita component	52 103	54 812	
Redistributive component	7 637	7 928	
Other general revenue assistance	736	731	na
<b>Total payments</b>	<b>115 807</b>	<b>118 968</b>	

Source: Commonwealth of Australia (2017b); Productivity Commission calculations using CGC (2017a, 2017h).

The CGC has also stated that where Commonwealth payments are made on an equal per capita basis, it may in essence override that basis for distributing payments where the distribution is inconsistent with the CGC's assessment of needs:

The closer Commonwealth payments in total are to an EPC distribution, the more work the GST has to do in meeting State needs. A larger proportion of the GST will be required for equalisation

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purposes. If the payments are distributed in a manner consistent with the Commission's assessment of needs, this will reduce the extent to which GST is redistributed. State needs have already been met by the Commonwealth payments (CGC 2015e, p. 47).

Only a small share of payments are quarantined from the relativity process. These tend to be payments supporting national priorities, reward payments for achieving specific reforms, and other payments quarantined at the discretion of the Commonwealth Treasurer. In 2013-14, approximately 3 per cent (\$1.6 billion) of Commonwealth payments for specific purposes were quarantined (by the Commonwealth Treasurer) based on terms of reference requirements (CGC 2015e, p. 46).

Quarantined payments made to a State can raise that State's 'effective relativity', enabling it to receive additional Commonwealth funds without the consequence of a reduction in its relativity as calculated by the CGC.

For example, controversy about Western Australia's declining relativity following the mining boom led to the State receiving quarantined Commonwealth payments for infrastructure, amounting to over \$1.2 billion from 2014-15 to 2016-17 (Commonwealth of Australia 2016, 2017b). The Commonwealth explicitly indicated that the payments were made to affect Western Australia's relativity:

The Commonwealth will invest ... [in] Western Australian infrastructure in 2016-17, to ensure that Western Australia's share of the GST is effectively maintained at its 2014-15 levels. (Morrison, Turnbull and Cormann 2016)

For those payments that are not quarantined, and which do have an effect on relativities, there may be a partly symbiotic relationship with HFE, or the application of HFE may work against the direct policy objective of that payment. The ACT Government (sub. 49) highlighted instances where it believed that some needs-based funding models might be overridden by HFE.

This is an inescapable trade-off that arises when pursuing full and comprehensive equalisation. The general principles applying to the treatment of Commonwealth payments (discussed in appendix B) appear reasonable and consistent with the CGC's overall approach to HFE. If a greater share of payments were to be excluded, to preserve their original intent, this would result in a movement to more partial equalisation.

The nature of Commonwealth payments, and their treatment by the CGC, is discussed in more detail in appendix B.

## **The role of HFE in compensating for differences in State capacities**

The system of HFE also corrects for differences between States. Each State has its own distinctive features, such as geography, natural endowments, industry mix and population characteristics. The combination of these features determines a State's fiscal capacity — the extent to which a State can raise financing, and the expenditure that is required to provide

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services and infrastructure for its population. Accordingly, each jurisdiction has a different fiscal capacity. Some States are affected by structural elements that affect their budgets more than others, and therefore face a constrained ability to raise revenue, or incur expenditures due to geography and population factors.

For instance, the Northern Territory's fiscal capacity is affected by its remoteness and the Indigenous share of its population — that is, structural factors. These affect the Northern Territory's expenditure levels. By contrast, the concentration of federal public servants in Canberra means that the ACT has a limited ability to raise payroll tax (because government payrolls are exempt), and it also has low revenue raising capacity from land values and stamp duty (CGC 2017h).

For the smaller States, with persistently lower capacities — that is, where there are structural, as opposed to cyclical, factors affecting revenue and expenditure — GST payments are a significant part of their budgets (figure 5.1). For example, in the Northern Territory, revenue redistributed through the GST pool accounts for 47 per cent of its total revenue (Northern Territory Government 2017), while in Tasmania, funding from the GST pool accounts for 41 per cent of its total revenue in 2017-18 (Tasmanian Government 2017). As such, the funding provided through HFE can significantly affect the ability of some States to provide services and infrastructure for its population.

### **3.3 Calculation and methodology processes of the Commonwealth Grants Commission**

The decision made in 2000 to distribute GST to the States on the principle of HFE means that States do not receive an equal per capita distribution of GST because State circumstances and fiscal capacities differ. Hence, the CGC calculates the GST payment a State would require to give it the fiscal capacity to provide services that are provided by the other States. This is a complex process involving many calculations. It is comprehensively outlined in CGC documents and so is not detailed at length here.

The categories of State revenue and expenditure considered by the CGC are listed in figure 3.6. The 'other revenue' category is a residual category for those State revenues that are not assessed in other revenue categories. The revenues that appear in this category are those for which reliable data could not be found to make an assessment, an assessment method could not be developed, or where an assessment was not material (CGC 2015e, p. 120). As such, this category has no influence on the relativities calculated by the CGC, and therefore no implications for the distribution of GST payments.

Figure 3.6 Categories of State revenue and expenditure

Revenue	Expenditure
Payroll tax	Schools education
Land tax	Post-secondary education
Stamp duty	Health
Insurance taxes	Welfare
Motor taxes	Housing
Mining revenue	Services to communities
Other revenue <sup>a</sup>	Justice services
Revenue from Commonwealth payments	Roads
	Transport services
	Services to industry
	Depreciation
	Investment <sup>b</sup>
	Other expenses <sup>c</sup>
	Net borrowing

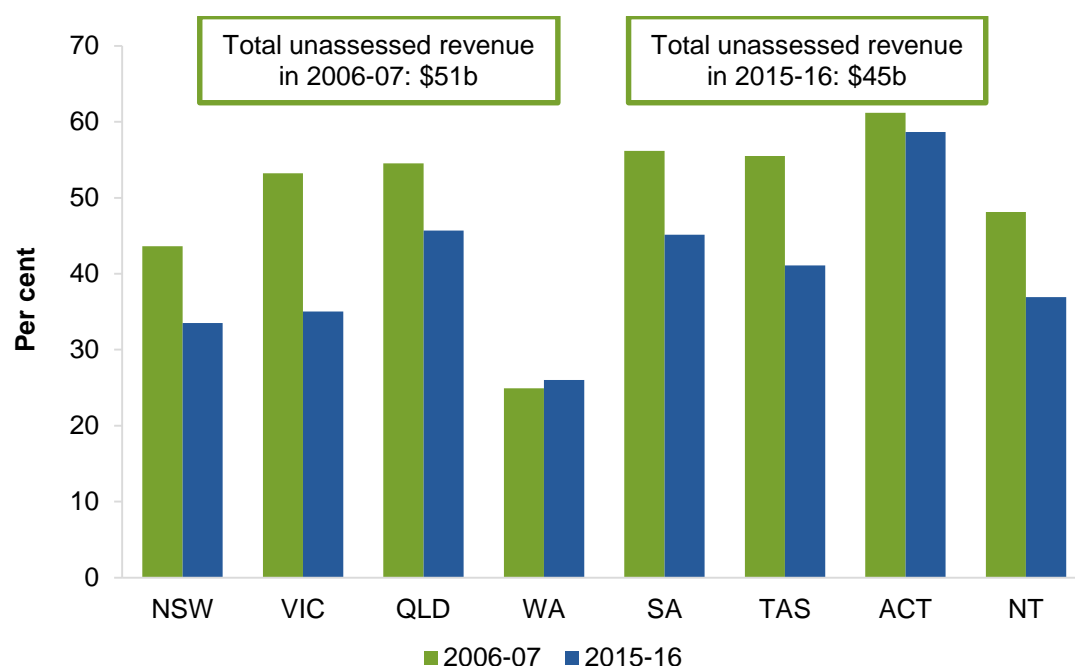
<sup>a</sup> Includes gambling taxes, user charges, fees and fines, interest and dividend income, contributions by trading enterprises, and other revenue, such as taxes to be abolished under the Intergovernmental Agreement on Federal Financial Relations. <sup>b</sup> Only refers to investment in new infrastructure and equipment. Replacement of existing assets is assumed to be funded by depreciation expense. <sup>c</sup> Includes expenses on general public services, natural disasters, and capital grants to local governments for community amenities, among other expenses.

Source: CGC (2015e).

The size of the other revenue category can hence be viewed as one source of divergence between the theoretical objective of perfect equalisation, and the actual outcome of less than perfect equalisation (discussed in section 3.4; table 3.5). The share of State revenues

classified in the ‘other revenue’ category is significant, ranging in 2015-16 from about one-quarter of Western Australia’s own-source to almost 60 per cent for the ACT. Nevertheless, the share of the other revenue category has fallen for all States except Western Australia in the past decade (figure 3.7).

**Figure 3.7 State shares of unassessed revenue<sup>a,b</sup>**



<sup>a</sup> Calculated as the amount of State revenue in the ‘other revenue’ category as a share of total State own-source revenue using the adjusted budget summaries published by the CGC. <sup>b</sup> Data for total revenue classified as ‘other revenue’ refers to 2016-17 dollar terms.

Source: Calculated using CGC (2013b, 2017h).

The CGC acknowledged:

... while precise (or complete) equalisation is the aspirational goal, in reality the Commission achieves proximate equalisation. (2017k, p. 4)

Another illustration of the fact that equalisation is not precise in practice is the use of discounting by the CGC. In 2015, the discounting applied by the CGC (table 3.3) resulted in a total redistribution of \$503 million relative to a case where no discounting was applied (CGC 2015e, pp. 18–19).



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**Table 3.3 Discounted assessments in the 2015 review**

<i>Assessment</i>	<i>Discount factor (per cent)</i>
Police custody weights	12.5
Location — wage costs factor	12.5
Location — regional cost factors in police	12.5
Service delivery scale — factors in police	12.5
Net borrowing — assessed net borrowing	12.5
Land tax — differential land values	25
Health — proxy measures for community health socio-demographic composition and community health non-State sector adjustment	25
Location — regional costs assessment where the general regional costs gradient is extrapolated to other categories and the police gradient to other justice components	25
Service delivery scale — where factors are extrapolated	25

*Source:* CGC (2015e, p. 18).

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## **Distributing the GST — the role of structural and cyclical factors**

Relativities underpin the ‘spirit level’ distribution of GST payments. A per capita relativity is derived for each State by expressing its per capita GST allocation relative to the national average per capita GST distributed in the year. The share of the GST pool distributed away from an equal per capita basis has increased in recent years (figure 3.8).

It is important to note that a relativity is not the same thing as the GST revenue that is raised in a State that is returned to that State. As stated by the CGC, this would ‘only be true if the GST collected per person were the same in every State, which given differences among the States appears unlikely’ (CGC 2014b, p. 36).

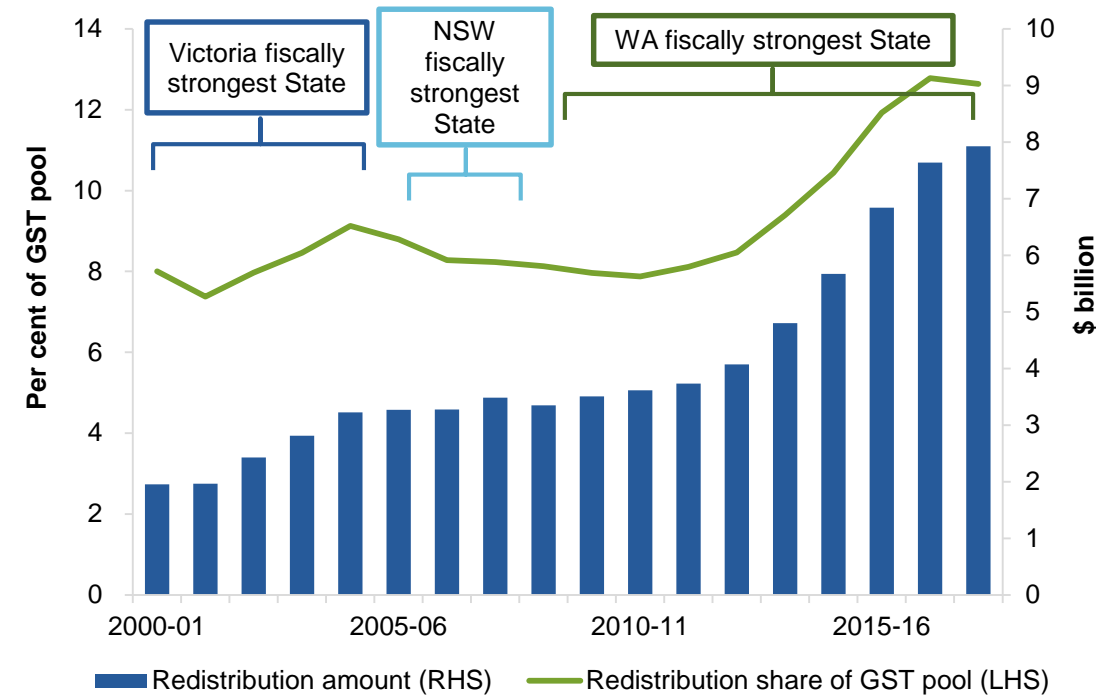
Changes in the financial circumstances and characteristics of States lead to changes in calculated relativities (as can changes in the methodology used to construct relativities). This may be driven by a mixture of structural and cyclical factors including demography, population dispersion, real estate markets and mineral endowments (table 3.4).

Some of the key factors affecting the redistribution of GST (away from an equal per capita distribution) are mining production, remoteness and regional costs and Indigenous status. The Northern Territory, for instance, has been assessed to have a below average fiscal capacity since its entry into the HFE system in 1988-89.

Western Australia’s mining boom has seen its relativity decline to the point where it has the lowest relativity of any State. Despite this, Western Australia has historically had an expense disadvantage, caused by such factors as its above average shares of people living in remote areas and Indigenous population, as well as a below average share of non-State provision of health services (CGC 2016c). Hence, structural elements have historically resulted in a higher relativity for Western Australia, but in recent years, cyclical factors associated with

the mining boom have caused Western Australia’s relative to both decline and (forecast) to increase somewhat to pre boom levels.

Figure 3.8      **Share of GST pool distributed away from equal per capita<sup>a,b</sup>**



<sup>a</sup> The share of the GST pool redistributed was calculated by taking the difference between actual GST distributions and equal per capita distributions for each State. Positive differences were summed, and then divided by the total GST pool for that year. <sup>b</sup> From 2000-01 to 2008-09, the CGC recommended relativities for distributing the pool of GST revenue plus Health Care Grants. Health Care Grants were not included in the calculations for this figure.

Source: Calculated using ABS (*Australian Demographic Statistics*, Dec 2016, Cat. no. 3101.0); CGC (2017d, 2017h).

Most recently, falls in commodity prices have reduced Western Australia’s capacity to raise mining royalties, leading to a small increase in its relativey despite a slowdown in population growth. New South Wales and Victoria, by contrast, have been experiencing strong population growth (one effect of which is to increase fiscal need) and corresponding activity in the property sector (resulting in increased revenue) (CGC 2017h).

**Table 3.4 Difference from an equal per capita distribution of GST**  
2017-18, \$million

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist <sup>b</sup>
<i>Revenue</i>									
Mining	2 165	2 770	-176	-5 530	446	191	186	-52	5 758
Property sales	-1 817	-112	483	386	698	236	47	77	1 929
Taxable payrolls	-389	510	397	-1 128	369	217	57	-33	1 550
Taxable land values	-219	-202	273	-246	229	87	55	24	668
Other revenue	250	65	-98	-222	-49	10	34	9	368
Total revenue	-10	3 031	879	-6 740	1 694	740	381	25	6 750
<i>Expenditure</i>									
Socio-demographic characteristics	-889	-2 953	1 692	113	422	552	-407	1 471	4 249
Wage costs	228	-509	-312	828	-235	-165	79	86	1 221
Urban centre size	345	849	-627	16	-166	-234	-63	-119	1 210
Administrative scale	-443	-285	-170	40	123	232	238	265	898
Natural disaster relief	-428	-228	782	-57	-66	-9	-12	18	800
Small communities	-301	-269	99	179	65	22	-19	224	588
Non-State sector	-183	-206	-17	336	-9	57	40	-16	432
Population growth	-146	231	23	113	-137	-94	-42	52	419
Other expenses	-707	-967	294	690	120	-2	-54	626	1 729
Total expenses <sup>a</sup>	-2 524	-4 335	1 762	2 258	115	359	-240	2 605	7 099
Commonwealth payments	103	272	-242	17	146	-24	62	-335	601
<b>Total</b>	<b>-2 432</b>	<b>-1 032</b>	<b>2 399</b>	<b>-4 464</b>	<b>1 955</b>	<b>1 075</b>	<b>203</b>	<b>2 296</b>	<b>7 928</b>

<sup>a</sup> Includes the effect of net borrowing. <sup>b</sup> Refers to total redistribution.

Source: CGC (2017I).

## Complexity and precision

Australia's system of HFE is comprehensive and complex, incorporating a large range of calculations, data, and judgements in constructing relativities. The complexity of the current system was an issue mentioned in several submissions to this inquiry (box 3.3).

Given the nature of its task, some degree of complexity is inherent in the CGC's methods. However, if the system is too complex and requires too much time and effort to be understood on even a basic level, confidence in the system may be eroded over time and also likely to become subject to misunderstanding and misrepresentation. Chapter 9 considers the implications of complexity for public comprehension, government accountability and thus the communication by the CGC.

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### Box 3.3      **HFE complexity: what participants say**

A number of submissions to this inquiry remarked upon the complexity of the HFE system.

The Queensland Government:

HFE is a challenging concept to implement in practice. In its quest to achieve precise equalisation, the methods employed by the CGC have been criticised for being overly complex, lacking transparency, and leading to a false sense of precision. (sub. 32, p. 3)

The ACT Government:

The current HFE system contains very considerable complexity and potential for inconsistency in its treatment of State needs in some of the major categories of expenditure. (sub. 49, p. 38)

The NSW Government:

... the current system of HFE is complex and lacks transparency. (sub. 52, p. 1)

The WA Government (sub. 15) alleged that with respect to assessments, there was great variance in approach and detail. They pointed out that while, for example, some assessments are based on population shares, others are highly detailed.

A contrary view was provided by the Tasmanian Government:

The distribution of the GST revenue will by its very nature invariably involve certain levels of complexity. However, the core concepts of the CGC methodology are straight-forward ... Tasmania does not believe the CGC methodologies to be unnecessarily complex ... (sub. 28, p. 37)

The Victorian Government (sub. 53) considered that the complexity of the HFE system should be evaluated on its merits of achieving the objective of equalisation, and that simplicity would not necessarily improve transparency or accountability.

The Northern Territory Government (sub. 51) stated that proposed alternatives to the current HFE system would result in more complexity and less administrative efficiency, instead proposing that an HFE advocate explain the intent of equalisation and the distribution methodology to the public in simple terms.

The SA Government (sub. 25) did not make any direct comment relating to system complexity.

The NSW Business Chamber (sub. 27) submitted that complexity was one of the criticisms that could be made about the current system, and contributed to the Chamber's previous support for moving to a simpler version of HFE underpinned by a per capita distribution of GST receipts. The Minerals Council of Australia (sub. 48) also made reference to the complexity of assessment methods used by the CGC, as did the Association of Mining and Exploration Companies (sub. 23), the Parliamentary Liberal Party of Western Australia (sub. 22), and the Business Council of Australia (sub. 47).

Some participants to this inquiry also expressed a belief that the methods and processes used by the CGC result in, or at least run the risk of 'false precision' (Business Council of Australia, sub. 47, NSW Government, sub. 52). That is, despite finely detailed calculations, a number of assumptions and judgements are used in the process of making these calculations (such as discounting based on data reliability). Practices such as publishing relativities to five decimal places may contribute to perceptions of false precision.

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Against this, it should be noted that there are some areas where less precision is employed by the CGC — such as in the State revenues that are unassessed (illustrated above in figure 3.7).

Brumby, Carter and Greiner (2012a) posited that the current HFE system utilised a finer level of detail than necessary. To this end, they recommended an alteration to materiality thresholds, and rounding relativities to two decimal places, as opposed to the current practice of five decimal places.

### **3.4 To what extent does HFE achieve equalisation?**

The CGC's fiscal equalisation objective only refers to an equalisation of fiscal capacities; it does not imply that outcomes will be equal across States in terms of living standards, or goods and services delivered. Outcomes across individuals will depend, in part, on how States use the revenue available to them.

Furthermore, the principle of HFE is not intended to address inequality at the individual level — interpersonal inequality is affected by a host of factors, not all of which are within the ability of policy to alter, and hence, interpersonal inequality is beyond the scope of HFE. The tax and transfer system is the most direct instrument available to policy makers to influence income distribution and inequality at the interpersonal level (figure 3.9). As the CGC has stated:

... equalisation is not directed to interpersonal, community or regional equality because States do not follow such policies. States do not provide residents of rural and remote areas with the same access to services as people in metropolitan areas. ... Equalisation is not intended to provide States with the capacity to implement policies they do not, on average, already follow. (CGC 2010, p. 36)

The CGC has two ways of measuring the size of the equalisation task.

- The first is to identify the redistribution from States with above average fiscal capacity to those with below average fiscal capacity after GST has been distributed on an EPC basis. This technique was presented in figure 3.8 and shows how the redistribution task has increased from about 8 per cent of the GST pool to currently about 13 per cent.
- Alternatively, the equalisation process can be thought of as distributing GST to bring the initial fiscal capacities of all States up to that of the strongest State, with the remaining GST distributed equally among all States. The CGC started presenting the measures of the equalisation task this way in the 2010 review, and this is depicted conceptually in figure 2.1 in chapter 2. Based on this measure, the size of the equalisation task fluctuated between 14 per cent and 17 per cent of GST from 2000-01 to 2007-08, before rising to become 70 per cent of the pool in 2016-17 (CGC 2017h).

**Figure 3.9 Income tax payments less social security benefits received**  
2015-16



Source: Calculated using ABS (*Australian Demographic Statistics*, Dec 2016, Cat. no. 3101.0; *Australian National Accounts, State Accounts*, 2015-16, Cat. no. 5220.0).

An evaluation of the extent of fiscal disparity between sub-central governments has been undertaken by the OECD (2013). Based on measurement of the Gini coefficient of tax raising capacity and the ratio of highest and lowest tax raising capacities, Australia is found to have eliminated, or significantly reduced fiscal disparities among the sub-central governments (table 3.5). Hence, while post-equalisation fiscal disparities are significantly reduced by Australia's HFE system, this does not mean that economic disparities are eliminated.

An earlier analysis by the CGC (2009) of the extent of equalisation that occurs in federated nations found similar results to the OECD analysis. Specifically, comparing Australia with Canada and Germany in 2006-07, the CGC (2009) found that, based on national definitions of equalisation, Australia achieved full equalisation, while significant disparities remained in Canada, and some disparities remained in Germany.

Even in Australia's case however, equalisation is not perfect, as acknowledged by the CGC (CGC 2015e, p. 19). This is largely due to conceptual considerations and data limitations. For example, materiality thresholds mean that factors with a very small individual effect on the GST distribution do not result in redistribution of GST. As noted above, discounting is another illustration of the implementation of proximate, rather than precise, equalisation. Similarly, a sizable proportion of State revenues, classified as 'other revenue', are assessed as equal per capita and therefore do not affect the distribution of GST payments.

**Table 3.5 Fiscal disparities before and after equalisation**  
2012

<i>Country</i>	<i>Gini coefficient of tax-raising capacity</i>		<i>Ratio of highest to lowest tax raising capacity</i>	
	<i>Before equalisation</i>	<i>After equalisation</i>	<i>Before equalisation</i>	<i>After equalisation</i>
Australia	0.07	0.00	7.5	1.0
Austria		0.05		1.5
Canada	0.11	0.08	2.4	1.8
China (2010)	0.31	0.18	10.3	5.3
Germany (2005)	0.06	0.02	1.7	1.1
Italy	0.19	0.04	4.5	1.3
Spain	0.13	0.05	3.0	1.4
Switzerland	0.17	0.11	4.3	2.6

*Source:* OECD (2013).

Further, the fact that States are free to spend GST payments as they deem appropriate can also contribute to differences in outcomes across the States — the expenditure preferences of State governments and State populations are not nationally uniform. In general, the effort made by States in providing services is about average for various expenditure categories, though with some significant areas of exception (box 3.4).

**DRAFT FINDING 3.1**

Australia achieves a high degree of horizontal fiscal equalisation and to a much greater extent than other countries.

### Box 3.4 How are funds actually used?

GST distributed to the States is not tied to expenditures in particular areas, although evidence collected by the CGC suggests that the effort made by States in providing services is generally about average for various expenditure categories.

However, there are some significant exceptions, such as the low level of actual spending for services to communities in Tasmania and welfare services in the Northern Territory, as well as the relatively high level of expenditure devoted to post-secondary education in the Northern Territory (shaded areas in the table below).

Some participants to this inquiry have expressed concerns that HFE revenue is not being used by States in a way that improves services or State structural disadvantage. For instance, Warren (sub. 38) suggested reforms were necessary to make States accountable for how HFE funds were actually spent. Where State disadvantage is persistent and extreme, or where there are national priorities, he advocated direct action through specific purpose conditional grants, highlighting health, education and Indigeneity (sub. 38). Similar concerns were expressed by Garnaut and FitzGerald (2002) in their review of Commonwealth-State financial relations.

#### Selected 'effort' ratios

Ratio of actual to assessed expenses<sup>a, b</sup>

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Schools education	101.0	94.4	98.8	108.1	102.5	100.9	109.0	99.9
Post-secondary education	74.7	124.4	90.9	110.8	120.6	83.6	108.1	210.3
Health	91.0	94.1	110.0	112.2	104.6	87.1	125.0	124.8
Housing	84.9	90.9	108.5	169.3	32.2	82.1	135.6	152.2
Welfare	100.6	103.8	84.3	118.8	117.9	87.4	113.6	67.6
Services to communities	77.1	99.4	73.5	212.8	80.7	34.8	73.5	98.4
Roads	95.1	124.8	105.3	99.7	48.3	73.5	52.1	99.7
Transport	121.9	106.8	84.2	68.3	61.2	67.1	54.8	138.4

<sup>a</sup> The ratio of actual to assessed expenses of a State is the ratio of its actual expenses per capita to its assessed expenses per capita. A ratio of 100 suggests a State is spending at average levels. A ratio greater than 100 suggests a State is spending more than average, given its characteristics. A ratio below 100 suggests below average levels of spending. <sup>b</sup> Shaded entries highlight areas of significant difference between actual and assessed expenses.

Source: CGC (2017a).



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## 4 Does HFE influence States' incentives to undertake reforms?

### Key points

- Australia's HFE system is not policy neutral. State policy decisions can and do influence the share of GST revenues flowing to each State — and often in complex ways.
- On the revenue side, changes in one State's tax rates generally have a small impact on GST shares. However, the effect can be substantial in some atypical circumstances — such as some large tax reforms where a State departs from what other States do on average, or where State policy has a significant influence on the size of a tax base (like WA iron ore royalties).
  - This can alter States' incentives to undertake reforms. Though there is no direct evidence that such incentives have changed specific policy decisions, an absence of evidence is not evidence of absence. HFE can discourage efficiency-enhancing reform where a State experiences a large reduction in GST payments.
  - The impacts can be pronounced where a State significantly reforms an existing tax. Analysis of hypothetical stamp duty reforms suggests that revenue-neutral reform would have significant effects on GST payments for some States — especially if done unilaterally — which would pose a first-mover disadvantage to reform.
- On the expenditure side, changes in State policy can also affect GST shares, though the potential to do so is much lower than on the revenue side. There is no compelling evidence that Australia's HFE system is likely to systematically bias State policy.
  - HFE is unlikely to discourage (nor encourage) States from pursuing growth strategies or addressing structural disadvantages given the broader benefits of these to the community.
- 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.
  - These perverse incentives are exacerbated by volatile revenues and the high concentration of mineral production in a small number of States.
  - Previous reviews have dealt extensively with the equalisation of industry development costs. The Commission has not received any new or convincing evidence that the treatment of mining-related expenditures requires changes.
  - While there is no direct evidence that GST effects have influenced specific policy decisions (and the policy counterfactual is unobservable), the incentives have the potential to distort trade-offs States make between fiscal and other policy objectives, including decisions whether to facilitate or restrict resource extraction.
  - To some extent, these incentives are the inevitable consequence of pursuing full and comprehensive equalisation with disparate treatment of revenues due to imperfect data.

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The terms of reference ask the Commission to consider the effect of Australia's system of horizontal fiscal equalisation (HFE) on productivity, economic growth and budget management, with a particular focus on the development or restriction of mineral and energy resources. This chapter does so through the lens of whether HFE influences State policy decisions. Sections 4.1 and 4.2 look at State tax and expenditure reforms respectively. Section 4.3 focuses specifically on mineral and energy resources, where the potential impacts of HFE have been highly contentious.

## **4.1 State tax reform**

Australia's HFE system is designed to equalise the fiscal capacity of all States. The Commonwealth Grants Commission (CGC) does this by first assuming that each State has the capacity to levy the average tax rate on its tax base (adjusted, where necessary, to reflect average exemptions and thresholds). It then uses GST payments to even out differences in capacity across States (chapter 3). In this way, States with stronger revenue bases (for example, due to high wages or mineral royalties) receive less GST than States with weaker revenue bases.

This method is intended to be policy neutral — that is, GST shares should reflect structural differences across States but should not be affected by an individual State's policy decisions, including the mixture of revenue bases that it chooses to tax. But the formula is complex, and in practice State policy can directly influence components of the formula, such as national average tax rates or the size of tax bases, and hence GST shares (box 4.1).

The academic literature has found that these effects are likely to be present in most countries that implement equalisation based on representative tax bases, including Canada, Germany and Australia (Buettner 2005; Dahlby and Warren 2003; Karkalakos and Kotsogiannis 2005). This approach, based on average rates of specific taxes, may contain overlaps and may not always align with long-term measures of fiscal (or tax-paying) capacity, such as household disposable income (Peter Abelson, sub. 9; Garnaut and FitzGerald 2002, p. 167). Such alternative measures are discussed further in chapter 7.

### **How can HFE discourage State tax reform?**

In principle, the GST formula can give States a financial incentive to rely on inefficient taxes — namely those with a mobile (elastic) tax base. Reducing the rate of these taxes would see a relatively large increase in the tax base, all else equal, and thus a reduction in the State's GST payments. By way of example, if a State with high insurance taxes legislated a lower tax rate, the reduced cost of insurance would lead to greater take-up by households and businesses. But this larger tax base would mean the State is assessed as having a higher revenue-raising capacity, and so receives less in GST payments. If the State's capacity was initially below average, the effect on GST payments would be exacerbated by the downward impact on the average tax rate (Dahlby and Warren 2003).

## Box 4.1 How can State tax reform affect GST shares?

### Changes in tax rates

An increase in a tax rate in one State can affect GST shares through:

- 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 — 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.

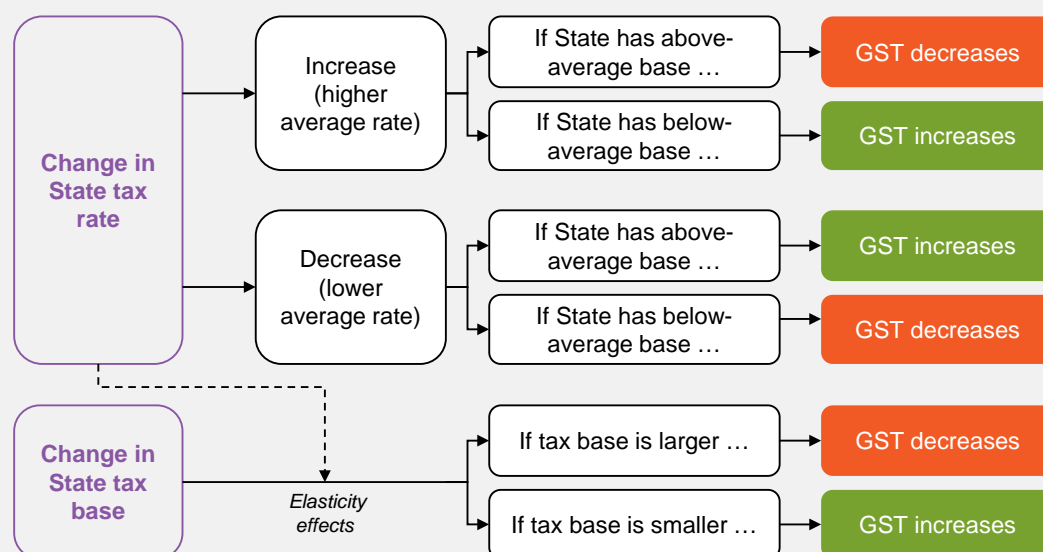
The reverse occurs for a decrease in a tax rate, as shown in the figure below. The effects occur because an increase or decrease in tax rates changes a State's position *relative* to other States.

The average-rate effect will at times be reduced (or more than offset) by the consequent elasticity effect. This change in the tax base means a change in assessed capacity, and thus a State's position relative to the other jurisdictions. In other cases, the elasticity effect will operate in the same direction as the average-rate effect and further increase or reduce the State's GST share.

In general, the average-rate effect is greater for States with larger shares of the national revenue base (as they have more scope to influence the national average). The elasticity effect is greater — all else equal — for smaller States, those with tax bases that are more responsive (elastic) to tax changes, and States with tax rates very different to the average.

### Changes in tax bases

GST effects also occur when policy affects the size of a tax base — for example, due to additional land being made available for development, or State approval of resource extraction. Any change in the size of the base affects a State's capacity or needs vis-à-vis other States, with the GST formula acting to equalise the changes across all States. This means that a State that expands its tax base will see all but its population share of the additional revenue (calculated at the average rate, which may rise or fall due to the tax-base change) redistributed to other States, and vice versa. Further GST effects would arise from any impact on the weighted-average tax rate.



Source: Boadway (2004); Bucovetsky and Smart (2002); Dahlby and Warren (2003).

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Further GST effects can arise where a State seeks to reform its tax mix — for example, phasing out insurance tax and replacing it with a new congestion tax — and can either offset or exacerbate the direct revenue effects. The State would lose revenue if the CGC deemed that it still had the capacity to tax insurance (though the lower average rate would partly reduce the GST impact). The impact of the new congestion tax would be more ambiguous, as some revenues may be shared with other States through equalisation (if the State is assessed as having above-average capacity) or, alternatively, may not be subject to equalisation at all (if the new tax is not considered to have a material distributional impact at the national level) (Brumby, Carter and Greiner 2012a, p. 68). These impacts will also depend on the size of the State, because States will generally only retain their population share of any changes in their fiscal capacity — anywhere from 1 per cent (for the Northern Territory) up to 32 per cent (for New South Wales).

More generally, a range of State policies (including tax, regulation and land-use planning) can have a material impact on economic growth and productivity over the long term, and thus change the size of individual State tax bases (Henry et al. 2010a; PC 2005). Any changes relative to other States will affect GST shares — in general, a State will only retain a small proportion of any additional tax revenue it collects from a larger tax base, and bear only a small proportion of any reduction in revenue (box 4.1).

The potential to lose GST payments could discourage States from pursuing efficiency-enhancing reforms that are in the national interest. Conversely, the potential to gain GST payments at the expense of other States could encourage States to favour particular reforms regardless of their efficiency implications. Policy is most likely to be influenced when the effect on GST payments is large, or when raising revenue is a primary objective of a reform.

Inquiry participants pointed to a number of potential policy distortions that can arise due to HFE (box 4.2). For example, the WA Government (sub. 15) submitted that the GST formula gives States a stronger incentive to raise tax rates than to pursue structural reforms that grow the tax base (or to pursue efforts to improve tax compliance). The NSW Government (sub. 52, p. 13) argued that HFE can discourage a State from adjusting its tax mix to better align with the structure of its economy or to extract the greatest value from available tax bases. These effects could be stronger in cases where the costs States incur pursuing reform are not fully shared with other jurisdictions through equalisation. Commentators have argued that, in general, HFE diminishes incentives to undertake contentious reforms because State governments must bear all the political costs but see the fiscal benefits diluted (Ergas and Pincus 2011, p. 8).

States could also be discouraged from pursuing reforms due to uncertainty about how the CGC will assess their revenues, and thus about the effects on their GST payments (and total revenues) (Queensland Government, sub. 32, p. 7). The CGC has considerable discretion over the methodology it adopts and to change that methodology as it sees fit (chapter 3). Uncertainty is likely to be greatest in the case of more substantive reforms — for example, substituting a broader land tax for stamp duty on housing, or introducing a congestion tax in

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a major city. The NSW Government (sub. 52, p. 14) submitted that it can sometimes be difficult to anticipate how the CGC might change its methodology:

The CGC treatment of a potential policy change is uncertain. State governments must necessarily consult with the CGC and Commonwealth to secure a determination on a proposed treatment before initiating any such reform with confidence regarding its fiscal outcomes — and even then the final outcome will only be known once all other states' policy approaches are known.

That said, in many cases the GST effects of reforms will be small or not a driving factor in policy decisions. Several States argued that they primarily focus on economic efficiency, distributional impacts and community welfare when considering tax reform proposals — rather than on how reform might impact their GST share (box 4.2). Some pointed to tax reforms they have undertaken regardless of the GST impacts, or argued that HFE can facilitate multilateral reform (in all States) by offsetting impacts on States' overall revenues and thus providing a level of fiscal certainty (SA Government, sub. 25, p. 12; Tasmanian Government, sub. 28, p. 14; NT Government, sub. 51, p. 20).

There are also examples of States not pursuing efficiency-enhancing reforms even where these would be associated with an increase in GST payments. One example is the NSW Government's decision not to replace insurance taxes with higher payroll taxes, despite its own Financial Audit recommending this in 2012 (Brumby, Carter and Greiner 2012b, p. 36).

The CGC (2017k, p. 25) has acknowledged that States may consider the GST effects of their policy decisions. In general, it examines the policy neutrality of its assessments when considering methodological changes (chapter 2) — though often it is not able to remove the potential for State policy to directly influence GST shares. In the past, it has adjusted for the elasticity of tax bases in some of its calculations, though it discontinued this in 1999 due to concerns about the reliability of measurement (CGC 2015e, p. 14). Some jurisdictions favour a return to elasticity adjustments (for example, ACT Government, sub. 49), and the CGC is investigating the feasibility of making such adjustments as part of its 2020 methodology review (ACT Government, sub. 49, p. 28).

## **What is the evidence?**

### **Impacts on GST payments**

There have been several attempts to calculate the impact that a change in State tax rates would have on a State's GST payments (box 4.3). Past research has found that the effects due to changes in average tax rates are mostly small, with the elasticity effects being larger. These findings are generally consistent with the Productivity Commission's estimates of small average-rate effects for most selected tax types (table 4.1; appendix C). The main exception is iron ore royalties — for which Western Australia has a very large share of the revenue base (section 4.3) — though there are also moderate effects on NSW's GST share from land tax rates and stamp duties on property.

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## Box 4.2      **HFE and State tax reform: what participants say**

Some participants argued that HFE discourages States from undertaking tax reform or from developing their economies:

There is a disincentive [from HFE] to undertake microeconomic reform (such as tax reform) that requires compensation for losers, incentivising States to maintain the status quo and free-ride on stronger States. (WA Government, sub. 15, p. 50)

The CGC seeks to equalise revenue capacity on an individual assessment of various taxation bases ... This approach can distort state decisions to alter their tax mix to enhance economic efficiency and minimise deadweight losses. (NSW Government, sub. 52, p. 13)

This [elasticity effect] creates incentives for States to avoid taxing low elasticity tax bases and instead target high elasticity tax bases, leading to possible efficiency losses in the State's economy. (ACT Government, sub. 49, p. 30)

[E]qualisation diminishes incentives for states to make difficult political and policy decisions that promote economic development, because they know they will receive a significantly diminished amount of GST if their state-based revenue increases ... (CCIWA, sub. 11, p. 1)

Others disagreed, and argued that State policy decisions are determined by other factors, with GST effects playing at most only a minor role:

There are some views that HFE may create a financial disincentive for states to undertake policy reform or economic development, with the benefits of reforms or development being offset by a lower GST distribution. This argument over-simplifies the process of policy development undertaken by states, and incorrectly suggests that states only take a simplistic revenue-based approach to reform. (Victorian Government, sub. 53, p. 3)

Where potential HFE impacts are considered in the policy decision making process, they are at best fourth or fifth order considerations. (Queensland Government, sub. 32, p. 7)

The overall fiscal impact of unilateral tax reforms tends to weigh more highly than GST revenue implications in the decision-making process, including level of additional tax revenue to be raised, revenue stability and increased efficiency of a state's tax regime. (NT Government, sub. 51, p. 19)

It is therefore very unlikely that HFE is at the forefront of a State government's mind when it proposes implementing State reforms. As noted earlier, a number of major reforms have taken place in Tasmania over the years and HFE has not been a barrier to such action. The benefits of the reforms are of greater importance than possible GST implications. (Tasmanian Government, sub. 28, p. 14)

There will always be examples where state governments have maintained policies that detract from pure economic efficiency ... These policies are determined on the basis of a wide range of economic, social and environmental considerations ... HFE is clearly not a factor in these decisions in South Australia. (SA Government, sub. 25, p. 2)

HFE may dull incentives for States to pursue efficiency gains at the margin, but most of the costs of any inefficiencies in State decisions will fall on the private sector within their jurisdiction, and ultimately States are electorally accountable to those interests. (Hancock, sub. 54, p. 5)

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## Box 4.3      **HFE and State tax reform: the evidence**

### **2012 GST Distribution Review**

In 2012, the GST Distribution Review produced estimates of average-rate effects across all main tax categories and all jurisdictions in 2010-11 (in response to a tax rate increase in any one State). Its estimates were less than 5 cents per \$1 change in own-source revenue for all tax categories other than mining, with a median effect of less than 1 cent (Brumby, Carter and Greiner 2012b, p. 30). In the event of a State increasing one tax and reducing another (for example, to make a reform revenue neutral), there would be two average-rate effects to take into account.

The 2012 Review also examined the effects of hypothetical tax reforms (which were revenue neutral in terms of own-source revenue). In the case of *all* States replacing stamp duties on housing with broad-based land taxes, the effects on annual GST payments ranged from a \$455 million increase for New South Wales to a \$264 million decrease for Western Australia (Brumby, Carter and Greiner 2012b, p. 33).

### **State government estimates**

Several State governments have also estimated the GST effects of hypothetical policy changes, often to illustrate that the effects of unilateral reform can be large. For example, in its submission to this inquiry, the WA Government (sub. 15, p. 54) estimated that:

- if Western Australia replaced its iron ore royalties with a revenue-neutral increase in payroll tax, its GST payments would increase by \$2.8 billion a year
- similarly, if Queensland replaced its coal royalties with additional stamp duty it would see its GST payments increase by \$1.4 billion a year
- to raise an additional \$1 billion in revenue net of HFE, Western Australia would need to raise iron ore royalties by over \$8 billion, compared with just \$950 million for stamp duty.

The magnitude of these effects is heavily contingent on, and sensitive to, assumptions about mineral prices and hence royalty revenues.

The NSW Government (sub. 52, pp. 15–16) estimated the impact of Victoria unilaterally introducing congestion pricing on major roads. It submitted that the collection of \$900 million in revenues by Victoria would be offset by a loss of \$22 million in GST payments to that State. At the same time, Queensland would gain \$53 million and New South Wales would lose \$47 million, despite neither having introduced a similar charge.

### **Academic literature**

There have been few attempts to estimate elasticity effects in Australia, in part because this requires assumptions to be made about how tax bases will respond to tax rate changes. An earlier study found that an additional \$1 in land tax revenue in 2000-01 would be accompanied by an increase in GST payments of 23 to 49 cents across States due to the elasticity effect (on the assumption that land taxes are capitalised into land values) (Dahlby and Warren 2003, p. 440).

Academic work in other countries has examined whether the incentive effects in equalisation formulas can explain tax policy outcomes. There is evidence that, all else equal, subnational jurisdictions in Canada and Germany set higher tax rates when this leads to receiving higher equalisation payments (Buettner 2005; Ferde 2014). However, the empirical techniques used in these studies (which rely on discontinuities in the equalisation formula to show causality) would be difficult to replicate in Australia.

**Table 4.1 Average-rate effects per \$100 revenue increase, 2015-16<sup>a</sup>**

<i>Revenue category</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
	\$	\$	\$	\$	\$	\$	\$	\$
Insurance tax	-1.9	1.6	0.2	0.5	-0.9	0.4	–	–
Land tax on income-producing property	-6.6	-1.6	4.8	-2.1	3.3	1.2	0.7	0.3
Iron ore royalties	32.0	25.1	20.1	-87.6	6.0	1.8	1.6	1.0
Taxes on heavy vehicles	5.9	0.4	-1.4	-5.3	-0.2	-0.3	1.2	-0.4
Payroll tax	-2.2	1.5	2.1	-3.7	1.5	0.8	0.2	-0.2
Stamp duty on property	-9.3	-2.0	2.8	3.5	3.4	1.1	0.1	0.4

<sup>a</sup> Figures indicate the change in each State's GST payments, in dollars, for a \$100 increase in revenue raised by a tax-rate increase in any State (the amount by which that State's tax rate needs to increase to raise the \$100 in revenue will depend on the State), assuming no change in the size of tax bases. – Nil or rounded to zero.

Source: Productivity Commission estimates based on data provided by the CGC; Appendix C.

However, there are circumstances where the impacts can be very large — such as an individual State undertaking major reforms to its tax mix. Often this is because of changes in tax bases, which tend to have a larger impact on GST payments than average-rate effects. Where reforms involve substantial modification to existing taxes, a State acting unilaterally could find itself deviating far from average policy — with a correspondingly large impact on its GST payments that could serve as a first-mover disadvantage to State tax reform.

The Productivity Commission has analysed two reform ‘cameos’ to illustrate how GST payments can be affected by changes in State policy (table 4.2; appendix C). The first cameo involves a single State halving its average rate of stamp duty on property and replacing the lost revenue with a new broad-based tax on all residential land. The net effect is a reduction in GST payments for any State that undertakes this reform unilaterally, with the ACT and Queensland experiencing the largest reduction on a per-capita basis. In absolute terms, the net impact on New South Wales and Victoria could exceed \$1 billion.

The impacts are much smaller in the case of multilateral reform, as the national average stamp duty rate would also fall by half (bringing down assessed revenue in all States). Indeed, because no State would be a big outlier from average policy after multilateral reform, some States would see a modest gain in GST payments whereas others would still experience a reduction (depending on where each State stands in relation to the average for each tax base).

The second cameo involves a State introducing a new type of congestion tax that raises revenue equivalent to \$200 per capita, which is then hypothecated to public transport spending. The impacts on GST shares are much more modest in this cameo (with the impacts of multilateral reform being higher than for unilateral reform). This is partly driven by the assumption that the congestion tax would not affect the size of the underlying tax base (total kilometres travelled in each State's capital city).



**Table 4.2 Impact on GST payments of hypothetical reforms, 2015-16<sup>a</sup>**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Cameo 1: Stamp duty halved with revenue replaced by new land tax<sup>b</sup></b>								
<i>Unilateral reform</i>								
GST, lower bound (\$m)	-317	-319	-302	-159	-83	-22	-30	-12
GST, lower bound (\$pc)	-41	-53	-63	-61	-49	-43	-76	-47
GST, upper bound (\$m)	-1 233	-1 125	-920	-472	-250	-74	-103	-39
GST, upper bound (\$pc)	-161	-188	-191	-181	-147	-143	-263	-161
<i>Multilateral reform</i>								
GST, lower bound (\$m)	161	55	185	-192	-167	-19	-14	-9
GST, lower bound (\$pc)	21	9	38	-74	-98	-36	-36	-35
GST, upper bound (\$m)	119	41	137	-142	-123	-14	-11	-6
GST, upper bound (\$pc)	16	7	28	-55	-73	-27	-27	-26
<b>Cameo 2: New congestion tax introduced and hypothecated to public transport<sup>c</sup></b>								
Congestion tax revenue (\$m)	1 534	1 200	962	521	341	103	79	49
<i>Unilateral reform</i>								
GST (\$m)	69	6	-36	3	-3	-2	0	0
GST (\$pc)	9	1	-7	1	-2	-3	-1	-2
<i>Multilateral reform</i>								
GST (\$m)	214	23	34	-67	-61	-43	-73	-27
GST (\$pc)	28	4	7	-26	-36	-84	-185	-111

<sup>a</sup> Both cameos are evaluated on a 'steady state' basis; that is, assuming the new policy was fully in place in 2015-16. No transition paths are evaluated. <sup>b</sup> Cameo 1 uses two values for the elasticity of stamp duty revenue to duty rates, and thus produces lower and upper bound estimates. <sup>c</sup> Cameo 2 is associated with a higher per-capita stock of public transport infrastructure. The analysis only covers the operating and depreciation costs associated with maintaining this higher stock.

Source: Productivity Commission estimates based on data provided by the CGC; Appendix C.

These estimates are illustrative and depend on the specific assumptions used, including on the size of elasticity effects (for the stamp duty cameo), how the new taxes would be structured, and how the CGC would treat these taxes in its assessments. Appendix C explains these assumptions in more detail.

#### INFORMATION REQUEST

*What further 'cameos' would usefully illustrate how particular State reforms can influence GST shares?*

## Impacts on State reforms

Whether such GST effects — or uncertainty about their magnitude — actually influence policy decisions is harder to discern. Only two studies appear to have looked at this

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quantitatively. The GST Distribution Review compared each State's actual tax revenues and expenditures (relative to the average, across many categories) with estimates of the average-rate effect and found a correlation close to zero, suggesting that States do not systematically set higher tax rates where doing so would generate the largest consequent gains in GST revenue (Brumby, Carter and Greiner 2012a, p. 69). By contrast, regression analysis by Dahlby and Warren (2003, p. 444) found some correlation between State tax rates and GST effects, though the authors noted that their model was simplistic and that the results provide only weak evidence of a policy impact. There has also been empirical work to quantify policy effects for other countries (box 4.3), but these are not directly relevant to Australia given differences in how HFE systems are designed.

Several jurisdictions argued that there is a lack of evidence that States change their tax rates to increase their GST shares (Tasmanian Government, sub. 28, p. 1; Queensland Government, sub. 32, p. 7; ACT Government, sub. 49, p. 26). Some pointed to the GST Distribution Review's conclusion that:

The current system creates perverse theoretical incentives in some instances, but there is little evidence that they have any effect in the real world. In particular, there is no evidence that HFE acts as a material disincentive to State tax reform. (Brumby, Carter and Greiner 2012a, p. 140)

Though there is no direct evidence that GST effects have played into specific policy decisions in the past, this in itself is not proof that GST effects do not and will not influence State policy. In other words, an absence of evidence is not evidence of absence. A large number of factors influence State tax policy, and sufficient data are not available to isolate the effect of HFE from these other influences in a robust way.

Some inquiry participants argued that the GST effects of tax reform have no influence at all on State behaviour; others suggested that the effects can be pervasive and accumulate over time (for example, WA Government, sub. 15, p. 47). Neither extreme seems plausible. On balance, GST effects are likely to be negligible in the majority of cases — and thus unlikely to pose a significant cost of achieving fiscal equalisation. However, perverse incentives exist at the margin, and can be especially strong when there are outliers and atypical circumstances, for example, in relation to mineral and energy policy (section 4.3) and when States are contemplating substantive reforms to their tax mixes that depart from what other States do. In some cases, the revenue implications of these reforms will be too large for State Treasurers to ignore.

#### DRAFT FINDING 4.1

For the most part, States considering tax reforms would generally not be deterred by the effects on GST redistribution. However, there are circumstances where the GST effects can be material — such as for a State undertaking large scale tax reform — and act as a significant disincentive to States implementing efficient tax policy. These disincentives are likely to be exacerbated where the State is a first mover on reform or where there is uncertainty about how significant tax changes will be assessed by the CGC.

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## 4.2 Efficiency of service delivery

The potential for HFE to influence State policies relating to the delivery of services and infrastructure has been an ongoing source of contention. Some inquiry participants argued that HFE can reward inefficiency and may offer States perverse incentives around the level of services they provide and the costs of those services. Incentive effects could arise because of the ability of State policy to influence GST shares, either through changes in national average costs or by addressing structural disadvantages (which, respectively, are analogous to the average-rate and tax base effects in box 4.1).

All State governments raised concerns about the accuracy of specific assessments undertaken by the CGC, especially on the expenditure side. These concerns often related to the use of specific data sources or the way that data adjustments had been made. Such matters are not a focus of this inquiry, except in cases where there is potential to distort State policy. It is expected that the CGC will consider these concerns in the course of its 2020 methodology review.

### Does HFE reduce incentives to deliver services cost-effectively?

The CGC assesses State expenditure needs by calculating the national average per capita *cost* of providing a service, and then applying this to each State using proxy measures for average levels of service *use* (CGC 2015e, p. 32). These figures are then adjusted up or down for each State depending on structural factors (termed ‘disabilities’), which reflect higher or lower levels of service usage or cost in specific States due to factors beyond the direct control of individual State governments. For example, the CGC’s expenditure assessment for public housing in Queensland is based on the national average cost of providing housing and Queensland’s share of all households, adjusted up for that State’s above-average share of lower income and Indigenous households (among other factors).

This approach means that 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). This gives States a financial incentive to provide services as cost-effectively as possible (Tasmanian Government, sub. 28, p. 16).

However, this policy neutrality could be undermined by the ability of a single State to influence the national average per capita cost — analogous to the average-rate effect for taxes. For example, States with higher than average costs for primary school education (after taking account of structural disadvantages) could have an incentive to increase their spending in order to drive up the average per capita cost and therefore the GST payments they receive (the reverse would apply to States with below-average costs). Alternatively, a State could influence the average per capita cost by increasing the number of residents using the government service rather than allowing greater private-sector provision. Such changes

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could be counter to economic efficiency if they were not the best course of action in the absence of GST effects.

The most populous States will have the greatest influence on average costs (for instance, New South Wales and Victoria between them have about 57 per cent of the national population). The efficiencies that these States are able to achieve will thus be built into the national averages (NT Government, sub. 51, p. 21). By contrast, smaller States have much more limited scope to influence the averages (for example, South Australia has 7 per cent of the population, so in general an extra \$1 per capita in expenditure would raise the national average cost by just 7 cents).

However, smaller States can have a large influence on particular parts of expenditure assessments in some cases. This is often noted in relation to expenditure on Indigenous Australians who, on average, consume more public services than non-Indigenous Australians. While the average costs of most services to Indigenous Australians are driven by NSW and Queensland (which have the largest numbers of Indigenous residents), the Northern Territory has an outsized influence on average costs for remote areas (CGC 2015e).

Several inquiry participants argued that the ability of States to influence average costs can give them an incentive to provide services inefficiently. Others argued that the effects are small and do not materially influence State policy decisions (box 4.4). The latter view accords with the 2012 GST Distribution Review, which found that the incentives are small in magnitude, and concluded that ‘empirically, there is no obvious correlation between GST incentives and a State’s policy effort’ (Brumby, Carter and Greiner 2012a, p. 136).

The Productivity Commission considers the ability of individual States to influence national average costs to be small — across the major expenditure categories, an additional dollar of expenditure in any State will move the national average by less than one cent (appendix C). There is a large degree of homogeneity across States in the types of services they provide, meaning that there are few outliers (with the possible exception of the Northern Territory). Any attempt by a State to increase or decrease the cost of provision in order to ‘game’ its GST share is likely to have very limited benefits, and in any case will generally be outweighed by the myriad other policy priorities that State governments have. For this reason, the current HFE system is unlikely to materially distort State incentives to provide public services cost effectively.

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#### **Box 4.4 Cost-effectiveness of service delivery: what participants say**

Some participants argued that HFE reduces incentives for States to deliver public services cost-effectively:

States are, in effect, compensated for continued underinvestment in important areas linked to their assessed disabilities, as defined by the CGC. Further, the incentive for governments to innovate, drive increased efficiency and cost savings in the delivery of government services is often dampened by the GST distribution. (NSW Government, sub. 52, pp. 6–7)

Although unintended these perverse incentives punish states that seek to maximise their own-source revenue or improve operating efficiency in the provision of public services. These incentives have been well documented in a number of economic papers ... (Minerals Council of Australia, sub. 34, p. 2)

Other States disagreed or pointed to a lack of evidence:

While it may be technically possible for states to influence their GST shares at the margin by changing their expenditure or tax mix, Queensland is not aware of any evidence that this is a factor for governments in the setting of expenditure and revenue policies. (Queensland Government, sub. 32, p. 7)

South Australia is not aware of any evidence that demonstrates a systematic correlation between the direction of HFE transfers and differences between jurisdictions in their efficiency in delivering services. (SA Government, sub. 25, p. 11)

The CGC has established conclusively that the HFE system has virtually no impact on the efficiency of service delivery and that States overwhelmingly get to keep the benefits of reforms which enable services to be delivered at lower cost. (ACT Government, sub. 49, p. 14)

Conceptually, there may be some risks to policy neutrality, where larger states may be able to influence this baseline through a policy change, thereby affecting GST distribution. However, as highlighted earlier, there is little evidence that state governments game this to increase their GST share. (Victorian Government, sub. 53, pp. 16–17)

If a State is able to deliver the average level of service at a cost below the national average, its funding from the GST would only be affected by the marginal impact it would have on the average national standard. Therefore any reforms that States make to their service delivery systems will not materially affect those assessments or HFE transfers. (Tasmanian Government, sub. 28, p. 16)

The supporting principles of ‘what states do’ and ‘policy neutrality’ remove the ability and incentives for states to game the HFE process through unilateral changes to tax and service delivery policies. In addition, the use of the internal standard means national average expenditure and tax rates reflect the policies of the largest, most efficient states. (NT Government, sub. 51, p. 21)

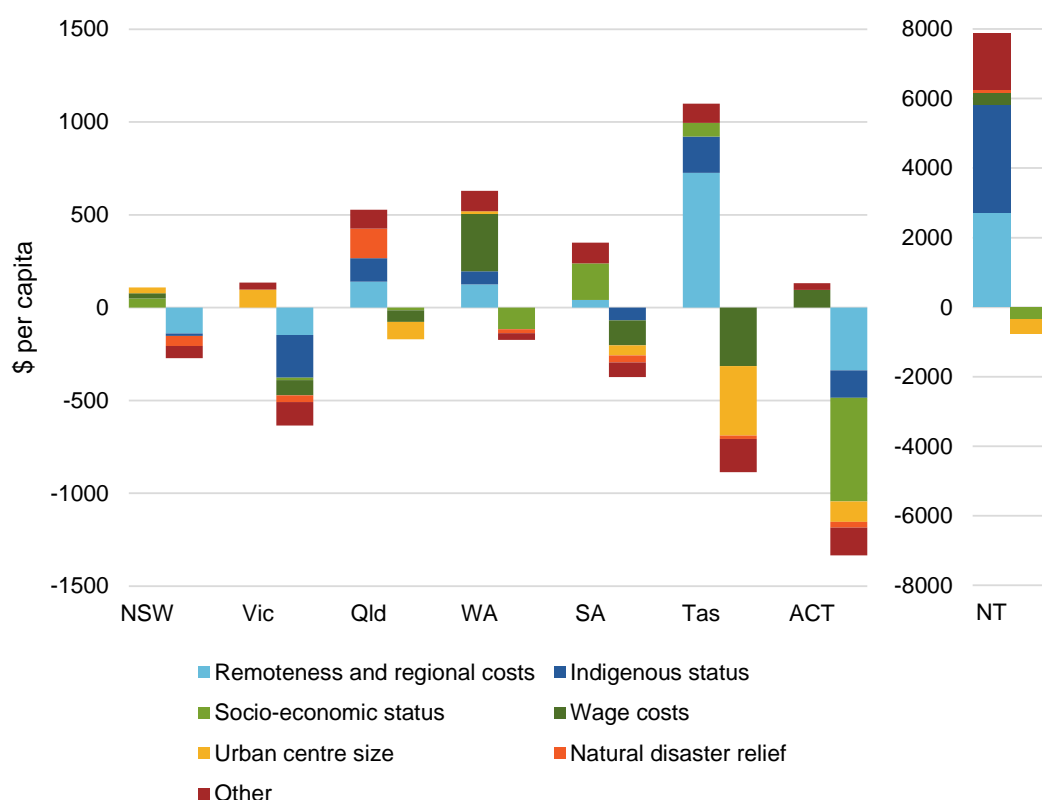
### **Does HFE reduce incentives to address structural disadvantages?**

Structural factors have a significant impact on expenditure assessments, and hence GST shares (figure 4.1). This impact arises through both the use and cost of services. While these factors are largely invariant to State policy in the short term, and some (such as climate) may be completely beyond State government control, there may be scope for State policy to address specific disadvantages over time, and thus affect GST shares.

To the extent that a State’s policy decisions can affect its assessed capacity, any State that addresses the underlying drivers of the *use* of services or infrastructure would in general only receive its population share of the fiscal benefits (Brumby, Carter and Greiner 2012a, p. 138). Moreover, where a State actually spends less than the expenditure it is assessed to require (and thus retains the fiscal difference), addressing the underlying disadvantage would lead

to a net financial loss, all else equal. These factors suggest there may be financial disincentives for States to address their structural disadvantages, particularly if they would incur high costs to do so.

**Figure 4.1 Selected drivers of expenditure capacity, 2017-18**  
Difference from equal per capita distribution



Source: CGC (2017h).

Several inquiry participants argued that HFE can give States perverse incentives to not address structural disadvantages (box 4.5). Such incentives can be readily apparent in specific areas. To give one example, the Productivity Commission has previously found that the equalisation of spending on natural disaster recovery, but not of mitigation expenses, biases States' incentives to effectively manage natural disaster risks (PC 2014b, p. 33). More generally, some analysts have argued that assessments of service delivery costs and usage are unlikely to be policy independent in the long term, because State governments can indirectly affect the location, health, economic circumstances and behaviours of their populations (Garnaut and FitzGerald 2002, p. 149).

There are sound objections to adjusting for cost-related disadvantages in service delivery across States. The academic literature has argued that using HFE to compensate for interstate cost differences due to location or wage levels can impede efficient migration and preserve

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inefficient institutional structures that impede cost-saving technologies (chapter 6). Specifically, compensating for the higher costs of providing services to more remote or dispersed populations may give States an incentive to continue providing services to remote settlements (Ergas and Pincus 2011, p. 9), rather than reducing service levels or charging residents in these areas more to access services. This can act to impede migration within States.

#### **Box 4.5      Addressing structural disadvantages: what participants say**

Some participants claimed that HFE discourages States from addressing their structural disadvantages:

[T]he current HFE system provides perverse incentives for states with these [expenditure] disabilities to:

- Address disadvantages faced by particular social groups that qualify that state for a greater share of GST, as this would sustain (or increase) that state's national share of that group.
- Underinvest in infrastructure, or other efficiency-enhancing initiatives, that lower the cost of providing services to a remote area or particular group. (NSW Government, sub. 52, p. 7)

The system particularly encourages recipient States to adopt a welfare mentality. The motivation to undertake reform is diminished by the resulting loss of GST grants they are accustomed to receiving. Further, it entrenches a mindset that reform is not needed as they can continue to rely upon these grants. (WA Government, sub. 15, p. 52)

Others disagreed:

As a recipient HFE state, South Australia is not dissuaded from improving economic outcomes for its citizens. But the influence of state policy in this sphere is dwarfed by national and global forces and the investment decisions of individual firms. (SA Government, sub. 25, p. 22)

Divergences in fiscal capacity also occur because of structural factors such as socio-demographic factors, regional dispersion, and scale. These factors can cause fiscal divergence through increasing cost to provide services because of a State's inherent disadvantages. These disadvantages may take a long time to resolve or may never be overcome. (Tasmanian Government, sub. 28, p. 34)

And several participants noted that HFE is not intended to address structural disadvantages:

The current HFE framework only compensates states for the higher costs incurred by governments in delivering its services to these remote communities — that is, it does not provide additional funding in excess of the cost of compensating for the disability so as to be able to reduce the disability. (Victorian Government, sub. 53, p. 4)

HFE is not designed to close the gap in unmet need, or address extreme disadvantage, backlogs in service provision, infrastructure deficits or economic efficiency. These are important issues and there are more appropriate means of pursuing these objectives from outside HFE ... (NT Government, sub. 51, p. 31)

More generally, there are long-running concerns that HFE reduces the need for smaller States to grow their economies and address their underlying sources of disadvantage. Garnaut and FitzGerald (2002, p. 146) argued that the fiscally weaker States tend to have a higher share of their workforces in public rather than private sector employment, and as a result are less supportive of growth-oriented policies and more dependent on Commonwealth transfers. In addition, researchers in other countries have found some evidence for a 'flypaper effect', where subnational jurisdictions use fiscal transfers to expand service provision rather than reduce taxes (Inman 2008).

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Several States refuted these views. They argued that HFE is intended to compensate only for differences between a State's service delivery costs and the average — it is not designed to provide funds for the State to deliver services over and above the average level, or to tackle the root causes of structural disadvantage (box 4.5). In addition, the Commonwealth Treasury has suggested that fiscally weaker States may have larger public sector workforces because of the very structural disadvantages that drive their high GST relativities (Treasury 2011, p. 35).

It is difficult to conclusively link HFE to specific State behaviour on the expenditure side, as GST effects are likely to be just one of many factors that States consider when pursuing reform (BCA, sub. 47, p. 7). It is undisputed that HFE influences State service delivery by virtue of giving fiscally weaker States the capacity to provide a similar *level* of services to the fiscally stronger States (chapter 2). And a State experiencing an increase in its own fiscal capacity will see some of the fiscal benefits flowing to other States under any form of full HFE.

But HFE only aligns States' fiscal capacities, not their policy outcomes. There is no compelling evidence that Australia's HFE system is likely to systematically bias States towards providing services in a particular way, or towards particular policies aimed at growing their economies or addressing structural disadvantages. In sum, the potential for HFE to distort State policy is much lower on the expenditure side than it is on the revenue side.

In some policy areas, States do not spend at the national average level despite being provided the fiscal capacity to do so through HFE (chapter 3). However, accountability is a much greater driver of expenditure effort than HFE, and has been eroded by high levels of vertical fiscal imbalance and blurred funding responsibilities (chapter 9).

#### DRAFT FINDING 4.2

Changes in State service delivery policies can impact on GST payments, but the impacts are mostly trivial. HFE is unlikely to discourage — nor encourage — States from pursuing growth strategies or addressing their structural disadvantages given the broader and more significant benefits of doing so to the community.

## 4.3 Mineral and energy resources

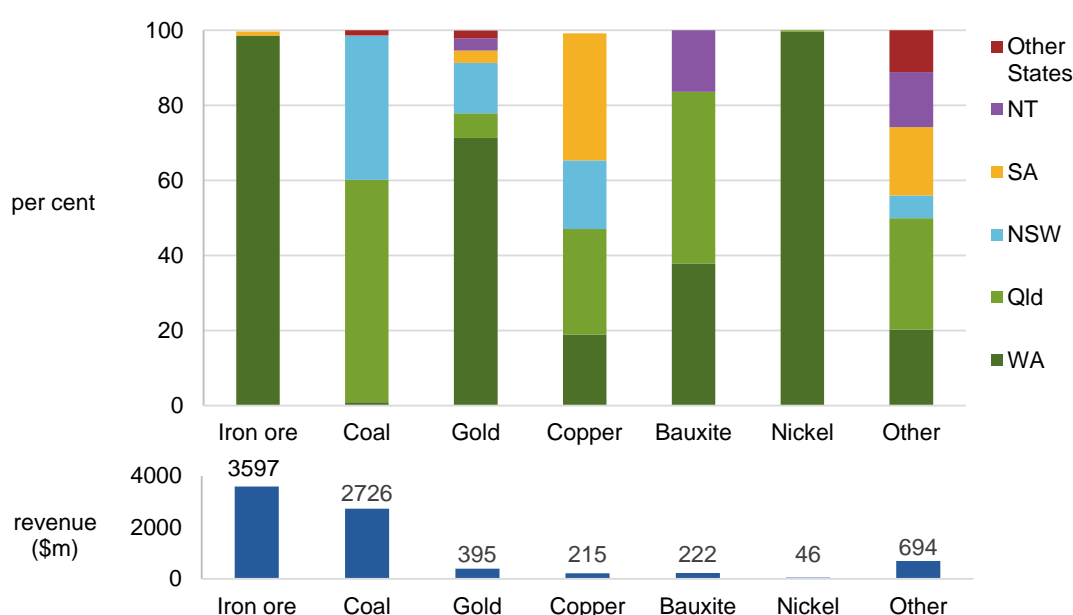
State royalties from the extraction of mineral and energy resources have been a major source of redistribution — and controversy — in Australia's HFE system. Though royalties comprised just 7 per cent of total State own-source revenues in 2015-16, they were the most unevenly distributed revenue source across jurisdictions (CGC 2017h). Royalty revenue led to over \$40 billion being redistributed between States for the ten years to 2015-16 (primarily as a result of the mining boom) — with \$34.9 billion being redistributed away from



resource-rich Western Australia, and gains for more populous New South Wales (\$14.6 billion) and Victoria (\$19.6 billion) (Productivity Commission estimates). This redistribution has been the primary cause of the fall in Western Australia's GST relativity to a low of 0.30 in 2015-16.

Mineral and energy resources are very unevenly distributed across States (figure 4.2). Though States have ownership of onshore resources under the Constitution, the GST distribution is used to balance out the differences between the States in their capacities to generate royalties. The CGC does this by calculating the value of production in each State (the tax base) and applying the average royalty rate, across seven mineral groups (iron ore, coal, gold, onshore oil and gas, copper, bauxite and nickel), plus an eighth residual category. The total is then redistributed across States on a per-capita basis.

Figure 4.2 State shares of value of mineral production, 2015-16<sup>a</sup>



<sup>a</sup> The share for 'Other minerals' includes the share for onshore oil and gas, which the CGC does not separately disclose for confidentiality reasons. 'Other States' comprise Victoria, Tasmania and the ACT.

Source: Productivity Commission estimates based on data provided by the CGC.

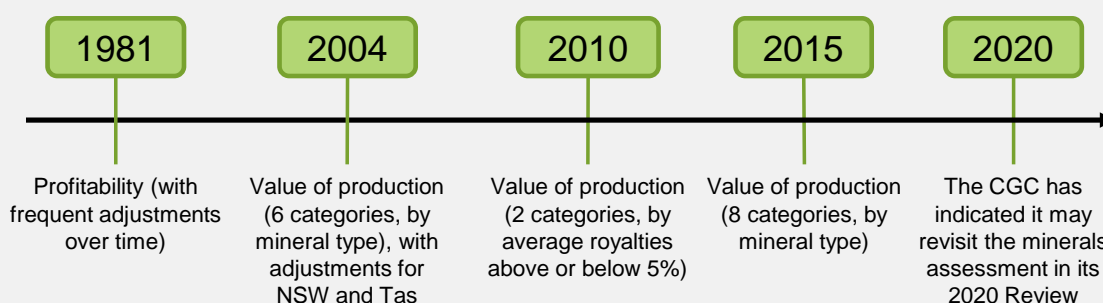
This is similar to the method used to equalise most other categories of State taxes (section 4.1). However, HFE combined with the concentration of known resources in a few States may be distorting State royalty policies or incentives to develop resources.

## Does HFE distort how States set royalty rates?

Some inquiry participants argued that the way mineral and energy royalties are assessed acts as a disincentive for States to set royalty rates in an efficient way. This has been a long-running complaint which has persisted despite frequent changes in the CGC's methodology over the years (box 4.6).

### Box 4.6 The ever-evolving mineral royalty assessment

The methodology the CGC applies in its mineral royalty assessment has changed frequently over the years, with the level of complexity waxing and waning. The timeline below indicates changes to the measure of revenue-raising capacity, including a major change from profitability to production values in 2004.



Amidst all this change, one constant has been the difficulty of disentangling the impact of State policy from underlying revenue-raising capacity. This is a high on impossible task, given the high concentration of activity in Western Australia, Queensland and New South Wales, which means that each of these States can have a disproportionate influence on national average rates and total production for specific minerals.

The prior assessment approach in place from 2010 to 2015, based on aggregating royalties into two categories (high and low rate), was heavily criticised for being sensitive to a single State's policy changes. The CGC adopted the approach just after Western Australia had negotiated to remove concessions on iron ore royalties for some producers, which would have led to iron ore fines moving from the low to the high royalty category. This re-categorisation would have seen Western Australia lose up to three times as much in GST payments as it gained in additional own-source revenue — a much larger GST effect than the State government had originally estimated (WA Government, sub. 15, p. 69). This specific outcome was a major focus of the 2012 GST Distribution Review, as was the incentive for States to raise their royalty rates in anticipation of these being rebated under a future national profit-based mining tax. Ultimately, the Commonwealth Treasurer directed the CGC to adjust its assessments from 2011 to 2014 to reduce the fiscal impact on Western Australia.

The current mineral-by-mineral methodology, adopted in 2015, avoids the problem of a mineral moving between categories but could still impact States' incentives. It gives States with a high share of production for a particular mineral an outsized influence on the national average. As a result, a change in royalty rate can still be accompanied by a substantial change in GST payments (such that the State retains only its population share of any increase in revenue, and bears only its population share of any decrease in revenue).

Source: Brumby, Carter and Greiner (2012a); CGC (2015c, p. 9, 2017i, p. 7).

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In particular, the methodology can give States an incentive to keep royalty rates low. The WA Government (sub. 15, p. 43) has estimated that if it raised royalty rates on iron ore or nickel, it would lose about 88 per cent of the additional revenues to other States (and 60 per cent in the case of gold). It has also been suggested that HFE is likely to be one of many factors driving the under-taxation of mineral rents by Australian States (Petchey 2011, p. 18).

The GST consequences of an increase in royalty rates have attracted public attention in Western Australia over the past year, with State politicians acknowledging that much of the increase would be redistributed to other States through HFE (McKinnon 2017; O'Connor 2016). Industry groups have lobbied against royalty increases, with some producing detailed estimates of the GST impacts as part of their arguments (CCIWA 2017; MCA 2016).

The methodology could also give States an incentive to extract rents through other means. For example, States could require mining companies to provide infrastructure and services directly to remote communities in exchange for paying lower royalties (Ergas and Pincus 2011, p. 8; Pincus 2011, p. 17). Alternatively, a State might facilitate industry development by providing royalty relief rather than direct assistance — for example, the WA Government (sub. 15, p. 72) argued that Queensland recently considered giving a ‘royalty holiday’ to a proposed coal mine, which would have resulted in increased GST payments that would offset 40 per cent of the foregone royalty revenue. Such incentives to ‘game’ the system could be reinforced by under-equalisation of some expenditures (discussed below), because royalty relief would mean that a State loses less revenue to other jurisdictions while bearing fewer unequalised costs.

Further, because equalisation is based only on production values, it could discourage States from designing their royalty regimes to more closely target economic rents, such as by using profit-based taxes (as in the Northern Territory, sub. 51, p. 19) or by providing deductions relating to mine profitability, exploration costs and/or required rates of return (Garnaut and FitzGerald 2002, p. 169). This is because such features would tend to reduce actual revenues below the level the CGC assesses a State to have based on production values.

In sum, there is potential for Australia’s HFE system to distort State royalty policies — it is not policy neutral. While there is little direct evidence that GST effects have influenced past royalty policy decisions, there are likely to be strong incentive effects at the margin, especially in the context of a mining boom.

## **Does HFE discourage resource development?**

Several participants strongly criticised the HFE system as a major disincentive to States developing their mineral and energy resources (box 4.7). This is because any State that sees an increase in production levels will lose GST payments, such that it only retains its population share of the increased royalties (calculated at the average rate). These are tax base effects, and arise regardless of how average rates are determined (section 4.1).

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#### Box 4.7      **HFE and resource development: what participants say**

The WA Government and other participants argued that the way royalties are assessed discourages resource development:

Risk averse development is encouraged, as risky successes are taxed by HFE, but risky failures are not subsidised by HFE. This can also mean a focus on shorter-term prospects, or reliance on large private firms to lead development initiatives who do not have an interest in establishing infrastructure to facilitate other entrants into the industry or broader economic activity. (WA Government, sub. 15, p. 46)

The system's treatment of resources revenue ... dulls the incentives for States to stimulate development of their resource endowment. Over time, this is likely to result in less investment in the resources sector than would otherwise be the case. (BHP, sub. 42, p. 1)

Under the current system, mining revenue is assessed mineral by mineral. Given the dominance of Western Australia and Queensland in iron ore and coal respectively, the policy of one State effectively becomes the policy average for HFE purposes, which in turn can create problems for the policy neutrality principle. (Queensland Government, sub. 32, p. 9)

Other participants argued that HFE is not a core consideration when governments set policies in relation to minerals and energy:

No government would expect to be returned to office, nor opposition expect to win government, if it did not actively propose and implement policies which are designed to increase economic development. (Tasmanian Government, sub. 28, p. 20)

The South Australian Government has actively pursued expansion of mining through investments in geological mapping and creating regulatory certainty — even though additional royalties would be shared with other states through HFE. (SA Government, sub. 25, p. 5)

Critics of the current HFE system have claimed that it acts as a disincentive for State governments to pursue policies which are favourable to mining development and that this can have the effect of deterring otherwise productive investments. However, international comparisons of the favourability of jurisdictional mining prospects do not support this contention. (ACT Government, sub. 49, p. 32)

Some participants argued that the HFE system perversely encourages States to limit mineral or energy extraction:

The approach to HFE adopted by [the CGC] only considers actual production of resources, ignoring the revenue potential of resources blocked by policy. This is not consistent with the policy-agnostic approach to HFE demonstrated in relation to other areas of state revenue ... (CCIWA, sub. 11, p. 6)

The problem for the pro-active states is that as soon as the royalty revenues start to flow, their GST receipts start to fall. Meanwhile, for the obstructionist states, their share of GST distributions starts to rise. The policy signal heard in state capitals is unmistakable. State Governments can impose moratoria on new gas development, ban uranium mining, close brown coal generation and be rewarded with windfall gains for their budgets ... (MCA, sub. 48, p. 23)

Others warned that penalising States for not extracting a resource would be fraught with danger:

Proposals for financial 'penalties' through the GST for states that have a ban on onshore unconventional gas ... would undermine state accountabilities to their constituents, and may reduce the capacity for sovereign state governments to balance potential economic gains of extracting non-renewable natural resources against other economic and policy considerations. (Victorian Government, sub. 53, p. i)

Seeking to penalise states that choose not to adopt a particular extraction method, due to environmental, economic, cultural or social concerns of their constituents, would open up all revenue sources to scrutiny regarding whether or not states are fully exploiting all options to broaden their revenue bases. (NT Government, sub. 51, p. 24)

Withholding GST from the states to force them to allow unsustainable development of unconventional gas mining will have perverse economic and environmental impacts on Australia. (Lock the Gate Alliance, sub. 20, p. 2)

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State governments generally have a greater influence on their mining revenue base than on the size of other tax bases (Brumby, Carter and Greiner 2012a, p. 107). Extraction activity can be influenced, to some degree, by a wide range of policies relating to geological surveying, exploration licensing, environmental management, and the provision of economic and social infrastructure (MCA, sub. 34, p. 3; Garnaut and FitzGerald 2002, p. 169). However, the method used to assess royalty revenues does not take account of past or current policy efforts.

As a result, State governments may be discouraged from developing or approving (contentious) mining or other industry activity because they would bear the full political cost but retain only part of the revenue benefits after equalisation (Ergas and Pincus 2011, p. 8; Garnaut and FitzGerald 2002, p. 9). The WA Government (sub. 15, p. 41) argued that equalisation can discourage State efforts to develop mining and reduce the funds available to offset risks to the community or to invest in infrastructure that would grow the national economy. It specifically pointed to the assistance it provided to support development of the North West Shelf gas project in the 1970s and 1980s, which it has previously argued ‘may not have gone ahead if the [future] impact of fiscal equalisation had been fully appreciated at the time’ (WA Government 2011b, p. 27).

### Equalisation of industry development expenses

Disincentives to develop resources may be reinforced by incomplete equalisation of the expenses States incur to facilitate development — that is, where the expenses are not shared with other States to the same extent as the revenues. Because HFE is currently premised on average State policy, an individual State’s industry development expenses are only shared among other States through equalisation to the extent they align with the CGC’s expenditure categories and disability factors (most of which are agnostic to specific industry sectors). While this is true for all industry sectors, it has been especially contentious for mining, given the scale of upfront investment that often accompanies new development.

The WA Government (sub. 15, p. 60) argued that the CGC does not adequately recognise its expenditures on economic development, which compounds the disincentive for States to develop mining activity. It has also argued that the high costs it incurs to support mining activity in remote areas, including by providing infrastructure and services (such as ports and schools), are not fully recognised (WA Government 2013, pp. 34–35).

This view was not shared by all States. Some noted that the CGC already takes account of remoteness and other mining-related factors in assessing service delivery costs. Moreover, some States argued that the bulk of investment in mining infrastructure has been (and should be) undertaken by the private sector (SA Government 2012, p. 20), or that the nature of the underlying resources — coupled with global commodity prices — is a much bigger driver of mining activity than State government actions (ACT Government, sub. 49, p. 5; NT Government, sub. 51, p. 25).

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The equalisation of industry development costs has been a long-running point of contention. It relates to specific details of the CGC's methodology and the availability of reliable data, as well as subjectivity in defining which activities constitute average expenditure policy across States. The 2012 GST Distribution Review dealt extensively with the equalisation of industry development costs, and found that Western Australia's unrecognised expenditures amounted to at most \$120 million in 2010-11, significantly less than that State's own estimate of \$1.6 billion (Brumby, Carter and Greiner 2012a, p. 119). The CGC's 2015 methodology review also examined these costs and, in response, introduced two new expenditure assessments (CGC 2015d, p. 44).

Earlier reviews have considered these matters in detail, and changes have already been made to the CGC's methodology. The Productivity Commission has not been presented with new convincing evidence that changes to the treatment of mining-related expenditures are required, and thus this matter is not being further pursued in this inquiry.

## Restrictions on mineral and energy extraction

Some States have imposed wide-scale restrictions on mineral and energy extraction (box 4.8). Where a State has banned extraction of a resource, the CGC assesses it to have zero capacity to raise royalty revenue (CGC 2017i, p. 6). This treatment may distort States' incentives because policy decisions to *restrict* extraction are not treated symmetrically with policy decisions to *facilitate* extraction (for example, a State with 10 per cent of the population that allows extraction of a specific mineral would see most of the revenue equalised away to other States, whereas if it were to ban extraction it would effectively receive a share of other States' royalties from that mineral).

Several participants argued that the HFE system effectively rewards States for restricting resource extraction (box 4.7). Because GST shares do not change, these States would continue to receive a share of other States' royalties through HFE. For example, the WA Government (sub. 15, p. 89) argued that NSW and Victoria — which have banned coal-seam gas exploration — will benefit from the equalisation of Queensland's gas royalties. This could give States a financial incentive to accede to community pressure to introduce restrictions. Some participants implied that equalisation should be based on an assessment of each State's underlying reserves or its potential level of production.

Other participants argued that restrictions are driven entirely by environmental, social and/or scientific considerations, rather than by HFE (box 4.7). Indeed, in some cases the Commonwealth has imposed restrictions on States on environmental grounds, even where a State government has sought development (such as the proposed Franklin Dam in Tasmania in the early 1980s). Participants also noted that States benefit from industry development in terms of higher employment and incomes, separate to any royalty payments (for example, SA Government, sub. 25, p. 5). In any case, participants argued that an assessment based on potential production would be unworkable, given incomplete data and the control States have over exploration activity (CCIWA, sub. 11, p. 6). The Productivity Commission is not aware of any other country that uses such an approach as part of fiscal equalisation.

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#### **Box 4.8 State restrictions on mineral and energy extraction**

Most States have implemented bans or moratoria on mineral and energy extraction:

- NSW, Victoria, Queensland and Western Australia ban uranium mining.
- Victoria has a moratorium on onshore conventional gas mining.
- All States except Queensland, South Australia and the ACT have some kind of moratorium or ban on coal-seam gas extraction:
  - NSW has a freeze on coal-seam gas exploration and development
  - Victoria bans onshore exploration for unconventional gas and hydraulic fracturing
  - Western Australia and the Northern Territory have moratoria on hydraulic fracturing (pending scientific review), and Western Australia has banned hydraulic fracturing in the south-west of the State
  - Tasmania has a ban on hydraulic fracturing.
- Western Australia bans coal mining in an area around the Margaret River township.

*Source:* CGC (2017i, pp. 4–5); Dawson and Johnston (2017).

There is no direct evidence that GST effects have influenced State policy decisions in relation to minerals and energy. In some (but not all) cases, the amount of reserves subject to restriction could be small — for example, the Victorian Government (sub. 53, p. 6) has stated that ‘there are no proved and probable onshore gas reserves in Victoria’, though the extent of extractable unconventional gas reserves in Victoria is not well known (Ross and Darby 2013, p. 12). The CGC has examined the impact of using measures of known reserves to assess coal-seam gas and uranium royalties, but found that the impact on the GST relativities would not be material in either case (CGC 2017f, pp. 27–28). It intends to revisit its methodology in the course of its 2020 review.

Nevertheless, the distortions arising from the treatment of resource restrictions could have large financial implications for some States, especially over the long term. Although the policy counterfactual is unobservable, the fiscal incentives that arise through HFE are likely to distort policy decisions at the margin.

These distortions may be amplified by inconsistencies in how the CGC treats different revenue and expenditure categories. A significant portion of State own-source revenues are not differentially assessed, with wide variation across States: from about a quarter for Western Australia up to almost 60 per cent for the ACT (chapter 3). While this is often due to difficulty in defining average policy or obtaining suitable data, the result is that States may have a stronger incentive to rely on taxes that the CGC does not differentially assess (such as gambling, user charges, fines and licensing fees) rather than those which it does (such as mining royalties and land taxes).

Several participants compared the treatment of mining royalties with gambling revenues to highlight the disparate treatment (by the CGC) and consequential distortions: States have a greater incentive to increase gambling activity (because they retain all of the revenue) than

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mining production (because they lose most of the revenue to equalisation) (box 4.9). This incentive does not arise from the gambling assessment itself (which is policy neutral) or the equalisation of other revenues *per se*, but from inconsistencies in how the CGC assesses different categories of revenues (some on an EPC basis, such as gambling, and others on a differential basis, such as mining).

#### **Box 4.9 Case study: gambling revenues in the GST formula**

Gambling has been a contentious part of the HFE formula, in part because State governments are responsible for both taxing and regulating gambling (as well as managing the costs it places on individuals and communities). All States licence and tax gambling activities to some degree, but their approaches vary widely — for example, tax rates and deductions on wagering vary across States, as does the structure of taxes on gaming machines (pokies). Some States (such as New South Wales and Queensland) licence large numbers of gaming machines, whereas Western Australia has banned these machines outside its sole casino.

Gambling revenues are heavily influenced by State policy. The CGC currently assesses these revenues on an ‘equal per capita’ basis, meaning that it assumes each State has the same per-capita capacity to raise revenue. As a result, the revenues have no impact on GST relativities.

The CGC previously used a measure of household disposable income to guide the redistribution of gambling revenue, but ceased doing so because of evidence that the relationship between income and gambling activity within a State had weakened (potentially due to the rise in online gambling). Since 2010, it has been unable to find sufficient evidence to construct a reliable and material indicator of gambling revenue capacity that is not under the direct influence of State policy.

Some inquiry participants argued that the gambling assessment effectively penalises States that restrict gambling and rewards those that allow it, and thus gives States an incentive to over-rely on socially harmful gambling activity (WA Government, sub. 15, p. 56; Parliamentary Liberal Party of WA, sub. 22, p. 3; Parliamentary National Party of WA, sub. 43, p. 9).

*Source:* CGC (2015b, pp. 8–9, 2015e, pp. 122–123); QGSO (2016).

These inconsistencies in the HFE system will sometimes have large revenue consequences for State governments. In extreme circumstances, they will compromise the trade-offs that States make between fiscal and other policy objectives. Such circumstances are likely to arise in mineral and energy policy, given the highly uneven distribution of resources across States combined with the volatile nature of royalty revenues. Significant revenue consequences arising from HFE can discourage States from developing resources and give them an incentive to set the rate and timing of royalty changes in ways that are not efficient.

Such incentives are not a desirable feature of the HFE system, but to some extent may be an inevitable consequence of pursuing full and comprehensive equalisation with the variable quality of available data. The incentives also point to an inherent tension in the HFE process between equity (providing all States with the same fiscal capacity) and efficiency (not encouraging or discouraging particular State policies). There is no obvious and objective way to lift this tension and provide outcomes that are both fully equitable and completely policy neutral — especially in the case of mining (chapter 7).



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Making adjustments to the HFE system specifically to *add* incentives for policies that are deemed to be desirable would be an intentional breach of policy neutrality and State autonomy, as well as a source of additional complexity. To the extent that there are other obstacles to State development of resources (such as cumbersome or ineffective development approval processes), these should be addressed directly rather than through HFE.

DRAFT FINDING 4.3

The potential for HFE to distort State policy is pronounced for mineral and energy resources. While there is no direct evidence that GST effects have influenced specific policy decisions, the incentive effects are large and have the potential to undermine State policy neutrality over time.

However, making adjustments to the HFE system specifically to add incentives for resource exploration policies that are deemed to be desirable would be an intentional breach of policy neutrality and State autonomy; be a source of additional complexity; and come at the expense of equity.



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## 5 How does HFE affect State budget management?

### Key points

- Australia's HFE system provides States with a substantial share of their overall revenue, and the implementation of this system can have a significant impact on State's budget management.
- The current implementation of HFE (via the GST distribution) blurs accountability for State budget outcomes as it addresses both vertical and horizontal equalisation. This effect on accountability is exacerbated by overlap in funding responsibilities between the Commonwealth and States and the complexity of Australia's HFE system.
- The lack of contemporaneity of Australia's HFE system has mixed impacts on State budget management.
  - The three-year assessment period and two-year lag limit the responsiveness of GST payments to changes in States' budget positions. This can exacerbate the fiscal impact of economic cycles when States experience large economic shocks.
  - But introducing a shorter assessment period would not offer unequivocal improvements, and available options to reduce the lag would introduce additional complexity, volatility and the potential for unintended consequences.
  - The three-year assessment period reduces the volatility of GST payments. Compared to other sources of State government revenue, GST payments are relatively stable. Despite this, States have experienced mixed results in budget forecasting.
- Overall, GST payments have not been the steady, growing source of revenue first envisaged — especially for Western Australia. However, this is largely a product of equalisation itself rather than a lack of contemporaneity in how HFE is enacted.
- While Western Australia is currently receiving less than it would under fully contemporaneous equalisation, it received more while mining royalties were increasing. From 2010-11 to 2015-16 growth in iron ore royalties resulted in Western Australia retaining about \$7 billion more than it would have under fully contemporaneous GST payments.

The terms of reference ask the Productivity Commission to consider the effect of Australia's system of HFE on productivity, economic growth and States' budget management. Chapter 4 examines how HFE can affect incentives regarding State government decision-making, while chapter 6 considers the influence Australia's HFE system has on interstate migration and productivity. This chapter focuses on how features of Australia's HFE system affect States' ability to manage budgets. More specifically, section 5.1 examines how HFE can alter the impact of economic fluctuations on State budget cycles, while section 5.2 looks at how the volatility of GST payments may impact on State budget planning.

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## 5.1 How does HFE affect State budget cycles?

Australia's HFE system provides States with a substantial share of their overall revenue. Over the last 16 years, GST payments as a proportion of total State revenue have ranged from an average of 18 per cent (in Western Australia) to 57 per cent (in the Northern Territory) (figure 5.1). As a result, HFE has considerable scope to influence States' budget outcomes and management.

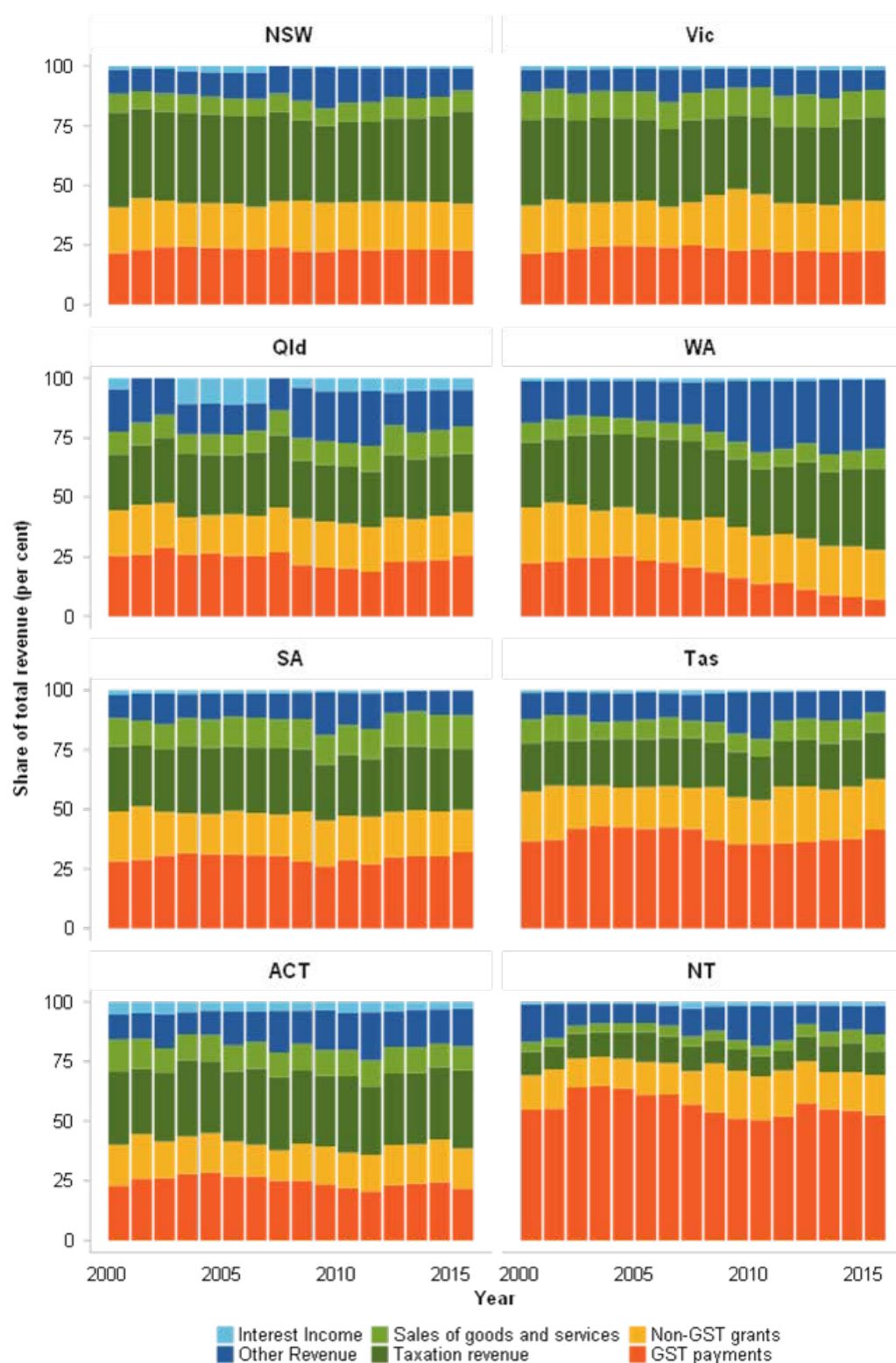
HFE can impact State budget management in several ways. In the short term, economic shocks that affect a State relative to other States have the potential to either attenuate or exacerbate a State's budget. During a downturn, more contemporaneous (timely) equalisation payments can offset declines in States' own-source revenue or increases in expenditure requirements, reducing the need for States to run budget deficits or reduce their expenditure (Smart 2004, pp. 197–198).

By contrast, less contemporaneous equalisation can exacerbate the budget cycle where State fiscal situations change abruptly and equalisation payments fail to reflect new circumstances. Less contemporaneous equalisation will nevertheless respond over the longer term to structural change in States' fiscal capacities.

Two key features of Australia's HFE system limit the contemporaneity of GST payments. First, relativities are averaged over a number of years (the assessment period). Second, there is a lag between the assessment period and the year in which relativities apply, which is the result of delays in data availability. Australia's HFE system currently involves a three-year assessment period and a two-year lag, such that equalisation payments for the 2017-18 financial year are determined by States' circumstances in the financial years 2013-14 to 2015-16.

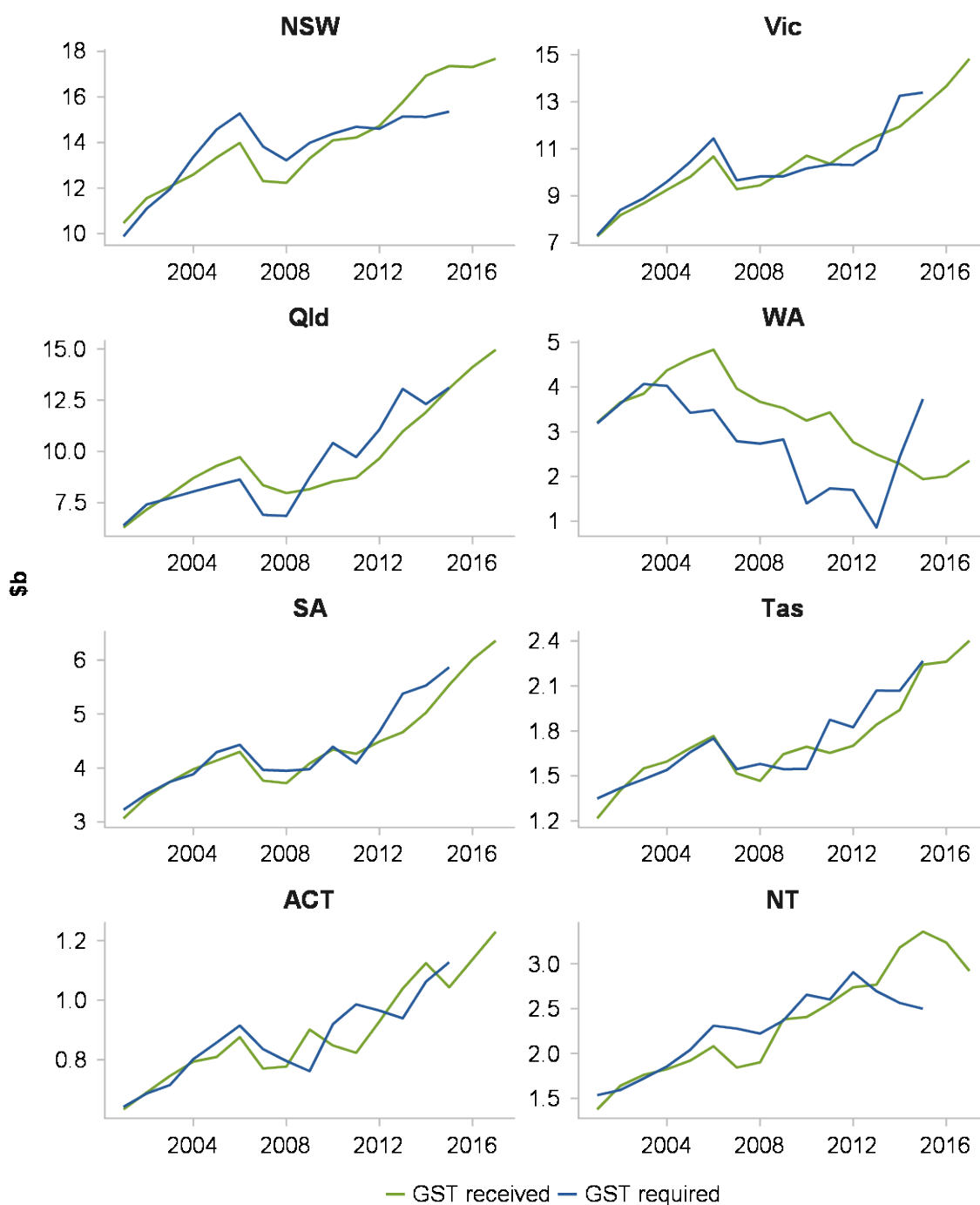
As a result, States' actual GST payments can differ substantially from their contemporaneous GST requirements — the payments they would receive if relativities reflected their circumstances in the application year. As illustrated in figure 5.2, for the 2015-16 application year (the latest year for which data are available to calculate GST requirements), all States but New South Wales and the Northern Territory received GST payments below their contemporaneous requirements.

Figure 5.1 State government sources of revenue



Source: Productivity Commission estimates based on ABS (*Government Finance Statistics, Australia, 2015-16*, Cat. no. 5512.0) and Treasury (pers. comm., 20 July 2017).

Figure 5.2 **GST payments and requirements<sup>a</sup>**



<sup>a</sup> 'GST payments' represent the actual amount of funds allocated to States. 'GST requirements' represent the payments that States would have received had the CGC access to data on States' circumstances and populations in the application year. Calculating this figure involves using annual relativity calculations included in later assessments. For example, GST required in 2015 is determined by using the calculation of the 2015-16 annual relativity from the 2017 update.

Source: CGC (pers. comm., 10 July 2017).

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In submissions to this inquiry, several States outlined the impacts of limited contemporaneity on State budget management. The Queensland Government (sub. 32, p. 10), for example, noted that limited contemporaneity can increase budget instability. The WA Government (sub. 15, p. 94) argued that limited contemporaneity can lead to more extreme fiscal policies as lags ‘hide’ the GST consequences of increased State revenues, leading States to apply lower tax rates than they would otherwise. The WA Government argued that this contributed to its lower land tax rates and reduced electricity prices prior to 2008-09. (A larger driver of Western Australia’s current budget position, however, was its increased recurrent expenditure per capita, which rose 94 per cent in nominal terms from 2000 to 2015, compared to 80 per cent for the rest of Australia (ABS 2017b).)

The WA Government (sub. 15, p. 93) further noted that Australia’s combination of a three-year assessment period and two-year lag mean that changes in economic conditions in the current year impact GST payments beyond the State’s four-year budget forward estimates, thereby reducing its propensity to incorporate changes in GST payments into its budget planning. Other States noted that limited contemporaneity promotes stability of GST payments and provides States with more certainty when managing their budgets (SA Government, sub. 25, p. 16; Tasmanian Government, sub. 28, p. 28).

The potential for HFE to exacerbate the impact of economic cycles on State budgets has been brought to the fore in recent years in Western Australia (box 5.1). In this instance, the three-year assessment period and two-year lag have resulted in declining GST relativities coinciding with falls in royalty revenue, thereby exacerbating the effects of the economic cycle on Western Australia’s budget. For States with less extreme changes in fiscal capacity, limited contemporaneity has been less problematic.

Contemporaneity can be increased by reducing the length of the assessment period or addressing the lag in data availability. It is unlikely that reducing the length of the assessment period would systematically reduce the intensifying effect HFE can have on State budget cycles. Figure 5.3 shows how States’ net operating balances would have differed had GST payments been calculated using a one-year assessment period. It suggests that a shorter assessment period could have led to larger extremes in operating balances in some cases (for example, during Victoria’s, South Australia’s and Western Australia’s most recent operating balance minimums) and smaller declines in others (most notably, Queensland’s most recent minimum). Another option would be to reduce the lag between the assessment period and application year.

## Box 5.1 Western Australia's budget position

After 10 years of strong growth, Western Australia's royalty revenue peaked in 2013-14 and declined substantially thereafter. Due to the three-year assessment period and two-year lag, Western Australia's GST payments have remained heavily influenced by previously high royalty revenues, contributing to pressure on the State's budget. The WA Government argued that in this instance fiscal equalisation exacerbated the effect of the downturn on the State's finances.

Western Australia's falling GST shares were nonetheless predicted. For example, in its 2011-12 budget, the State projected a fall in its relativity from 0.72 to 0.33 by 2014-15 — its actual relativity in 2014-15 was 0.38 (WA Government 2011a). In later years, however, the WA Government based its spending decisions on the assumption that a 0.75 floor would be introduced. The State Treasurer noted in his budget speech:

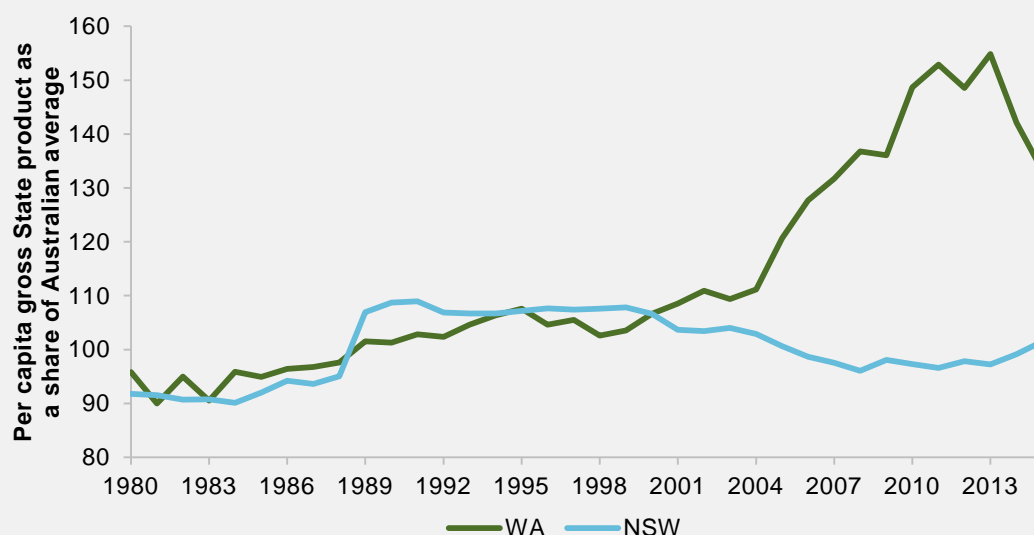
What we reasonably anticipate is that in 2013-14 the CGC will have brought in a new GST system. We expect it will produce a floor of around 75 per cent of our population share of the GST. Therefore we expect revenue of \$1.8 billion in 2013-14 and \$2.5 billion in 2014-15. These amounts will allow for reduced borrowings and will be used to progressively reduce existing debt to less than \$18 billion while maintaining strong infrastructure spending. (Porter 2011, p. 3)

Many have attributed Western Australia's current fiscal position to continued high spending, despite falling GST shares. Eslake (2017b), for example, argued:

Despite the sharp decline in its share of GST revenues, the WA government's total revenue per head of population in 2015-16 was just A\$67 (or 0.7%) below the average for all states and territories. By contrast, by 2015-16 the WA government was spending over A\$1000 (or 10.5%) more per head of population on 'operating expenses', than the average of all states and territories ...

WA's present fiscal woes are the result not of a flawed system of distributing revenue from the GST among the states and territories, but rather of its inability to control its own spending.

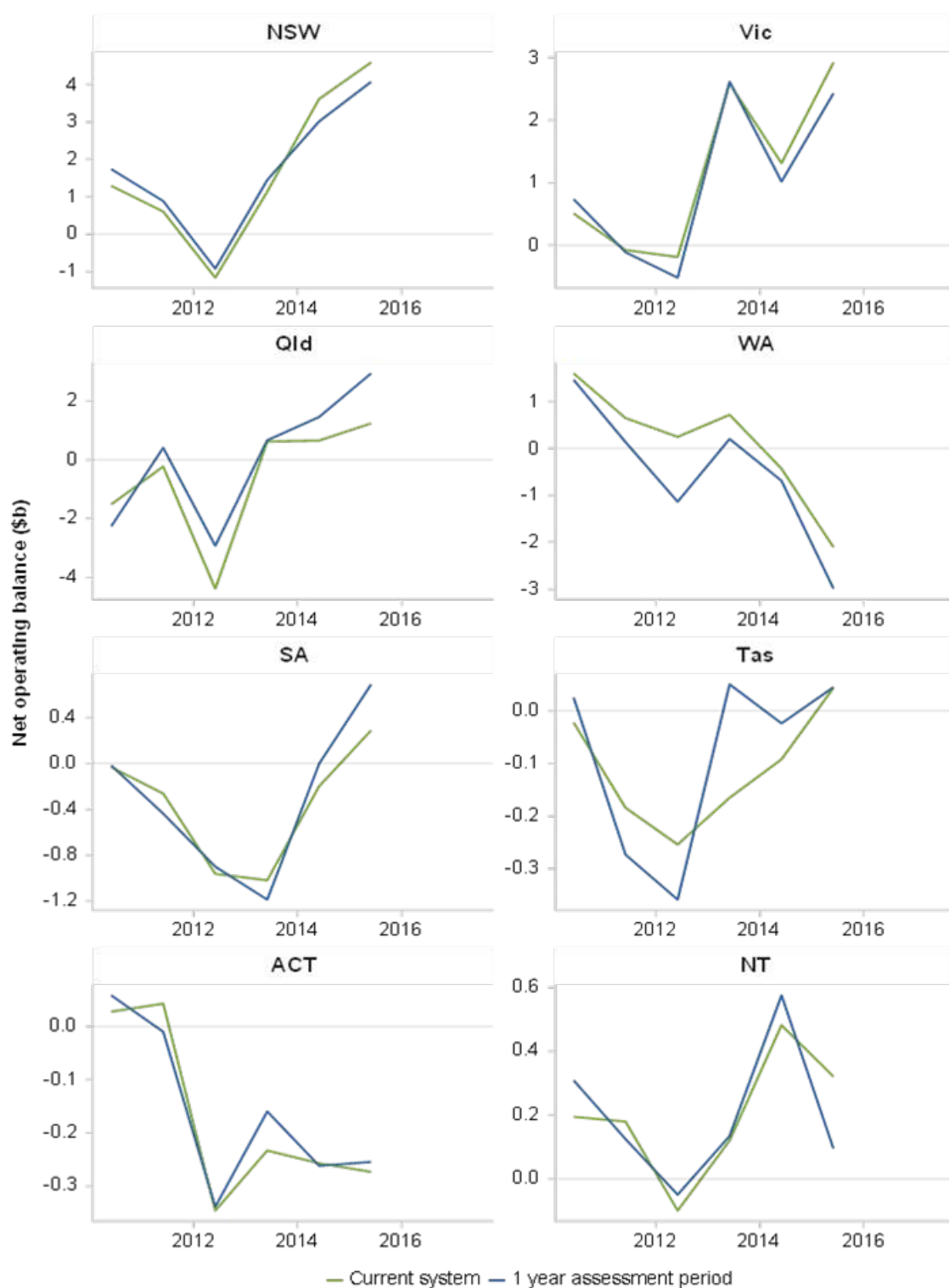
Moreover, Eslake (2017a) has noted that while the level of Western Australia's relativity is unprecedented, so is its relative growth in per capita gross state product (see chart below).



While Western Australia is currently receiving less than it would under fully contemporaneous equalisation, it received more while mining royalties were increasing. The CGC has estimated that from 2010-11 to 2015-16 growth in iron ore royalties resulted in Western Australia retaining about \$7 billion more than it would have under fully contemporaneous GST payments (CGC 2015d).



Figure 5.3 Net operating balance and assessment period



Sources: Productivity Commission estimates based on ABS (*Government Finance Statistics, Australia, 2015-16*, Cat. no. 5512.0) and CGC (pers. comm., 10 July 2017).

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## Is reducing the lag feasible?

Substantial reductions in the lag between the assessment period and the application year would require the CGC to either forecast or project States' circumstances up to the application year. While the potential benefits of increased contemporaneity are clear, the use of forecasts and projections would introduce several complications.

First, forecast and projection approaches are likely to produce inaccurate relativities when States' economic circumstances change course, as has occurred recently in Western Australia. The CGC noted:

It is not clear that estimating financial data will reduce gaps if the cause is a sudden change in State fiscal capacities. It is unlikely forecasts or projections could reliably predict turning points, particularly for the more volatile revenue streams (such as property duties and royalties) or payments for specific purposes (PSPs). (2017g, p. 8)

Inaccuracies in the calculation of relativities due to using forecasts or projections would likely need to be corrected in later years. These corrections could be large, introducing additional volatility to GST payments and increasing the complexity of the HFE system (Victorian Government, sub. 53, p. 10; NT Government, sub. 51, p. 27; Queensland Government, sub. 32, p. 13; Tasmanian Government, sub 28, p. 26). Large corrections could also undermine contemporaneity in future years.

An additional issue introduced by forecast and projection approaches is the increased degree of judgment required by the CGC, as it would be required to develop forecast and projection methods (Tasmanian Government, sub. 28, p. 26). Using forecasts produced by States, on the other hand, could be difficult due to inconsistency in methods and a lack of comparability across States (Queensland Government, sub. 32, p. 13). Moreover, relying on States' forecasts could lead to unintended consequences, as changes in States' forecasting techniques would have the potential to affect GST payments (Victorian Government, sub. 53, p. 10).

### DRAFT FINDING 5.1

Features of Australia's HFE system detract from its contemporaneity. While this works to smooth out changes in GST payments, it can exacerbate the fiscal impact of economic cycles when States experience large economic shocks. Such a situation has occurred in Western Australia in recent years.

However, offsetting cyclical factors is not the primary objective of HFE, and alternative approaches do not offer unequivocal improvements. Reducing the length of the assessment period would have mixed impacts across States, and reducing the lag due to delayed data availability would introduce additional scope for dispute, volatility and the potential for unintended consequences.

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## 5.2 How does the HFE system affect budget planning?

Volatile equalisation payments can contribute to uncertainty in budgetary processes. Several States stressed the importance of stable and predictable equalisation payments (for example, NT Government, sub. 51, p. 27; ACT Government, sub. 49, p. 34; SA Government, sub. 25, p. 16). The Victorian Government (sub. 53, p. 10) argued that volatile revenues can force State Treasuries to allocate larger contingencies and can undermine confidence in planned investments, distorting resource allocation. The Queensland Government (sub. 32, p. 10) suggested that volatile revenues challenge States' ability to plan for the sustainable provision of services. Most States — with the exception of Western Australia and the ACT — have advocated against changes that improve contemporaneity but increase volatility.

### What drives volatility in equalisation payments?

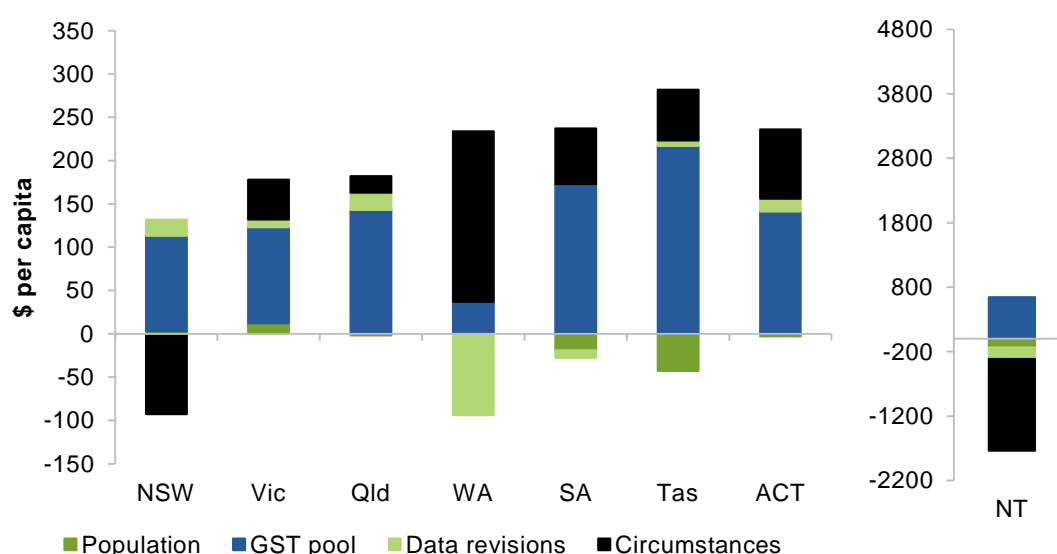
Volatility and contemporaneity are closely related — contemporaneous equalisation payments would necessarily be more volatile than those calculated over a range of years. As such, the factors that limit the contemporaneity of equalisation payments in Australia (the length of the assessment period and the lag) also reduce their volatility. Other important influences on volatility and predictability include:

- *the size of the total GST pool* — Australia's national GST collections determine the total amount of funding to be distributed to States. In most years, changes in the size of the pool have contributed more to changes in each State's GST payments than changes to populations and relativities combined. Growth in the GST pool has ranged from 14 per cent in 2002-03 down to -3 per cent in 2008-09. As such, while a State can only receive more GST payments at the expense of another State in any one year, growth in the GST pool can result in larger GST payments for all States
- *revisions to data and the CGC's methodology* — the CGC calculates annual relativities on three separate occasions for each assessment year — for example, the 2012-13 annual relativity must be calculated for the 2015-16, 2016-17 and 2017-18 relativity updates. Because the data used by the CGC are often revised following initial release, annual relativities for a given assessment year can vary materially across updates. In the 2017-18 update, data revisions changed GST payments substantially for some States, with a \$181 per capita reduction for the Northern Territory and a \$94 per capita reduction for Western Australia. These effects can be compounded by changes in the CGC's methodology, which is reviewed every five years
- *judgements regarding the exclusion of Commonwealth payments* — both the Commonwealth Treasurer and the CGC have the ability to determine whether specific Commonwealth payments are excluded from the calculation of States' relativities. While the share of Commonwealth payments excluded from the GST calculations is small (appendix B), these determinations can have significant impacts on State budgets, particularly for smaller States (Brumby, Carter and Greiner 2012a, p. 70). When payments are quarantined, relativities become less representative of the amount of funds

transferred from the Commonwealth to States, obscuring the extent to which the Commonwealth is equalising States' fiscal capacities (chapter 3).

The CGC reports the change in GST payments resulting from changes in population, GST pool, data revisions and States' circumstances (figure 5.4).

**Figure 5.4 Contributors to change in GST payments**  
2016-17 to 2017-18



Source: CGC (2017h).

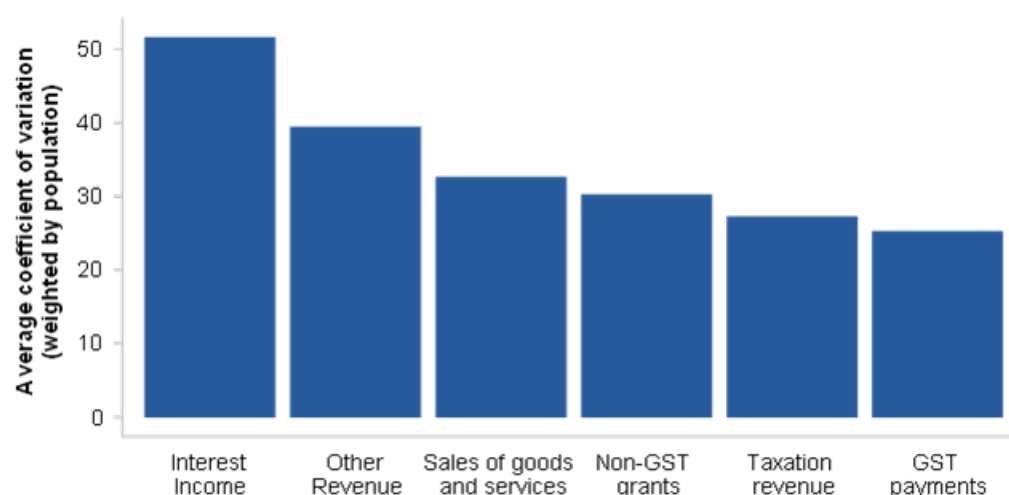
## How volatile are Australia's equalisation payments?

Compared to other sources of State government revenue, GST payments are relatively stable. Over the last 16 years, the variation in GST payments to the States from one year to the next has been smaller than for other major sources of revenue (figure 5.5).

States have reported varying degrees of success with forecasting GST payments. The ACT Government (sub. 49, p. 35), for example, described predicting future relativities for small States as an 'exercise in futility'. In a similar vein, the NSW Government (sub. 52, p. 25) noted that the complexity of the formula, combined with changes in methodology, makes predicting GST consequences of spending decisions difficult. On the other hand, the Tasmanian Government (sub. 28, p. 21) reported that its forecasts have proven to be as accurate as those for other revenue sources and in some cases more so. And the WA Government (sub. 15, p. 92) reported that its relativities can be forecast one year in advance reasonably accurately, though forecasting further out is more difficult. Indeed, States' predictions in outyears tend to be less accurate; nonetheless, significant shifts in relativities in recent years have been foreseeable — for example, the WA Government successfully

predicted the decline in its relativities, albeit overstating the extent of this decline (figure 5.6).

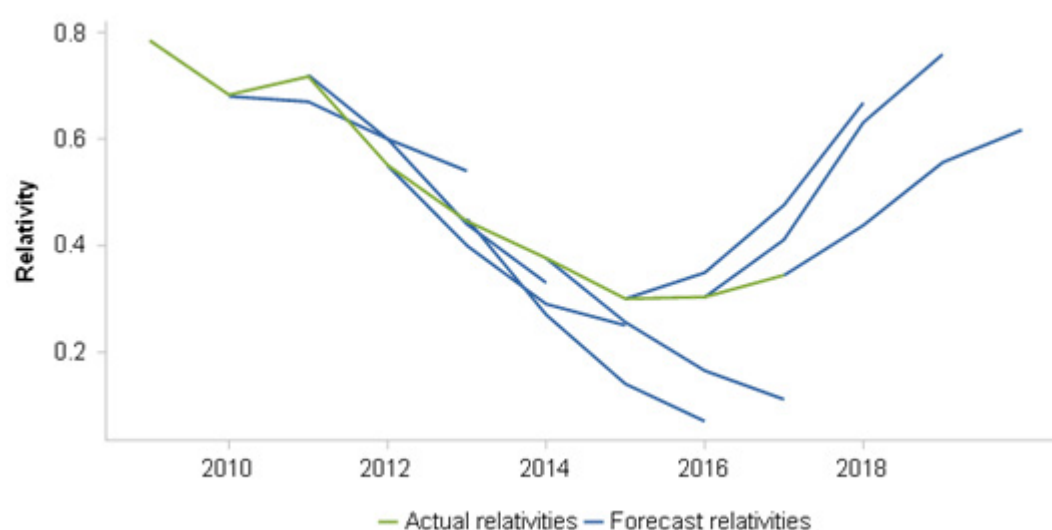
**Figure 5.5 Volatility of State revenue sources<sup>a,b,c</sup>**  
2000 to 2016



<sup>a</sup> The coefficient of variation is the standard deviation divided by the mean. <sup>b</sup> Royalty income is included in 'other revenue'. Details on revenue source classifications used in this chart are outlined in ABS (2015). <sup>c</sup> 'Current grants and subsidies' presented in the ABS Government Finance Statistics have been disaggregated into 'Non-GST grants' and 'GST payments'.

Source: Commission estimates based on ABS (*Government Finance Statistics, Australia*, 2015-16, Cat. no. 5512.0) and Commonwealth Treasury (pers. comm., 20 July 2017).

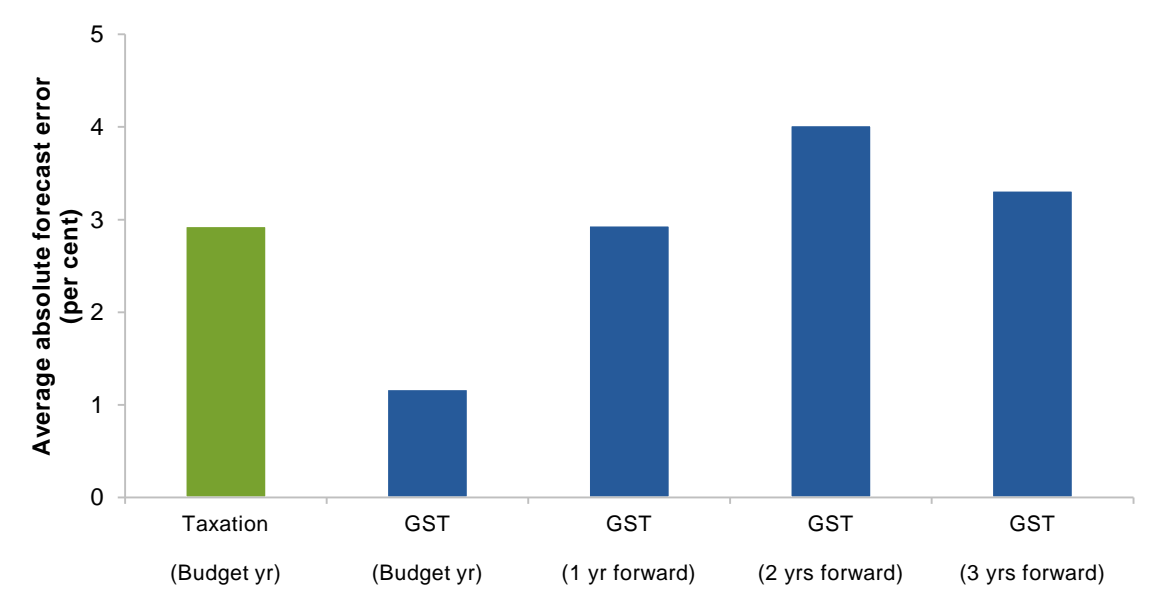
**Figure 5.6 Western Australia's performance forecasting GST relativities**



Source: WA Government budget papers (various years).

Overall, States have generally more success forecasting GST payments than taxation revenue. Excepting Western Australia (whose GST payment forecasts have been outliers and overly pessimistic) and the Northern Territory (whose forecasting performance of taxation has also been an outlier), GST forecasts one year ahead of the budget year are of comparable accuracy to taxation revenue forecasts for the budget year (figure 5.7).

**Figure 5.7 Revenue forecasting errors<sup>a,b</sup>**  
 2012-13 to 2015-16 for GST payments, 2011-12 to 2015-16 for other revenue



<sup>a</sup> Data from 2012-13 to 2015-16 have been used for calculation of GST payments forecasting error, whilst data from 2011-12 to 2015-16 have been used for other revenue sources. <sup>b</sup> Western Australia's GST payments forecasts and the Northern Territory's taxation and sales of goods and services forecasts have been removed as outliers.

Source: Productivity Commission estimates based on data provided by the Tasmanian Government (pers. comm., 18 August 2017).

**DRAFT FINDING 5.2**

GST payments are less volatile than other major sources of State government revenue. While some States have reported difficulty forecasting GST payments, others consider GST payments to be no less unpredictable than other sources of revenue.

**Fiscal equalisation and incentives for budget management**

Vertical fiscal imbalance (VFI) necessitates payments from the Commonwealth to the States to ensure that States have sufficient revenue to meet their spending obligations (chapter 3). A result of the Commonwealth's influence over State fiscal positions and the HFE system's joint role of addressing VFI and achieving horizontal equity is that responsibility for States'

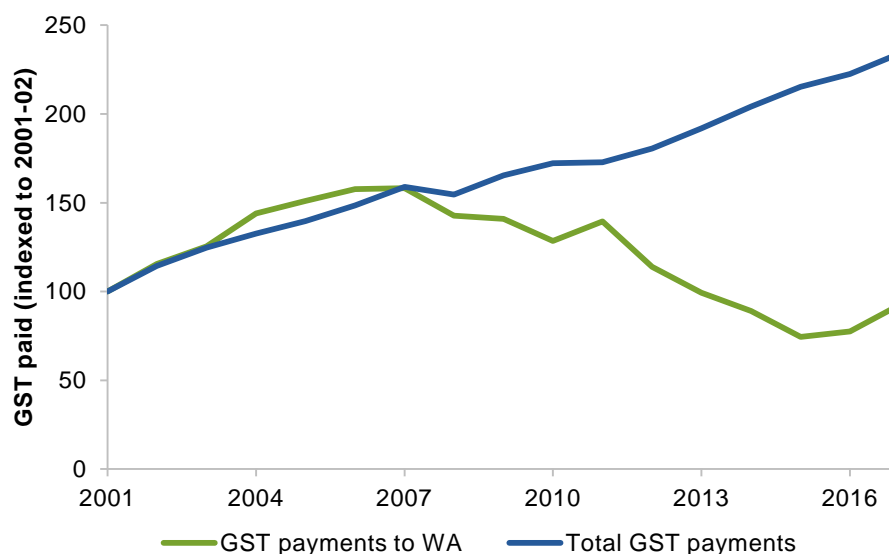
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budget positions can appear to be shared between States and the Commonwealth. This has been illustrated in recent years in Western Australia, where the State Government has attributed its worsening budget position to its declining GST share (figure 5.8). As the NSW Government argued:

The current system also inhibits, to some degree, state government being made accountable for the revenue and expenditure choices they make. This makes it difficult for citizens to hold governments to account for their revenue and expenditure choices. (sub. 52, p. 22)

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**Figure 5.8 GST payments to Western Australia and all States**  
2001-02 to 2017-18



Source: CGC (pers. comm., 10 July 2017).

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Such ambiguity regarding accountability for States' budget circumstances will persist under other approaches to addressing VFI. However, the relative complexity of Australia's HFE system likely exacerbates this. Along these lines, the Business Council of Australia argued:

Perhaps the biggest concern with complexity is it acting as a barrier to accountability – very few citizens or the journalists that inform them will be able to understand if a state is receiving a fair share of the GST, or hold the CGC to account for the judgements they must make. (sub. 47, p. 6)

As such, there are likely to be benefits from improved communication and understanding of Australia's HFE system and its objectives (chapter 9) and from longer term reform of Commonwealth-State financial relations to address elevated VFI and clearer roles and responsibilities that go beyond the Productivity Commission's terms of reference but are prerequisites for more meaningful HFE reform over time.

In summary, since the global financial crisis, GST payments have not been the steady, growing source of revenue first envisaged (chapter 3) — especially for Western Australia (figure 5.8). However, this is largely a product of equalisation itself — driven by Western Australia's unprecedented increase in revenue-raising capacity due to the mining boom — rather than a lack of contemporaneity in how HFE is enacted.





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## 6 Does HFE influence interstate migration and productivity?

### Key points

- HFE in Australia has mainly been focused on providing fiscal equity. HFE's influence on economic efficiency and national productivity remains a secondary and subsidiary concern for the Commonwealth Grants Commission.
- There are two schools of thought on how HFE bears on efficiency.
  - The most common is that fiscal equalisation can counteract distortions caused by movements of labour and capital that are fiscally induced (the 'efficiency in migration' theory).
  - An alternative is that HFE dulls economic signals for labour and capital to move to where they are most productive. That is, HFE can make it more attractive for labour and capital to remain in fiscally weaker States even though they are less productive and it is more costly to deliver government services.
- Modelling results provide no clear evidence on whether HFE enhances or reduces efficiency. Model outcomes are largely driven by assumptions of whether HFE is good or bad for efficiency, rather than having this determined by the model itself. Nonetheless, most modelling indicates that the size of HFE's impact on economic efficiency is likely to be small.
- The redistribution of revenue that arises from Australia's system of HFE is small in magnitude when compared to total government revenue for most jurisdictions. Accordingly, HFE would be expected to have little effect on decisions to relocate to another State.
- Interstate migration in Australia is low despite there being negligible barriers to movement across State borders. Labour has been found to respond to differences in work opportunities between States but not to the full extent that these opportunities are available. Movements based on differences in States' capacities to deliver services (the 'net fiscal benefits' of a State) appear far less important.
- However, the current redistribution arising from Australia's system of HFE is historically high. To the extent there are efficiency effects at the margin, these would become more pronounced in the current environment. Similarly, fiscally induced movement may become apparent if State fiscal capacities were to diverge over a sustained period.

This chapter considers the influence that Australia's HFE system has on the efficient movement of labour and capital across State borders. It is set out as follows: section 6.1 discusses the theory for and against HFE, based on the efficient migration of labour and capital; section 6.2 summarises the modelling used to evaluate the efficiency effects of HFE; and section 6.3 looks at whether HFE has influenced interstate migration decisions in Australia.

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## 6.1 HFE and efficient migration: what the theory says

Economists are divided on the effects of HFE on interstate migration and, in particular, whether it promotes or detracts from efficient migration outcomes.

Efficient migration refers to the movement of labour and capital to areas where they are most valued and most productive. In a federation that functions well, a person may decide to move interstate to enjoy higher earnings, particularly if these earnings more than offset the costs of moving.

However, a person may also decide to move if there are ‘net fiscal benefits’ from moving — such as getting better public services or paying lower taxes. For example, Queensland was able to attract a large influx of people from interstate when it abolished death duties in the mid-1970s. A State with a strong fiscal capacity could offer these sorts of net fiscal benefits to its residents, which would attract labour and capital from fiscally weaker States. This would distort migration decisions as labour and capital may no longer move to areas where they are most productive.

*Proponents* of HFE say that equalisation removes incentives for fiscal migration and so facilitates the efficient movement of labour and capital over the long term. This ‘efficiency in migration’ theory was first credited to Buchanan (1950, 1952) and expanded upon and formalised by others.<sup>6</sup> Boadway and Flatters (1982) developed a framework to show that an ‘optimal’ fiscal transfer can correct for these distortions in migration decisions by fully equalising net fiscal benefits between States. Following equalisation, each State would have the capacity to provide similar levels of services to their residents. Such equalisation would therefore also satisfy Buchanan’s ‘equal treatment of equals’ objective (discussed in chapter 2).

*Opponents* of HFE, on the other hand, point to it adding to existing distortions and further discouraging people and capital from moving to more productive areas. According to this view, the services that are funded by HFE in fiscally weaker jurisdictions can reduce incentives for labour and capital to move to where they are more productive. For example, Courchene (1984) argued that equalising transfers in Canada reduced the levels of out-migration from the Atlantic Provinces below what was optimal for the country.

Building on this, it is also argued that HFE could widen disparities between States. As noted by the OECD (2013, p. 111), ‘equalisation may in fact be self-defeating in that it slows down regional convergence’. In other words, in the absence of fiscal transfers, fiscally weaker jurisdictions would be forced to become more competitive, and would eventually overcome their fiscal disadvantages. McKinnon (1997, p. 85) argued that the economic development of the southern American States in the second half of the twentieth century resulted from low wages and more flexible labour markets. These conditions encouraged investment and

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<sup>6</sup> Buchanan and Goetz (1972); Flatters, Henderson and Mieszkowski (1974); Boadway and Flatters (1982); and Myers (1990).

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labour migration and brought with it new prosperity. From this perspective, HFE may hold back the economic growth of fiscally weaker jurisdictions.

A number of other factors can also bear on what is considered ‘efficient’ (box 6.1).

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#### **Box 6.1      Other efficiency considerations for equalisation**

##### **Agglomeration and congestion**

The effects of having more concentrated labour and capital markets can bring with it positive externalities, known as agglomeration (or ‘clustering’) effects. Agglomeration can provide economies of scale benefits through entrepreneurship, product diversity and better job matching (Krugman 1993; Romer 1986). The flipside to this is the negative diseconomies of scale costs brought about by congestion. Both effects can influence the efficient settlement pattern within a country (Boadway and Shah 2009, p. 53). If these externalities are present then HFE may in fact distort efficient labour and capital movements.

##### **Efficiency over time**

A common criticism is that HFE can constrain efficiency over time — hampering a State’s longer term growth potential. This could occur if HFE reduces incentives for a State to pursue policies that favour economic development, thereby curbing labour and capital flows to the State (Garnaut and FitzGerald 2002, p. 134; Weingast 2009, p. 283).

HFE’s potential influence on efficiency over time has only recently been considered formally in the literature. Chan and Petchey (2016, 2017) suggested that, in theory, redistributions caused by HFE may provide a disincentive for States to develop. They demonstrated that HFE may reduce a State’s incentive to save, which would lower its capital spending and output over time. This would lead to lower economic growth for a country when compared to a scenario without HFE (Chan and Petchey 2017). However, as the authors noted, these efficiency costs would need to be weighed up against the possible efficiency benefits suggested in the efficiency in migration literature, as well as equity and other concerns.

##### **Human capital development**

A contrasting view is that HFE could promote productivity by enhancing human capital. According to the Commonwealth Treasury submission to the *GST Distribution Review*, HFE could contribute to efficiency by boosting investment in health and education services in fiscally weaker States (Treasury 2011, p. 34). It pointed to the well-established positive link that education and health outcomes have with higher productivity and income.

The potential for HFE to support human capital development in fiscally weaker States could also be seen as an equity outcome. The Productivity Commission has not been asked to consider HFE’s influence on the equity of individual outcomes (beyond equity of State fiscal capacities).

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## **6.2      Modelling the efficiency effects of HFE**

There have been past attempts to quantify the efficiency effects of HFE using modelling. Most of these studies examine either the Australian or Canadian systems of equalisation.

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In Australia, these studies have primarily been conducted using computable general equilibrium modelling. Such modelling aims to examine the welfare effects of a simulated change to the HFE system for each State and for Australia as a whole.

The most comprehensive modelling of Australia's HFE system has been undertaken by Dixon, Picton and Rimmer (2002, 2005), Independent Economics (2012, 2015) and Murphy (2015, 2017). These groups disagreed on whether HFE enhances or reduces national welfare (when compared to an equal per capita distribution or some variant). However, despite these models applying different assumptions and leading to different conclusions, the overall efficiency impacts of all three models are generally found to be small. These models are described in detail in appendix D.

There are limitations in such modelling exercises. Many behavioural questions are left largely unanswered by these models. For example, HFE's influence on economic efficiency depends on how people and governments actually respond to fiscal transfers. These behaviours can drive the results, but they are not well known and are determined outside of the models. As a result, model outcomes depend largely on what underlying (often contentious) assumptions are first made about whether HFE actually improves or distorts migration decisions. For these reasons HFE's influence on efficiency remains contested. Further discussion of the modelling limitations can be found in appendix D.

As noted in chapter 1, the Productivity Commission has opted not to engage in our own modelling of the efficiency impacts of HFE. Such modelling, while helpful in exploring economic interactions and distributional effects of a policy change, has inherent limitations (mentioned above). The small and ambiguous efficiency impacts found in past modelling attempts, and the extensive work already carried out, do not make a strong case for further modelling as part of this inquiry.

## **6.3 Has HFE influenced migration decisions?**

The possible effects of HFE in influencing migration decisions was also discussed in a number of submissions to the inquiry.

Broadly speaking, inquiry participants' views on whether HFE helps or hinders the efficient movement of labour and capital largely aligns with how much GST is redistributed to or from their State. Most participants, particularly from fiscally weaker States tended to point to the role that HFE can play in preventing inefficient migration. Other participants, mostly from Western Australia, have argued that HFE reduces incentives for people to move to more productive and high growth regions (box 6.2).

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## Box 6.2 HFE's influence on efficient migration: what participants say

### Some participants argued that HFE supports efficient migration:

ACCI (sub. 40, p. 40):

... it would appear highly unlikely that labour or capital mobility would in any way be affected by the current system of HFE ... It is difficult therefore, without any firm evidence or analyses of a reasonable counterfactual, to suggest that the current system of HFE is not in the best interests of national productivity growth or that it acts as a disincentive for state growth agendas. To assume this is speculative.

Hancock (sub. 54, p. 7):

HFE supports efficient location decisions in general, and this is true under circumstances of high labour demand in a few regions ... HFE avoids the situation where individuals relocate simply to establish a share in the rents from mineral resources, a dynamic that would distort location decisions.

NT Government (sub. 51, p. 18):

... equalisation does not impede efficient labour and capital movement decisions by providing states with the capacity to provide infrastructure and services at comparable levels.

SA Government (sub. 25, p. 8):

HFE supports the efficient movement of labour across state borders as opposed to movement motivated by fiscal effects that can arise from accidental variations in the location of natural resources and variations in human resource characteristics.

Tasmanian Government (sub. 28, p. 9):

... the greater the uniformity in the net fiscal benefit across States, the more migration decisions will be influenced by employment-related factors, which leads to higher national productivity.

Victorian Government (sub. 53, p. 3):

With HFE in place, fiscally weaker states receive additional GST support, thereby allowing them to offer a comparable level of general government services to other jurisdictions. Labour and capital owners can then make migration and investment decisions based on where they can be most efficient and productive, balanced with other relocation costs. In this regard, HFE appears to be serving Australia well.

### Others disagreed, and argued that HFE discourages people from moving to more productive areas:

WA Government (sub. 15, p. 40):

... there is significant conceptual evidence to support the view that HFE in Australia, by equalising revenues from States with high performing economies, is likely to result in below optimal migration to areas of high economic opportunity.

Chamber of Minerals and Energy of Western Australia (sub. 29, p. 2):

By delivering equitable government service delivery in every state, regardless of local economy and workforce participation, the HFE policy provides no incentive for people to move to areas of economic growth or for governments to enact policies to attract investment and encourage growth. This is a key concern for Western Australia's resource sector, which is still facing short-term shortages of specialised, highly skilled labour that could potentially be eased through domestic migration.

Parliamentary Liberal Party of WA (sub. 22, p. 6):

Over the longer term there are structural issues which should not be ignored. In particular, it is important for future economic prosperity that there be mobility of capital and labour to growth industries and growth regions ... To the extent that the current GST distribution props up weaker states and declining industries it also mitigates against the mobility of capital and labour. In the same context it limits the capacity to support growth sectors through economic and social infrastructure.

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## Does Australia's system of equalisation encourage efficient migration?

Given Australia has a unique system of equalisation, it is also valid to ask if the effects of HFE on migration are particularly pronounced here.

Australia's system of equalisation is often regarded as the world's most comprehensive, equalising both revenue and expenditure capacities of State budgets and fully to the strongest State (chapter 8). The far reaching nature of the system has been raised as an efficiency concern, particularly where assessments by the Commonwealth Grants Commission (CGC) counteract economic signals for people to migrate, including differences in wages and living costs.

As discussed in chapter 4, the CGC's assessment compensates States for the added costs of delivering services to people living in high cost areas, such as remote towns or congested cities. This can also influence location decisions as it means people face reduced incentives to move to areas where service delivery is cheaper (Boadway 2004, p. 238; Garnaut and FitzGerald 2002, p. 134). Murphy (2015, 2017) said that this form of equalisation is inefficient and that people in high cost areas should pay the extra costs of delivering these services so as to signal the true cost of living in these areas. Pincus (2011, p. 15) also argued that compensating for these cost differences (if they are not also matched by productivity differences) would be inefficient and would reduce national output.

More generally, some economists have argued that HFE only supports efficient migration when equalising on source-based factors (such as mineral endowments) and demographic composition but not residence-based factors (such as productivity levels or amenity) (Albouy 2012; Murphy 2015, 2017). This is because it is efficient for people to migrate based on differences in residence-based factors across States, but not due to differences in fiscal capacity arising from source-based factors.

Despite these concerns for efficient migration, there were mixed views on whether HFE should compensate for geographic and other cost-related disadvantages (shown in chapter 4, box 4.5). According to the WA Government (which is compensated by the CGC's assessment of its higher costs of service delivery), this form of cost equalisation is an important feature of HFE, and without it, there would be differential fiscal equalisation leading to inefficient movement (sub. 15, p. 35).

### Migration could depend on other forms of equalisation

Efficient movement of labour and capital could also depend on other forms of fiscal equalisation that occur outside of Australia's HFE system. This includes the Commonwealth's own spending and tax policies and the transfers it makes directly to States (chapter 3).

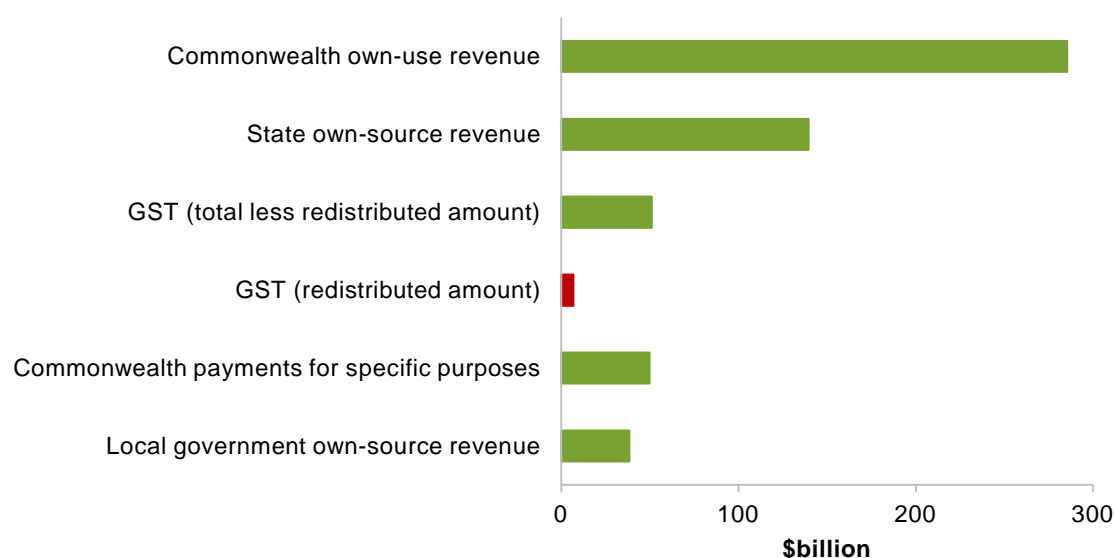
Commonwealth tax-transfer policies reallocate funds based on a person's income and spending behaviour and their need for public services. As incomes vary across States, some

States receive more in benefits than they pay in taxes, and some States receive less. For example, as people in Western Australia, the Northern Territory and the ACT earn higher incomes than those in other States, they pay much more personal income tax than they receive in social security benefits, while the reverse is true for Tasmania (shown in chapter 3, figure 3.9).

That said, the extent to which Commonwealth spending and taxes influence movement across State borders depends on whether it creates differences in net fiscal benefits. Most taxes and social security spending are applied on a nationally consistent basis. It is therefore unlikely to encourage inefficient fiscal migration.

Australian States also receive significant payments from the Commonwealth for specific purposes (figure 6.1). The majority of payments for specific purposes are also taken into account in determining the GST relativities (CGC 2015e, p. 46). Overall, these forms of redistribution are small relative to the size of government activities for most States. As such, they are unlikely to create differences in net fiscal benefits large enough to attract labour and capital.

**Figure 6.1 The relative size of the GST redistribution<sup>a,b,c</sup>**  
2015-16



<sup>a</sup> Commonwealth own-use revenue refers to total Commonwealth revenue less GST and payments for specific purposes. State and local government own-source revenues exclude grants and subsidies. <sup>b</sup> GST (redistributed amount) refers to the total amount redistributed away from an equal per capita distribution as a result of the CGC's assessment. GST (total less redistributed amount) also includes \$786 million in funding for other general revenue assistance. <sup>c</sup> Specific purpose payments are actually an expense for the Commonwealth.

Source: Productivity Commission estimates using ABS (*Government Finance Statistics, Australia, 2015-16*, Cat. no. 5512.0); Commonwealth of Australia (2016); CGC (2015d).

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## Labour and capital movements in Australia

There are many factors that drive movements of labour and capital across State borders, but most moves are for work or family reasons.<sup>7</sup>

Australia has negligible barriers to interstate factor movement. It has a common goods and services market, centralised legal, financial and policy institutions (including federal-based tax and social security systems) and an open labour market.

But while Australia does have a high level of residential mobility, it is far less common for people to move interstate. States also differ in their appeal as a destination for interstate migration. Queensland, and to a much lesser extent Western Australia, have gained more people from interstate in recent decades than they have lost to other States, while New South Wales, Victoria and South Australia have traditionally lost people from this movement.<sup>8</sup> In more recent years, more people have moved out of Western Australia and into Victoria. This change appears to be in response to the contrasting fortunes of these States, with people leaving Western Australia now that the construction phase of the mining boom has ended.

More broadly, some States have grown much faster than others over the past few decades. Population growth (which includes net interstate migration as well as natural growth and net overseas migration) has risen in Queensland, Western Australia, the Northern Territory and the ACT while, as a share of the national population, it has fallen considerably in South Australia and Tasmania (figure 6.2).

Labour supply has, to some extent, adjusted to meet changes in labour demand between States. The Productivity Commission's *Geographic Labour Mobility* study concluded that workers appear to be responding to market signals and moving to areas with better employment and income prospects. The study also noted that 'there do not appear to be significant impediments that are distorting decisions' (PC 2014a, p. 19).

Work is a primary reason for people to relocate, particularly for long-distance moves. According to *Household, Income and Labour Dynamics in Australia* survey respondents, it was the most common reason given by people in the labour force for moves of more than 30 km (PC 2014a, p. 116). However, while finding secure employment is an important reason for people to move, not everyone responds to the job opportunities that are on offer in different areas. For an individual, the signal of better income or job prospects that are available in another State (assuming they are known to them) would need to be weighed up against a raft of other considerations in deciding whether they should stay or move.

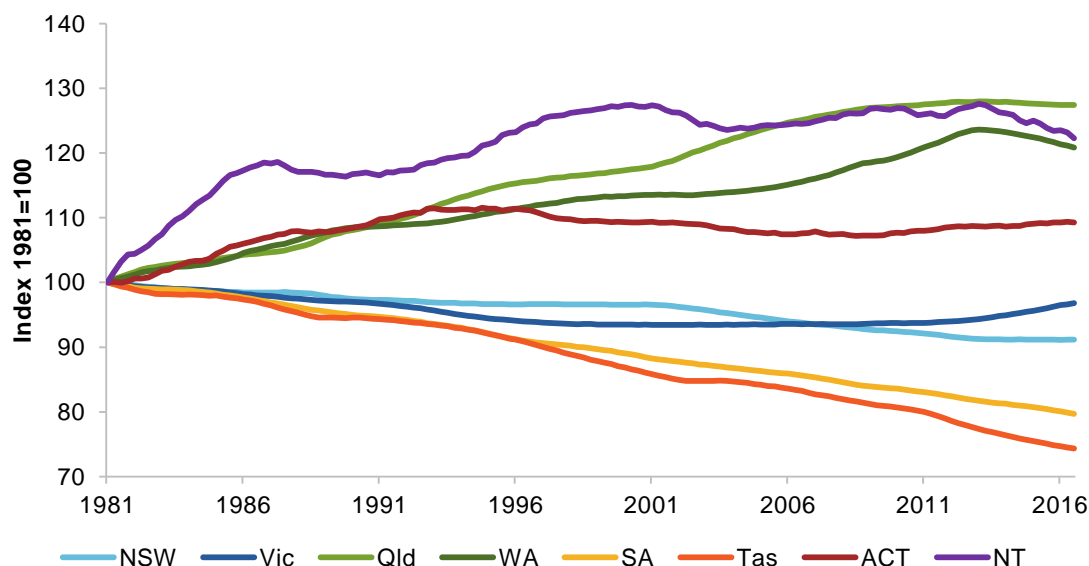
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<sup>7</sup> There is not a strong evidence base on capital movements across States, so this discussion is essentially about labour movements.

<sup>8</sup> Queensland is also regarded as a retirement destination. The WA Government analysed ABS net interstate migration data to show that, for ages below 60, Queensland was still overwhelmingly the favoured destination for interstate migrants, followed by Western Australia and Victoria (WA Government, sub. 15, p. 26).



**Figure 6.2 State shares of the national population**  
Compared to 1981



Source: Calculated using ABS (*Australian Demographic Statistics*, Dec 2016, Cat. no. 3101.0).

The WA Government examined the relationship between relative economic performance and population movements across States. While the WA Government observes that these indicators tend to move in the same direction, there was not a strong relationship, suggesting that ‘work opportunities have not been a consistently strong driver of interstate location choices’ (sub. 15, p. 24).

Western Australia has instead relied much more on overseas migration to meet its labour demands during the mining boom (figure 6.3). The WA Government concluded that Western Australia is ‘attracting far too few interstate migrants, relative to its strong economic performance’ (sub. 15, p. 26). This may in part reflect the rise of fly-in, fly-out workers from other States and the distance and costs that prevent stronger interstate labour flows into Western Australia (PC 2014a, 2017b).<sup>9</sup>

### Do people move based on net fiscal benefits?

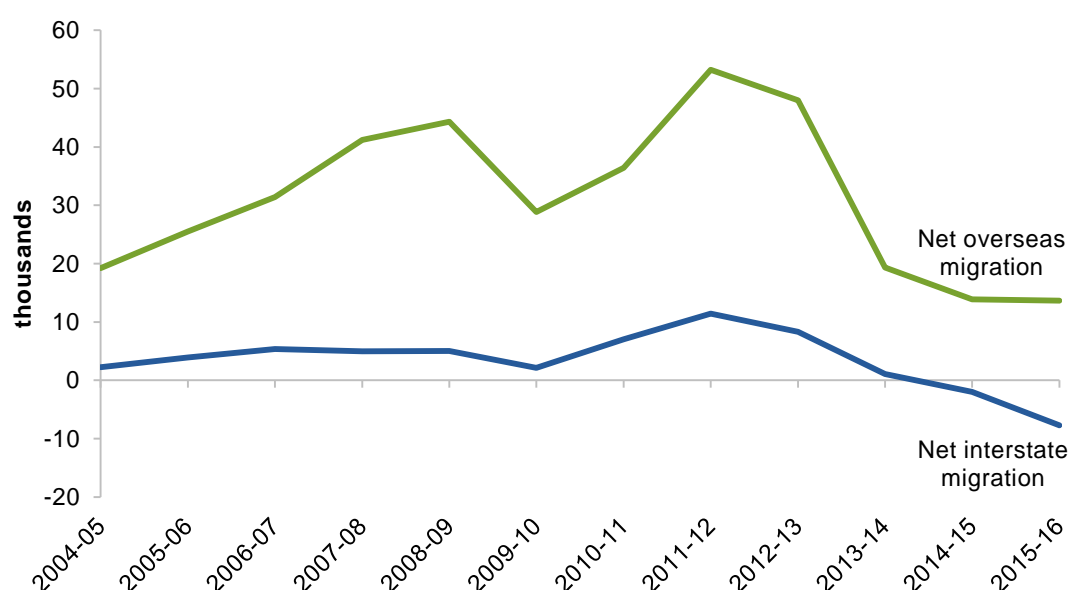
When deciding where to live, a person might consider living costs, and quality and availability of public services in that area. These factors could to some extent represent the net fiscal benefits of the area, and may encourage some people to relocate. Some States,

<sup>9</sup> A report by Deloitte Access Economics (2014, p. 39) estimated that 14 per cent of Western Australia’s FIFO workforce actually lived interstate. During the height of the mining boom, this equated to about 10 000 people living interstate and working in Western Australia. This group is unlikely to be included in figure 6.3.

particularly those most affected by GST redistributions, tended to highlight the role that public services can play in influencing where people choose to live (for example Tasmanian Government (sub. 28, p. 9) and the NT Opposition (sub. 31, p. 2)). However, for differences in net fiscal benefits to encourage sizable interstate migration, they would need to be large enough for people to recoup the initial costs of moving. There is no evidence to suggest that this is the case in Australia.

**Figure 6.3 WA's labour needs have relied largely on overseas migrants**

Net migration to Western Australia, overseas and interstate



Source: ABS (*Migration, Australia, 2015-16*, Cat. no. 3412.0).

Some economists were also doubtful that net fiscal benefits are large enough to be important for interstate migration:

Western Australia attracted six overseas migrants for every interstate migrant (on ABS data). This experience suggests that, if large differences in wages are not sufficient incentive to move, then small differences in 'net fiscal dividends' are unlikely to trigger significant additional internal migration. (Pincus 2012, p. 3)

Many influences affect decisions to move, or not to do so. At different stages in their life, people may decide to move in spite of negative consequences in terms of the 'net public sector benefits' that they will receive and other costs they will incur: higher incomes, or improved lifestyles or stronger family connections, for example, may be dominant influences. Conversely, the opportunity to receive higher net public sector benefits by moving may be outweighed by, for example, the transactions costs of moving, or potential income reductions or the loss of family or community connections. Empirical studies suggest that policy-induced mobility of households does exist but that it is modest compared to mobility induced by other location-specific influences. (Walsh 2006, p. 72)

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## How important is the migration argument for HFE?

Summing up, on the basis of theory, available modelling from both Australia and overseas, and other forms of evidence, the Productivity Commission's view is that fiscal migration (including the influence of HFE) is unlikely to be a major factor in interstate migration decisions. Labour is not always responsive to better job opportunities across States borders. And when people do move interstate, this is driven primarily by work and family reasons, not by differences in net fiscal benefits.

The efficient migration argument for HFE is disputed, partial and relies on simplified modelling that uses contested assumptions. In practice, the influence of HFE is swamped by other factors that could impact on economic efficiency and national productivity. The available evidence suggests that efficiency effects of HFE — whether positive or negative — are small.

An important caveat to this discussion is that the current redistribution arising from Australia's system of HFE is historically high (figure 3.8, chapter 3). To the extent there are efficiency effects at the margin, these would become more pronounced in the current environment. Similarly, fiscally induced movement may become apparent if State fiscal capacities were allowed to diverge over a sustained period.

### DRAFT FINDING 6.1

The redistribution that arises from Australia's system of HFE is small in magnitude relative to total government revenue for most States. As such, the GST distribution and net fiscal benefits are unlikely to be a significant driver of interstate movement of people.



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## 7 Improving current arrangements

### Key points

- Australia's system of comprehensive and full equalisation works well when the States are reasonably similar. But it struggles with extreme events and outliers.
  - There are key examples of this on both the revenue (mining revenues concentrated in a single State during an historic commodity cycle) and expenditure (such as remote Indigenous services in the Northern Territory) sides.
- The CGC methodology for the mining assessment continues to be contentious, given recognised problems with policy neutrality.
  - The introduction of a permanent discount factor for mining is a popular proposal, but it is inequitable, a blunt instrument with potential unintended consequences, and a poor substitute for more genuine reform to the mining assessment or HFE system.
  - A return to a more aggregated mining assessment has also been suggested by some parties, but is unlikely to be an improvement on the more detailed, mineral-by-mineral approach that replaced it.
  - Overall, while ongoing consideration of improvements to the mining assessment is justified, and is under active consideration by the CGC as part of its current methodology review, it is likely to remain problematic as an assessment area given the heavy concentration of select minerals in a small number of jurisdictions.
- The introduction of a relativity floor is a common proposal aimed at dealing with extreme outcomes. The effects of the introduction of a floor on redistribution may be very significant depending on the chosen level. Such a proposal would introduce greater complexity and bias the system towards the fiscally stronger States.
- While considerable benefits in simplicity and predictability would accrue from a switch to using broad indicators, this would potentially have some costs in terms of precision. Nonetheless, there is merit in exploring more aggregated and simplified assessments and the CGC should be tasked to do so.
- The use of benchmark prices in the HFE system could also reduce problems of policy neutrality at the margin. But this approach would be very complex to implement, and involve significant levels of subjectivity in setting and updating the chosen benchmarks.
- At this time, the Commission is not drawn to proposals to remove Indigeneity from the assessment (to improve accountability for outcomes). Substantive change and reform to roles and responsibilities across governments for Indigenous policy is an essential precursor to any meaningful reconsideration of the treatment of Indigeneity in HFE.
- Reform to the arrangements for the quarantining of Commonwealth payments by the Commonwealth Treasurer is needed.
  - Clear and publicly available guidelines are needed at a minimum to set out the basis on which payments are quarantined. Quarantining of payments should only occur in exceptional circumstances that are in the national interest.

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The Commission's terms of reference ask that it consider the present HFE formula used by the CGC. While this inquiry does not intend to replicate other assessment work with a methodological focus, such as that currently being conducted by the CGC as part of its five-yearly review, it is nonetheless the case that many participants raised issues of method change with the Commission, both during its consultations and in submissions.

This chapter considers several of the more commonly proposed changes to the HFE methodology, aimed at addressing problems discussed in earlier chapters such as policy neutrality, distorted incentives and complexity. These are:

- the introduction of a discount factor within the mining assessment
- the introduction of a relativity floor
- the use of broader indicators as the basis for assessment, on the revenue and/or expenditure sides
- the use of benchmark prices on the expenditure side of the equalisation process.

The chapter also considers possible improvements to arrangements regarding other payments by the Commonwealth to the States and Territories, some of which are currently quarantined from the HFE process.

## **7.1 Treating outliers differently**

As discussed in earlier chapters of this report, a persistent criticism of the current HFE system and its underlying methodology is that it does not deal well with extreme circumstances, be they regarding sectors or entire jurisdictions.

According to these arguments, a buoyant sector (such as mining) in a limited number of jurisdictions (particularly Western Australia) results in assessments by the CGC that are 'unfair', in that they lead to excessive redistribution away from the jurisdictions experiencing boom conditions. Such large redistribution is seen by critics as lacking an acknowledgment of the specific policy choices made, and the associated investments and other costs incurred, by the prosperous States in facilitating economic activity.

These arguments often lead to views that there is a need to move to a system involving, in the words of the 2012 GST Distribution Review, either less equalisation, or less precise equalisation (Brumby, Carter and Greiner 2012a, p. 47).

### **A different approach to assessing mining capacity**

The most common change to the HFE method put forward by stakeholders from Western Australia during the inquiry to address this outlier issue is to treat mining revenues as a special case. In proposing change, some of these stakeholders favoured only partially including mining revenues within the HFE process (via a 25 or 50 per cent discount, along

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the lines of Canada's mining discount (box 7.1)). Others proposed a return to a more aggregated approach to assessing mining revenue to mute the influence of single mineral categories, and yet others proposed excluding mining revenues entirely from HFE. By far the most frequent of these suggested changes was the use of a mining discount (box 7.2). All other State governments were opposed to these suggested changes.

### **Box 7.1      Canada's mining discount**

In 2006-07, Canada undertook extensive reform of its fiscal equalisation system, following the recommendations of the Expert Panel on Equalization. In undertaking its review, the Expert Panel commented that:

By far, the most contentious issue involves how resource revenues should be treated in the formula. The Panel heard strongly held and diametrically opposing views ranging from excluding resource revenues entirely to including them completely. Given the importance of resources to the economies of some provinces and the impact of high prices for oil and gas in particular, this issue has direct bearing not only on the Equalization program but on the potential for resource revenues to increase disparities among provinces. (Department of Finance (Canada), 2006)

A key part of the reforms was that natural resource revenues, such as royalties and fees, would contribute 50 per cent to defined provincial fiscal capacity. The use of actual resource revenues, instead of resource tax bases, was also introduced in calculating the fiscal capacities of the provinces.

*Source:* Dahlby (2008), Department of Finance (Canada) (2006), OECD (2013, pp. 63–72), Smart (2017).

## **Possible effects of a discount**

Proponents of change to the mining assessment argue that applying a significant discount would reflect the uncertainty and lack of policy neutrality inherent in the mining assessment. In supporting a revised approach, they argue that the current method as applied on the revenue side provides a significant disincentive to development, and that on the expenditure side the current approach underestimates the costs associated with supporting mining industries (via infrastructure spending and other provisions).

As discussed in chapter 4, the mining assessment has been particularly troublesome for some time, and has been subject to significant change in the CGC's 2010 and 2015 reviews.

There are some unique aspects of the Australian case which have ensured that the mining assessment remains an area of particular dispute. These include the dominance of select resources in the revenue category, particularly iron ore and black coal. Teamed with this is the centrality of mining revenues and resource activity in several States, including Western Australia, Queensland, New South Wales and the Northern Territory (figure 4.2). A further factor is the pronounced effects of the recent mining boom on revenues, and the subsequent diminishment of this revenue stream as commodity prices have tailed off from their historic peaks.

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## Box 7.2 To discount or not? What participants say

### Yes to a discount

Western Australian Government (sub. 15, p. 112):

A number of options are possible, including:

- mineral-specific royalty discounts whose magnitude reflects the degree of concentration of the mineral in any one State (highest discount where all the mineral is in one State, reflecting that this raises the greatest policy neutrality concerns);
- uniform discounting of all mining royalties; or
- uniform discounting of all revenues.

The Minerals Council of Australia (sub. 34, p. 3):

The Minerals Council of Australia proposes that Australia initially apply a 25 per cent discount to the mining revenue assessment in the GST distribution calculations (which includes oil and gas revenues). The use of a discount is not new in CGC arrangements. The CGC already applies a 25 per cent discount to elements of its land tax, health costs and regional costs assessments to adjust for areas of uncertainty.

Rio Tinto (sub. 37, p. 3):

Discounting assessed mining revenues is consistent with the CGC's current approach to aspects of its calculations, and would mitigate some of the adverse incentives that currently exist. Such a reform could be supported by 'safety net' provisions to limit short-term financial impacts on individual jurisdictions through an appropriate transition period.

### No to a discount

Victorian Government (sub. 53, p. 8):

Victoria does not accept that mining revenue deserves preferential treatment compared to other revenue sources, as outlined above. Further, not only should all revenue sources be considered as part of a states' fiscal capacity without discount, the conceptual economic argument for fully equalising on immobile revenue bases (such as natural endowments in minerals and land) is particularly strong.

ACT Government (sub. 49, p. 8):

Partial fiscal equalisation, on the other hand, would not achieve the fundamental equity objective of HFE and may adversely affect efficiency, depending on the details of its design. Partial fiscal equalisation which omits or discounts major components of fiscal capacity, such as mining revenues, would be both inequitable and inefficient.

As noted in chapter 3, the CGC already applies discounts to select assessments. In explaining its reasons for doing so, and the extent of discount chosen, the CGC has provided the following explanation:

- 12.5 per cent, if we were not fully confident about the size of an effect because of a low level of uncertainty around the information;
- 25 per cent, if there was a medium level of confidence about the size of an effect or a medium level of uncertainty about the information;
- 50 per cent, if we were confident of the direction of the effect on States and that it was large but we had limited confidence in the measurement of its size due to a high level of uncertainty in the information; and



- no assessment was made, if we were not confident of the direction of an effect or its size. (CGC 2010, p. 83)

Discounting usually occurs, therefore, where data quality is patchy, where uncertainty exists regarding fiscal capacity, or where the CGC's view is that a methodology requires further development.

A different treatment of minerals would deliver significant benefit to those jurisdictions most intensively involved in extraction. The Commission's estimates indicate, for example, that applying a 25 per cent mineral royalty discount to the current model significantly shifts GST payments to States with relatively larger mineral royalty revenue bases, including Queensland, Western Australia, and the Northern Territory (table 7.1). Western Australia would receive an extra \$1 billion via the introduction of such a discount while NSW and Victoria would each lose more than \$400 million.

**Table 7.1 Effects of a 25% discount to the mineral royalty assessment**  
2017-18 recommended relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
Discounted approach	0.85	0.89	1.20	0.51	1.42	1.77	1.15	4.68
<b>Change in GST Payments</b>								
GST payments (\$m)	-455	-624	99	1 141	-92	-42	-42	15
GST payments (\$per capita)	-57	-100	20	426	-53	-80	-104	60

*Source:* Productivity Commission estimates based on data provided by the CGC, Appendix C.

Weighing up the various arguments and considering possible effects, the Commission is of the view that the introduction of a permanent discount factor in the mining assessment is not justified. The introduction of a discount does not sit well with the broad objective of horizontal fiscal equalisation (chapter 2). Mining revenue is a prime example of a source-based advantage (chapter 6), and should *prima facie* be included in the equalisation process. Further, there is a possibility that the use of such a carve out would open up the prospect of other discounts in a range of areas where a small number of jurisdictions can claim to be adversely effected in the HFE process through locally situated activities or industries. Permanent discounts should also not be introduced to provide a supposed solution in cases where jurisdictions have managed the fiscal returns of buoyant conditions in a less than ideal way over time.

The temporary use of a discount factor is also far from ideal, and realistically runs the risk that it would become permanent over time.

While the Commission does not see an in-principle case for a mining discount, what is clear is that the way that the mining assessment is currently conducted, in combination with recent economic conditions and the concentration of extraction activity in key minerals categories

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within a small number of jurisdictions, has created problems. It has opened up the possibility of overly pronounced effects on redistribution and has stifled policy neutrality. The proposal of a discount points to a legitimate problem in the HFE process, but provides for a less than robust solution. Other approaches may therefore be preferable, as discussed below and in chapter 8.

DRAFT FINDING 7.1

Removing mining from the HFE process, or the use of a discount factor within the mining assessment, is inequitable and not justified. However, there is a need to consider potential improvements in the assessment method in light of problems with policy neutrality.

### Are there other feasible options?

A further option proposed by some participants during the Commission's inquiry is a move to a more aggregated mining assessment. The Queensland Government (sub. 32, p. 9), for example, stated:

... an aggregated mining revenue assessment could be examined and considered. Under this approach, all mining revenue would be considered together – rather than assessing each mineral separately. This approach could greatly enhance the policy neutrality of the assessment while still assessing each State's relative capacity to raise revenue through mining royalties.

The CGC, for its part, considered the possibility of an aggregated assessment as part of its 2015 review (CGC 2015e, p. 107). Its view was that such an approach would address policy neutrality problems if they arose in practice, but that this was (then) not currently a concern. The CGC did, however, acknowledge that, given the dominance of single mineral categories in select jurisdictions (in particular iron ore in Western Australia and coal in NSW), the potential for policy neutrality problems existed. Its argument was that equalisation was the main focus of its processes, and that policy neutrality was subsidiary to this main goal:

If policy neutrality is the sole issue, grouping minerals together addresses policy neutrality, but at a cost of producing an assessment that does not reflect the underlying differences in States' capacities. (CGC 2015e, p. 107)

The CGC's overall conclusion was to move to a mineral-by-mineral assessment, but to adopt a watching brief regarding policy neutrality concerns.

In the Commission's view, and as discussed in detail in chapter 4, large potential for policy neutrality problems exists in regard to mining. But moving to a more aggregated approach carries with it the risk of a reduction in assessment precision regarding State revenue capacities. It also comes with the risk of unintended consequences, such as the perverse 'cliff-edge' effects witnessed under the previous two-category approach to mining assessment (chapter 4).

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While ongoing consideration of improvements in the mining assessment is justified, what also appears to be the case is that this area of assessment will continue to be problematic, in particular given the preponderance of select minerals in a small number of jurisdictions in Australia.

## **A relativity floor**

Another commonly suggested change to HFE methodology is to introduce relativity floors and/or ceilings.

A relativity floor would involve setting a lower limit to equalisation relativities, with jurisdictions that fall below this threshold receiving non-equalised compensating payments from a number of possible sources:

With a floor in place, any state that has a relativity calculated below the floor would be distributed GST first to raise that state's relativity up to the floor. Distribution of the remaining GST would then continue as per usual, raising the weaker states to the leading state's capacity, followed by equal per capita distribution. The Federal Government would not be responsible for funding the gap between a state's relativity and the floor. (CCIWA, sub. 11, p. 7)

Several submissions argued for this approach. For example, the Business Council of Australia (sub. 47, p. 9) stated:

The floor should be set initially below the lowest current relativity (WA currently at 0.344) and progressively raised to an agreed relativity. A key issue for the inquiry will be to determine how states that fall below the floor are funded – by top-up payments from the Commonwealth or from within the GST pool.

The WA Government also supported a staged or ratcheted approach, involving the introduction of a floor that progressively increases over time. In its view, this would provide a greater incentive for States to pursue economic development than is observed in the current system.

... [A] GST floor of 37.6 per cent could be formally introduced in 2018-19 and increase to 47.1 per cent in 2019-20 and then to 55.1 per cent in 2020-21, and so on. This is expected to have no financial impact for any State over the forward estimates period. (WA Government, sub. 15, p. 110)

Submissions from other State governments opposed the introduction of a floor. The Tasmanian Government (sub. 28, p. 42), for example, stated that the introduction of a floor:

... would undermine Australia's system of comprehensive fiscal equalisation. It would allow one State to maintain a fiscal capacity in excess of the other States and because of the comparative advantage and consequent greater ability to provide higher quality services, better infrastructure and a more competitive tax regime, it would risk permanently entrenching that fiscal advantage.

Several participants also commented on recent Commonwealth Government funding provided to Western Australia as providing a *de facto* relativity floor (WA Government,

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sub. 15, p. 99; Parliamentary Liberal Party of WA, sub. 22, p. 9). In this context, chapter 3 discusses Western Australia's 'effective' relativity.

## Assessment of issues

The introduction of a relativity floor would represent a move to more partial equalisation when compared with the present system, in those instances where the boundary becomes operational. Absent of any jurisdictions passing such points, and instead remaining within the lower relativity boundary, full equalisation would, it is assumed, remain in operation.

Proposals of this kind do have some initial attraction. They acknowledge that the current system works in a satisfactory way *on average* and when jurisdictions are similar, but has difficulty with extreme circumstances. At the margin, they may also provide greater incentive in principle within recipient States to pursue further development – a key complaint of some States within the current system (CCIWA, sub. 11, p. 8).

The magnitude of the redistribution impact would depend on the boundary level chosen. The Commission's estimates using a 0.70 relativity floor point to a large overall effect (table 7.2) based on current relativities. Western Australia would see its GST payment increase, largely at the expense of the three largest States. However, as pointed out by the WA Government (sub. 15, p. 110), if the floor was to be introduced in the future, when Western Australia's relativity is expected to increase, the redistributing impact would be smaller.

A major downside of such a proposal, however, is the increased complexity and unpredictability it could introduce. As the Queensland Government (sub. 32, p. 8) stated:

A floor would result in a system that did not achieve equalisation, and may be more complex than the current system.

This increase in complexity may particularly be the case for ratcheted approaches, and for hybrid proposals that mix the operation of a relativity floor with other features, such as pooled funding (as proposed by the Minerals Council of Australia (sub. 34, p. 4) and others publicly but not by way of submission to this inquiry).

Overall, the concept of a floor has some simplistic attraction as a way to blunt extreme equalisation outcomes, and may also provide greater incentives to fiscally stronger States to pursue development opportunities. An *explicit* floor would also be more transparent than the *implicit* floor we already have. However, the introduction of a relativity floor is unlikely to provide a holistic fix to the various complexity and incentive concerns identified in earlier chapters. Ultimately, prevention is better than cure.

**Table 7.2 GST effects of a relativity floor**  
2017-18 recommended relativities

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
0.50 relativity floor	0.86	0.92	1.17	0.50	1.42	1.79	1.18	4.65
0.70 relativity floor	0.84	0.89	1.15	0.70	1.40	1.77	1.15	4.63
<b>Change in GST payments (\$million)</b>								
0.50 relativity floor	-379	-299	-237	1 055	-83	-25	-19	-12
0.70 relativity floor	-870	-686	-543	2 419	-191	-57	-44	-27
<b>Change in GST payments (\$per capita)</b>								
0.50 relativity floor	-48	-48	-48	393	-48	-48	-48	-48
0.70 relativity floor	-110	-110	-110	902	-110	-110	-110	-110

Source: Productivity Commission estimates based on data provided by the CGC; Appendix C.

#### DRAFT FINDING 7.2

The introduction of a minimum relativity floor would blunt extreme equalisation outcomes and might theoretically introduce greater incentives for States to pursue development opportunities. But a floor will likely prove a band-aid solution as it does not address the identified deficiencies of HFE, and may even introduce greater complexity and unpredictability into the HFE system.

## 7.2 Departing from what States collectively do

The CGC's supporting principle of 'what States do' can come into conflict with the principle of policy neutrality (chapter 4). The following options for method change depart from this 'what States do' principle and, as such, aim to reduce any perverse incentive effects that may arise under the current system.

There are some common threads to the options being considered as possible improvements to the current system. First, there is an inescapable trade-off between the degree of equalisation and efficiency. And second, efficiency and simplicity tend to go hand in hand — simpler systems are less likely to have perverse or unintended incentive effects.

### Using broad indicators

The very significant level of detail that underpins the CGC's approach contributes to the complexity of the HFE process. It may also create a false sense of precision.

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A common proposal, exemplified in Victoria's submission to the 2012 GST Distribution Review, is to move to a much simpler approach based on a streamlined set of broad indicators:

Currently, there are eight revenue categories with 13 sub-categories. There are 14 expense categories divided into 43 subcategories, for which 93 disability adjustments are applied, requiring over 1000 data items. Each major revenue and expense category could be replaced by broad-based indicators drawn from a readily available and more reliable public data series (for example, Australian National Accounts data). Additional adjustments may be required to capture disabilities related to Indigeneity, remoteness and diseconomies of scale, but the overall HFE methodology would be much simpler, more transparent and more predictable. (Victorian Government 2011, p. 4)

Several submissions to the present inquiry also raised the possibility of a move to a broad indicators approach. For example:

- Peter Abelson (sub. 9, p. 6) discussed using broad revenue indicators, including: real disposable household income plus taxation of out-of-state residents; per capita personal income; or a broad macroeconomic indicator such as gross state product. This approach is used for the transfer of some payments in the United States, but is otherwise not commonly found in equalisation schemes overseas.
- the Queensland Government (sub. 32, p. 12) discussed the use of global revenue and expense assessments. These would involve basing redistribution on estimates of total actual revenue generated by a jurisdiction, and total actual expenses incurred, rather than a more detailed categorisation. A further, less drastic option suggested was a move to more highly aggregated assessments, but drawing in the first instance on the current approach used by the CGC.

A number of stakeholders during consultation for the inquiry also argued that a smaller set of indicators would assist in providing much greater simplicity and improved certainty about year to year estimation, and reduce the potential for gaming the system.

The 2012 GST Distribution Review considered this issue in great detail, and found that the search for an approach that was adequately 'broad', but did not result in very radical redistribution outcomes compared with the current system, was quixotic (Brumby, Carter and Greiner 2012a, p. 57). Notably, the requirement to achieve the same equalisation outcomes as the current system was a requirement that constrained the 2012 Review, but does not constrain the current inquiry and deliberations by the Commission.

The Commission's analysis in this area, using gross state product (GSP) and gross disposable income (GDI) to estimate revenue-raising capability, indicates large declines in GST payments for the Australian Capital Territory and the Northern Territory, and increases for Western Australia (in the case of GDI) (table 7.3).

**Table 7.3 GST effects of a broad indicators approach**  
2017-18 GST payments and relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
Gross state product	1.03	1.28	1.08	0.10	1.29	1.48	0.29	-0.49
Gross disposable income	0.88	1.24	1.12	0.81	1.13	1.21	-0.58	-0.05
<b>Change in GST payments (\$million)</b>								
Gross state product	3 022	5 384	-1 437	-1 702	-664	-441	-933	-3 229
Gross disposable income	-2	4 751	-956	3 157	-1 381	-793	-1 824	-2 952
<b>Change in GST payments (\$per capita)</b>								
Gross state product	382	863	-291	-635	-383	-845	-2 310	-13 135
Gross disposable income	-0.3	762	-193	1 177	-797	-1 518	-4 518	-12 007
<b>Total redistribution from EPC</b>								
Current approach								\$7 928 million
Gross state product								\$7 828 million
Gross disposable income								\$6 018 million

*Source:* Productivity Commission estimates based on data provided by the CGC; Appendix C.

## Assessment of issues

Weighing up whether a switch to broad indicators is justified requires a consideration of potential costs and benefits.

Regarding *benefits*, the use of such an approach would provide for a far less complicated, and more readily understandable and predictable, approach:

A well designed, simpler system could theoretically achieve equalisation but with considerable improvement in transparency. The GST shares received by States may not be the same as under the current system, but could still be equalisation if it allows States to provide similar standards of service to their residents, taking into account their particular circumstances. (Queensland Government, sub. 32, p. 12)

Such a model would also ensure that there would be far less reliance on subjective calls made by the CGC.

Most importantly, the use of broad indicators provides for a genuinely policy-neutral measure of revenue-raising capacity (chapter 4 discussed the potential for policy non-neutrality to distort incentives for tax reform). In this way, the use of broad indicators should not have any of the incentive effects on state tax reform discussed in chapter 4, and may at the margin even improve incentives to raise taxes efficiently.

As noted in chapter 4, there is a large degree of homogeneity across States in their expenditure, meaning that there are few outliers (with the exception of the Northern

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Territory). This has mixed implications for the potential use of broad indicators on the expenditure side. On the one hand, relative homogeneity would suggest there is not a need for highly detailed assessment, but on the other hand it would require some allowance to capture the impact of disability factors such as Indigeneity and remoteness. The 2012 Review found that applying broad indicators on the expenditure assessment would not change the aggregate redistribution much, but that it would have significant impacts on individual jurisdictions.

There would also be costs and risks with adopting a broad indicators approach. Major changes in simplicity are likely to require very significant change to the set of indicators used, with considerable uncertainty regarding whether they accurately reflected the particular circumstances within the jurisdictions. The Commission's own analysis using gross disposable income as a broad indicator revealed the potential for two jurisdictions to have a negative relativity.

State-level economic indicators, such as GSP, also suffer from a myriad of measurement issues, are volatile and subject to significant revisions. International experience is also relevant here (as discussed further in chapter 8). It indicates that, in general, broad indicators provide a poor reflection of a State's own-source revenue-raising capacity.

On balance, the Commission is of the view that a broad indicators approach, while potentially delivering benefits in terms of simplicity, would also have significant costs in terms of loss of accuracy, and may not achieve a 'reasonable' level of equalisation. The broader the indicators that are used, the more such risks may arise.

An intermediate approach, involving application of broad indicators to the category level, would appear to be a less extreme approach with greater likelihood of balancing accuracy and simplicity. There is merit in further exploring whether broad indicators may prove more fruitful at the revenue and expenditure category levels, and the Commission intends to continue to explore the possible use of a much more aggregated approach for its Final Report.

For its part, the CGC is unlikely to pursue such simplification absent of direction to do so and while it remains singularly focused on achieving full equalisation. The CGC needs to be directed, via the terms of reference it receives, to consider approaches to assessment that deliver significant simplification and 'good enough' (that is, slightly less or slightly less precise) equalisation outcomes. Rough justice may be better than full justice.

#### DRAFT FINDING 7.3

The introduction of a broad indicators approach for assessing fiscal capacity could potentially deliver benefits in terms of simplicity, but would also have significant costs in terms of loss of accuracy, and may not achieve a 'reasonable' level of equalisation. The broader the indicators that are used, the more such risks may arise.



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#### DRAFT RECOMMENDATION 7.1

The Commonwealth Government should direct the CGC, through the terms of reference it receives, to consider approaches to assessment that deliver significant simplification and ‘good enough’ equalisation outcomes. The use of more highly aggregated assessments should receive detailed consideration as part of the current CGC process.

### Benchmark costs

A further option discussed by some inquiry participants was to equalise to a benchmark, on the expenditure side, that is considered to define an efficient cost for providing services. This approach would involve a significant departure from the current focus on ‘what states do’, towards an equalisation system that encourages greater efficiency via use of benchmarked standards. It would also reduce potential for gaming the system.

As discussed in other parts of this report and in the international literature (chapter 8), cost-side equalisation is particularly prone to inefficient outcomes, and States have an element of control over the cost of delivering services.

Participants presented a range of views on the practicality or desirability of such reforms, but there is an absence of strong advocates for this approach.

A number of submissions focused on the subjectivity or inaccuracy inherent in making judgments about efficient benchmarks. For example, the Victorian Government (sub. 53, p. 17) stated:

Victoria is cautious of any proposal to introduce an externally-determined baseline, such as an ‘efficient price’ for government services. It is unclear how such an objective baseline could be reliably determined ... There is also a risk that, where a flawed ‘efficient price’ is used, it could potentially undermine state governments’ obligations to their constituents to provide the desired level and quality of services.

Along similar lines, the SA Government (sub. 25, p. 21) stated:

Adoption of an approach that uses the most efficient service provider as a benchmark would require the CGC to impose value judgements on jurisdictions, undermine states’ sovereignty and would be difficult to implement.

The Queensland Government (sub. 32, p. 8) also argued that equalising to an efficient standard would be subjective and provide less funding to recipient States.

### Practical issues

While in principle this approach would seem to have potential in providing for greater emphasis on efficiency and policy neutrality, in practice it would be very complex and

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involve a high degree of subjectivity. For instance, the introduction of such an approach would require important decisions with regard to such questions as:

- who would be the decision maker on setting and updating the benchmark or benchmarks?
- what would be the range of considerations feeding into the defined efficient cost level or levels?
- would a highly detailed, granular approach be used, which would involve defining a wide range of efficient costs across a large number of subcategories in any service area?

What seems clear from these questions is that a benchmarked approach could easily become highly complex and overly subjective.

The introduction of casemix funding in Victoria's hospital system provides some sense of the complexities involved. While this reform has been widely seen as successful, it has taken a long time to introduce. Further, the classification, measurement and costing methodologies involved have been highly detailed and have required a sustained effort to develop. And this reform was confined — at least initially — to health, whereas a widespread introduction of benchmark costs in HFE would involve multiple service delivery areas.

While equalising to an externally defined efficient benchmark has appeal, it is not a solution to what is nevertheless a genuine problem within the current approach to HFE. The Commission's view is that the HFE system *does* require reform to reduce the potential for disincentives and gaming at the margin. But this is likely to require reform of the system's underlying objective and approach (discussed in chapter 2 and further analysed in chapter 9), rather than the types of highly complex methodological change exemplified by this proposed reform.

#### DRAFT FINDING 7.4

The use of externally defined benchmarks for efficient service delivery within the HFE process would encourage greater efficiency and reduce the potential for gaming the system. However, it faces daunting practical difficulties and involves a high degree of scope for dispute.

While the establishment of detailed efficient benchmarks faces considerable practical difficulties, a simpler approach may be more feasible. This could involve benchmarks already available from existing data — for example, using the lowest costs among the States or including a discount factor as a means of providing incentives for greater efficiency in provision. This approach would have the advantage of being based closely on current costs of provision, and would, it seems likely, not require the very considerable efforts described to define an extensive set of efficient benchmarks. Further views are sought on this approach.

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#### INFORMATION REQUEST

*Further views are sought on the potential to apply a simple cost benchmark approach to the expenditure assessment.*

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### **Treating Indigenous disadvantage differently**

The treatment of Indigenous factors within the HFE process is a further area of controversy, and there have been calls for major reform of approach, mostly involving taking considerations of Indigenous expenditures out of HFE. Proposals of this kind are driven partly by concerns with inaccuracy and overweighting, but also by a view that to effectively address Indigenous disadvantage, more centralised policy and funding are required.

There are a number of notable examples of reform proposals of this kind. The 2002 Review of Commonwealth-State Funding (Garnaut and FitzGerald 2002), for example, raised the possibility of rationalising Specific Purpose Payments and establishing an Indigenous Community Development Program. Changes of this kind were also considered by the 2012 GST Distribution Review and in submissions to that review. For example, Ross Garnaut's submission stated:

It would be more transparent and efficient, more effective in the provision of services to Indigenous communities, and more closely aligned with Australian community expectations, if the Commonwealth accepted responsibility directly for meeting the additional costs of 'indigeneity'. (Garnaut 2012, p. 3)

Several submissions to the present inquiry have also called for a different approach. The Business Council of Australia (sub. 47, p. 10), for example, stated:

The Business Council thinks that Indigenous disadvantage should not be a permanent factor that is beyond the capacity of government to influence. Accordingly, this expenditure should be funded through a specific purpose payment with clear objectives and accountabilities.

In some respects, calls to change the treatment of Indigeneity appear to be based on a desire to increase the connectedness between, *ex ante*, funds provided via HFE, ostensibly for service delivery to defined cohorts, and *ex post*, the actual services delivered to these cohorts. Broader considerations about effectiveness, involving a more consistent policy approach located at a single level of government, are a further driving factor in such proposals.

### **Assessment of issues**

It is indisputable that we continue to observe poor outcomes in addressing Indigenous disadvantage. Providing clearer lines of responsibility for service delivery, funding and policy frameworks would potentially improve outcomes over time. Greater coordination of responsibilities at one level of government may also avoid duplication and overlap, and clarify where the buck stops in terms of funding, service delivery and policy effectiveness.

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However, in considering proposals for change in this area, there is a need to disentangle what exactly the inclusion of Indigeneity within HFE does, and does not, attempt to do. It is arguably legitimate that such considerations are included in equalisation if they are a significant driver of jurisdictional spending (and they are). And, *absent of a more fundamental reform to roles and responsibilities*, it remains open to question what taking Indigeneity out of HFE would achieve. The Commission's view is that such a reform is unlikely to achieve the benefits it aims for without being situated in a much wider and more substantive approach. This is discussed further in chapter 9. On this point, the Commission also notes the recent discussion by Professor Miranda Stewart which situates such a reform within a much broader attempt to establish Indigenous fiscal autonomy (Stewart 2017).

### 7.3 Summing up on changes in methodology

As noted earlier in the chapter, during consultations and in submissions, many participants have raised with the Commission issues of method change. Earlier reviews of the HFE system, both by the CGC and other reviewers, have also considered a very large number of methodological changes. Ongoing consideration of method change is a desirable permanent feature of the current arrangements.

This chapter has focused on a few substantive proposals for change that address some of the concerns raised in earlier chapters — namely that a system of full and comprehensive equalisation is overly complex, struggles with extreme circumstances and imposes efficiency costs at the margin. Other changes have been suggested in the course of this inquiry, such as revenue-only equalisation. While such approaches have some attractive elements, the Commission's assessment thus far is (as with past reviews) that there is no clear-cut adjustment to HFE methods that strengthens equity, efficiency and simplicity at once.

The Commission welcomes further views, both on the changes to methodology detailed in this chapter, and on other possible changes that are seen as prospective and likely to deliver material improvements to either the current approach to HFE, or to alternative approaches.

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#### INFORMATION REQUEST

*The Commission seeks further information and views on changes to methodology, both within the current approach to HFE and in any alternative approach, that would deliver significant improvements in simplicity, reduce some of the distortionary effects of the current system, and still deliver a degree of equalisation consistent with the Commission's revised objective of HFE.*

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## 7.4 Treating quarantined Commonwealth payments differently

Commonwealth payments for specific purposes are made in many areas administered by the States, such as infrastructure, education, housing, and community services. As noted in chapter 3, many of these payments are taken into account in CGC assessments of a State's fiscal capacity. Some payments, however, might have no effect on relativities, or may be discounted.

Principles for the treatment of Commonwealth payments in the HFE process exist and largely provide a clear framework on whether a payment will be included or excluded from the HFE process, or discounted (appendix B). However, the ability of the Commonwealth Treasurer to quarantine payments from HFE calculations would also benefit from stricter and principled guidelines.

Even though only a small proportion of payments are quarantined by the Commonwealth Treasurer in practice — for example, in 2013-14, about 3 per cent of payments for specific purposes had no effect on relativities as required by terms of reference (CGC 2015e, p. 46) — they have the potential to have a significant effect on the total funding received by a particular State and thus that State's effective relativity.

Further, the quarantining of some Commonwealth payment benefits the State that receives those payments by allowing it to keep the full value of the payment, rather than losing the equivalent of all but its population share in GST, while still allowing the State to receive its population share of non-quarantined payments (Brumby, Carter and Greiner 2012a, p. 70). The Tasmanian Government (sub. 28, p. 48) suggested that quarantined payments could be used to make structural changes to address inherent disadvantage. However, quarantining a large number of payments also carries the risk of compromising the objective of HFE, and widens the gap between the headline and effective GST relativities in a non-transparent, ad hoc manner.

Moreover, the ability of the Commonwealth to quarantine payments adds an additional element of complexity and unpredictability to Australia's HFE system (chapter 3). This is compounded by the fact that some payments may be fully quarantined, while others may only be partially so (table B.1 in appendix B provides a list of quarantined and discounted payments from 2013-14 to 2017-18, including those by way of Treasurer instruction). With respect to Commonwealth payments for transport infrastructure, the Grattan Institute (sub. 24, p. 9) submitted:

... the current approach is opaque, even to some decision-makers. This allows room for grants to States to be treated more or less favourably on grounds that are not consistently applied, giving rise to perverse incentives for both States and the Commonwealth. (sub. 24, p. 9)

The quarantining of payments by the Commonwealth Treasurer without a clearly stated rationale can therefore undermine system integrity, even if payments are relatively modest

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in size, as well as create an impression that the system is unfair. The Victorian Government (sub. 53, p. 6) submitted:

There may be legitimate reasons for such exclusions. For example, where there is no reliable, policy-neutral approach to objectively assess cost differences between States, or where reliable data is unavailable ... such exclusions should be independently and consistently administered by the CGC ... to prevent political decisions from interfering with the independent process. However, some other exclusions in the past have not been based on any obvious policy rationale. For example, inconsistencies are created through the differential treatment between funding for road and rail infrastructure ... (sub. 53, p. 6)

To reduce the ad hoc element introduced to the GST distribution system by the quarantining of Commonwealth payments, clear guidelines outlining principles of governance for quarantining should be developed. As noted by the 2012 GST Distribution Review, the establishment and publication of such guidelines would aid transparency and may also improve predictability for the States, by making it clear when a payment would or would not be quarantined (Brumby, Carter and Greiner 2012a, p. 70). This recommendation, like most made in that review, has not been subject to a government response.

Similar to Brumby, Carter and Greiner (2012a), the Commission considers that the principles on which the guidelines should be based would be that Commonwealth payments are to be quarantined only in exceptional circumstances that are in the national interest, as quarantining undermines the objective of HFE. Commonwealth payments should also only be quarantined for reasons that would not already be considered by the CGC, in order to avoid duplication and additional complexity.

#### DRAFT RECOMMENDATION 7.2

The Commonwealth needs to develop clear guidelines detailing the basis on which Commonwealth payments are to be quarantined from HFE by the Commonwealth Treasurer, so that they do not unnecessarily erode the efficacy of the CGC's relativities.

The guidelines should be based on the principle that quarantining of payments ought to only occur in exceptional circumstances.

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#### INFORMATION REQUEST

*The Commission seeks further views on the principles that should apply with respect to considering which (if any) Commonwealth payments should be quarantined by the Commonwealth Treasurer, and hence would not affect the distribution of GST revenue.*

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## 8 Alternative approaches

### Key points

- Fiscal equalisation to address disparities in the fiscal capacity of sub-central governments is common among OECD countries.
  - Approaches to fiscal equalisation are inextricably linked to the unique financial relations and institutional frameworks of their host country. Nonetheless, there are lessons for Australia from overseas experience.
- With the notable exception of Australia, no country with a federal government has an equalisation scheme that fully eliminates disparities in fiscal capacity among sub-central governments. Nor does any other country fully equalise across both revenue raising capacity and expenditure needs.
- Many of the lessons from overseas experience are embodied in Australia's system of HFE:
  - avoid the use of a narrow representative tax base in assessing revenue raising capacity
  - moving averages reduce volatility in the level of transfers and in doing so provide budget stability for sub-central governments
  - avoid tied equalisation payments
  - take account of broader conditional transfers
  - an independent grants agency reduces room for political manipulation of fiscal transfers.
- Other lessons suggest Australia's system could be improved:
  - avoid where possible high 'equalisation tax rates', as they can create incentives for sub-central governments to 'game' the system and can create development traps
  - changes to equalisation arrangements must be accompanied by building political buy-in by sub-central governments to ensure those changes are enduring
  - building societal understanding and consensus on the standard of equalisation that is at the heart of any HFE arrangement helps ensure confidence and stability in the scheme.
- Alternative approaches for distributing GST revenues inevitably involve trade-offs and require judgment between equity, efficiency and simplicity. Each approach has its advantages and disadvantages, but none provide an unambiguous improvement on the current HFE system.
  - While an equal per capita (EPC) approach appeals to many participants, and performs well in terms of efficiency and simplicity, it is incapable of equalising the fiscal capacities of States (to any standard) and, thus, is inimical to the equity principle underpinning HFE.
  - An EPC with top-up funding model breaks out of the GST zero-sum game dilemma, but providing top-up funding could (through its funding) create other losers. This is why it has only been meaningfully contemplated as part of broader reform to Commonwealth–State financial relations. This approach could offer benefits for transparency and accountability. However, its funding is unlikely to be forthcoming in the current fiscal environment, and would always be subject to future Budget vagaries.
- The current approach to HFE can be adapted to provide States with some level of fiscal capacity less than the fiscal capacity of the strongest State (which the Commission considers a desirable change).

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The inquiry's terms of reference cite concerns with the effects of horizontal fiscal equalisation on productivity, economic growth and budget management for the States and for Australia as a whole.

Earlier chapters examined the veracity of those concerns. Where they have substance, chapter 7 considers whether they can be addressed by changing the current system of equalisation. But those concerns and the terms of reference also raise the question of whether there are alternative systems that would avoid or address them, and would do so better than modifying the current system.

Given that fiscal equalisation schemes are common in other countries, the Commission has examined OECD countries' experiences to assess whether their approaches to fiscal equalisation provide an alternative and preferable model than that used in Australia (section 8.1) or lessons for how to make our system of equalisation better (section 8.2). The Commission has also considered how well alternative approaches to distributing GST revenues would perform against the criteria of equity, efficiency and simplicity (chapter 2) (section 8.3).

## **8.1 Fiscal equalisation in OECD countries**

OECD countries have a range of fiscal equalisation schemes. Participants have drawn particular attention to some of these schemes — such as that in Canada — and suggested that Australia adopt another country's approach in order to address perceived deficiencies with Australia's approach to HFE.

This section discusses the features of those schemes, how well they equalise fiscal disparities within their countries, and how transferable those schemes might be to Australia's situation.

### **Features of fiscal equalisation**

The need for fiscal equalisation arises where there is a vertical fiscal imbalance between central and sub-central governments and where sub-central governments are responsible for delivering services in the respective policy areas (Blöchliger et al. 2007, p. 10).

Fiscal equalisation across the OECD is given effect through the use of revenue equalisation, cost equalisation<sup>10</sup> or a combination of the two (as occurs in Australia). Table 8.1 shows how select OECD countries have employed these approaches.

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<sup>10</sup> Revenue equalisation is the transfer of fiscal resources to reduce differences in a jurisdiction's per capita revenue raising capacity. Cost equalisation is the transfer of fiscal resources to reduce differences in a jurisdiction's per capita cost of providing a standard set of public services.



**Table 8.1 Features of OECD countries' fiscal equalisation**

<i>Country</i>	<i>Cost and revenue equalisation<sup>a</sup></i>
<b>Federal/regional governments</b>	
Australia	joint
Austria	separate
Canada	separate
Germany	separate
Italy	separate
Mexico	cost equalisation only
Spain	cost equalisation only
Switzerland	separate
<b>Unitary governments</b>	
Denmark	separate
Finland	separate
Greece	separate
Japan	cost equalisation only
Norway	separate
Poland	separate
Portugal	joint
Sweden	separate
Turkey	revenue equalisation only
United Kingdom (England)	separate

<sup>a</sup> Indicates whether cost and revenue equalisation exist in a country, and if they do, whether there are separate transfers for the two forms of equalisation ('separate') or whether transfers combine both types of equalisation ('joint').

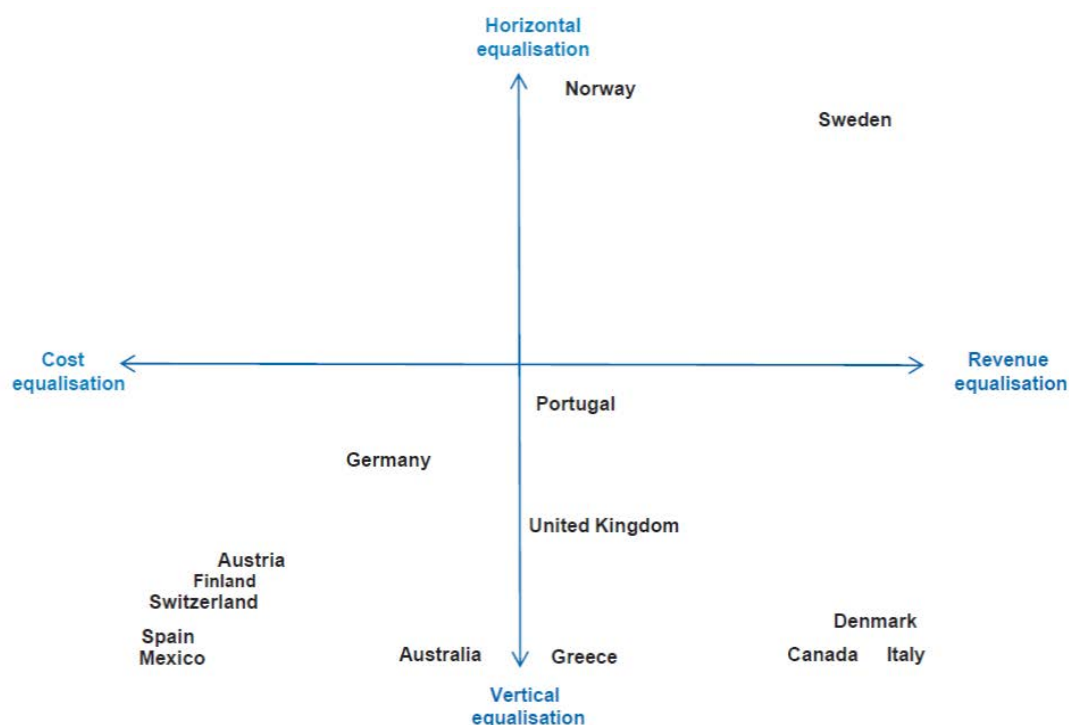
Source: Blöchliger et al. (2007, p. 11).

Moreover, OECD countries rely to varying degrees on horizontal and vertical transfers<sup>11</sup> of funds to achieve fiscal equalisation. The relative reliance on cost and revenue equalisation and on horizontal and vertical fiscal transfers for select OECD countries is shown in figure 8.1. Australia's position in the figure shows its heavy reliance on vertical equalisation (transfers from the Commonwealth to the States) and its relatively equal reliance on both cost and revenue equalisation measures.

Australia's system of equalisation relies on the transfer of Commonwealth Government GST revenue to the States (vertical transfers), with that revenue being redistributed among the States to equalise their fiscal capacity (horizontal transfers). This redistribution is sometimes misconstrued as indicating that Australia's system of equalisation is predominantly horizontal — but this is not the case. However, this view is understandable given that the States gave up some of their own taxes in exchange for receiving GST payments.

<sup>11</sup> Horizontal equalisation is the transfer of fiscal resources between governments of the same level. Vertical equalisation is the transfer of fiscal resources from the central government to sub-central governments.

Figure 8.1 Characteristics of OECD countries' equalisation schemes<sup>a</sup>



<sup>a</sup> The further a country is from the centre on any axis, the greater its reliance on that type of equalisation.

Source: OECD (2013, p. 103).

## To what extent do OECD countries' equalisation schemes reduce fiscal disparities?

OECD countries exhibit considerable variation in the extent to which their equalisation schemes reduce fiscal disparities among sub-central governments.

However, as shown in table 3.5 of chapter 3 (which shows Australia's experience relative to a selection of other federal governments), Australia is unique among OECD countries with federal governments in totally eliminating disparities in the fiscal capacity of sub-central governments.

In part, this is a function of significant differences in what countries mean by 'equalisation'. Australia, for example, is the only federation that interprets horizontal fiscal equalisation as the 'full equalisation' of both revenue raising capacity and expenditure needs (Garnaut and FitzGerald 2002, p. 89). Other OECD countries, by comparison, have less ambitious expectations of their equalisation schemes:

- Canada: 'reasonably comparable levels of public services at reasonably comparable levels of taxation across provinces'
- Germany: 'to equalize the differences in financial capacity of states'

- 
- Switzerland: ‘to provide minimum acceptable levels of certain public services without much heavier tax burdens in some cantons than others’. (Shah 2006, p. 10)

Moreover, in Australia the pool of funding available (GST revenue) is more than sufficient to achieve full equalisation. This is in contrast to most other countries, where funds available for equalisation are insufficient to achieve this. In Canada, for example, the amount of equalisation funding is only sufficient to bring the fiscally weaker provinces up to a minimum level (Brumby, Carter and Greiner 2012a, p. 172).

### **Country-specific factors limit the transferability of overseas schemes**

Horizontal equalisation arrangements in other countries are inextricably linked to their particular distribution of authority to collect taxes, legal and constitutional allocation of responsibilities for the provision of public services, and to federal–state government agreements to provide shortfall funding as appropriate. Moreover, as noted above, each country has its own interpretation of what ‘equalisation’ means for them, which is presumably reflective of the societal values of those countries. On this issue, a review of OECD experience found:

Fiscal equalisation is also tremendously country specific. Fiscal equalisation is shaped by the wider institutional framework such as size, number and geographical distribution of sub-central governments, the responsibilities and fiscal resources allocated to each jurisdiction, or the mechanics of power sharing between the central and the sub-central level. ... The wealth of explicit and implicit, statutory and common, equalisation arrangements makes it hard to find a common baseline and reduces the body of generalised policy analysis applicable to all countries alike. (Blöchliger et al. 2007, p. 5)

This country-specific nature of equalisation arrangements means the applicability of those schemes to Australia (with its own unique institutional framework, responsibility for providing public services, fiscal capacities and societal values) is limited.

For example, while Canada excludes some share of mining royalties from the assessment of provinces’ revenue raising capacity for equalisation purposes, it does so in the context that only provinces with below average revenue raising capacities receive equalisation payments, and where other federal transfers (under the Canada Health Transfer and Canada Social Transfer programs) are significantly greater<sup>12</sup> (Shah 2006). Differences such as these led the ACT Government, in its submission to the GST Distribution Review, to note:

Canada’s equalisation system and its treatment of natural resources are not applicable to Australia’s HFE system given the fundamental differences between the two arrangements. (ACT Government 2011, p. 17)

Box 8.1 provides some examples of country-specific features that frustrate the comparability and transferability of other countries’ equalisation schemes to Australia.

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<sup>12</sup> Equalisation accounts for some 26 per cent of federal cash transfers to the sub-central governments, while Canada’s Health Transfer and Social Transfer payments account for about 48 and 20 per cent, respectively (Clemens and N. Veldhuis 2007, p. 5). These transfers are allocated on an equal per capita basis.

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## Box 8.1      **Fiscal equalisation in Canada and Germany**

### **Canada**

Canada's equalisation system aims to address fiscal imbalances arising from economic differences across provinces and territories that are related to per capita income and natural resource endowments. It consists of three main transfers:

- equalisation transfers via unconditional per capita grants to provincial governments whose ability to generate revenue (or 'fiscal capacity') is below the average fiscal capacity of all 10 provinces. (In 2017-18, the provinces that did not receive equalisation were Newfoundland and Labrador, Saskatchewan, Alberta and British Columbia.)
- two sets of per capita health and social transfers designed to help finance provincial and territorial health, social and child welfare and post-secondary education spending (Canada Health Transfer and Canada Social Transfer, respectively).
- federal funding to the three territorial governments (Yukon, Northwest Territories and Nunavut). The territories do not have provincial powers and capacities for revenue generation and thus rely heavily on federal grants to deliver the services for which they are responsible. Each territory's grant is based on the difference between an estimate of its expenditure needs and its ability to generate revenues.

### **Germany**

Germany has a 4-stage approach for its fiscal equalisation system.

- The entire tax revenue is distributed to the two levels of government — namely the Federation and all the Länder — according to prescribed shares in legislation, and the local authorities receive a supplementary transfer of revenue (vertical distribution).
- The total Länder portion of tax revenue is assigned among the various Länder (horizontal distribution) — effectively a zero-sum game.
- There is equalisation between poor Länder and rich Länder. Local authority revenues are taken into account when assessing financial capacity because the Länder are responsible for providing their local authorities with appropriate and adequate financial resources
- Poor Länder also receive funds from the Federation (supplementary federal transfers).

*Source:* Government of Canada (2017), German Federal Ministry of Finance (n.d.).

In addition, it is difficult to distinguish equalisation payments from other grants, which in many countries are merged into joint payments (OECD 2013, p. 102). (This is also true for Australia; see appendix B.) This further complicates the applicability of other countries' equalisation schemes to Australia.

## **8.2      Lessons for Australia from OECD experience**

While country-specific factors neuter the scope for Australia to adopt other countries' equalisation schemes, OECD experience nonetheless provides useful lessons for how we approach revenue and cost equalisation, what design features should be avoided and how we might institute changes to our system.

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As Neil Warren noted:

Fiscal equalisation arrangements are inevitably country specific as they relate to institutional factors (e.g. Constitution) and political processes, however there are common lessons to be learnt about good design from quite different federation funding arrangements. (sub. 38, p. 1)

## **Institutional arrangements for fiscal equalisation**

Institutional arrangements for fiscal equalisation vary markedly across countries. These diverse arrangements can be classified into four stylised models:

1. a central/national government ministry/agency (for example, Italy, Poland, Switzerland)
2. the national legislature (for example, Brazil)
3. intergovernmental forums including intergovernmental-cum-civil-society forums (for example, Canada, Germany)
4. an independent agency (grants commission) reporting either to the executive or the legislature on a permanent or periodic basis (for example, Australia) (Shah 2005, p. 2).

The freedom countries have to adopt a particular model is often constrained by factors such as the inherent scope and nature of their intergovernmental fiscal relations, institutional arrangements, and administrative capacity of central (and local) institutions (Boex and Martinez-Vazquez 2004, p. 7).

There is little international evidence on which of these arrangements to administer fiscal equalisation is the ‘best’ (Boadway and Shah 2007, p. 293).

However, OECD experience suggests that, particularly for countries that operate cost equalisation arrangements, an independent agency leaves less room for political bargaining and allows the allocation of equalisation money to occur as a technical exercise (Blöchliger et al. 2007, p. 25). This is a particularly important feature of the independent agency model, given the growing body of literature on fiscal federalism highlighting the role of political factors in distorting equalisation policy (Khemani 2007, p. 464). Studies of UK equalisation arrangements also endorse the independent agency model (McClellan 2004, pp. 34–37).

Nonetheless, in view of the lesson that changes to equalisation arrangements require political buy-in by sub-central governments to ensure those changes are enduring (see below), a balance is required between an independent agency and political ownership. In Australia, most States supported the central role of the independent Commonwealth Grants Commission (CGC) in Australia’s HFE system (box 9.1 in chapter 9), though some States, such as New South Wales and the ACT, also argued for a stronger role for State governments in stewardship of the system.

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## Revenue equalisation

### High equalisation tax rates can create moral hazards

The ‘equalisation tax rate’ — the amount of money a sub-central government loses if it increases its own-source revenue — varies considerably across countries, and can range from zero to 100 per cent (OECD 2013, p. 107). Higher rates, for example, apply in Austria where Länder (states) with below-average fiscal capacity face an equalisation rate of 88 per cent for any increase in revenue, and in Canada where provinces with below-average fiscal capacity face an equalisation rate of between 70–100 per cent. (The issue in an Australian context is discussed in chapter 4.)

OECD experience provides some evidence that high equalisation tax rates can reduce the incentive for sub-central governments to increase their fiscal base and pursue regional growth. OECD country studies, for example, indicate that high effective tax outflows associated with interstate fiscal equalisation in Germany has a negative impact on the states’ tax revenue collection efforts (OECD 2006, p. 61). Other studies suggest equalisation produces disincentives for regional governments to develop their tax bases (Wurzel 2003, p. 14).

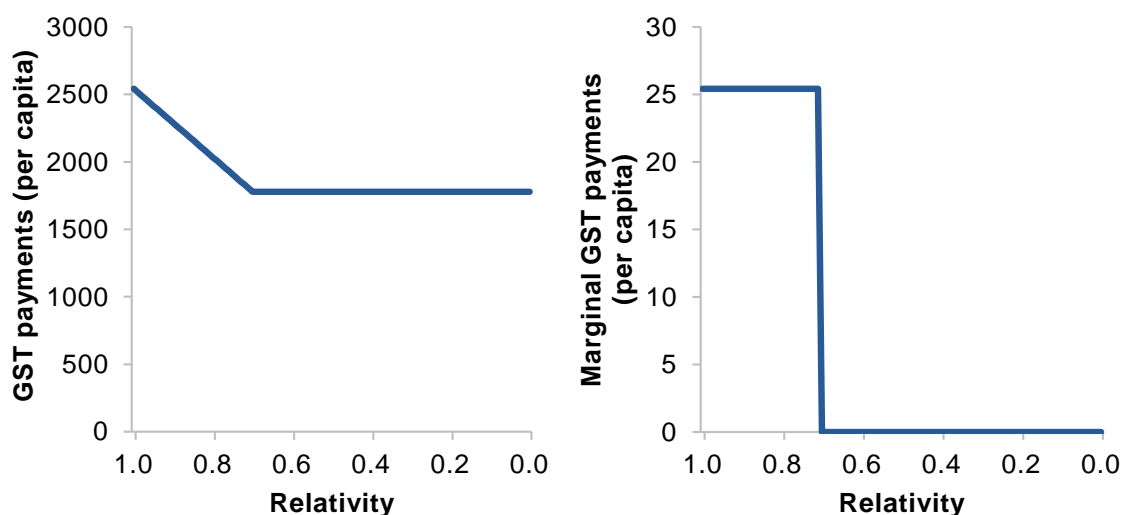
High equalisation tax rates can also create a development trap for fiscally weaker sub-central governments (Blöchliger et al. 2007, p. 16). This is most likely where equalisation schemes ensure a minimum fiscal capacity to governments whose fiscal capacity falls below a certain threshold. Under those circumstances, jurisdictions would effectively face a marginal equalisation tax rate of 100 per cent for any increase in their revenues up to that threshold — these ‘cliff edge’ effects were present in Germany’s system prior to equalisation reforms in 2005 (Färber 2013, p. 13). In contrast, jurisdictions above that threshold face a smaller equalisation tax rate that can be as low as zero per cent.

A comparable situation in Australia would apply if, for example, there was a floor on relativities (figure 8.2 provides an illustrative example). In that case, where a jurisdiction’s relativity had reached a floor, any further increase in its revenue raising capacity would effectively face a zero equalisation tax rate.

### Estimating revenue raising capacity

OECD countries use various approaches to estimate sub-central governments’ revenue raising capacity. A common approach is to do so through the use of a representative tax system, although countries differ on what they consider to be ‘representative’. Canada, for example, has five taxes in its representative tax system (reduced from 34 in 2007 following reforms to its equalisation system) (OECD 2013, p. 103). In comparison, Australia has seven categories of own-source revenue plus Commonwealth payments (chapter 3). These approaches are based on ‘internal standards’ — what jurisdictions actually do. No country appears to use an ‘external standard’ (that is, some concept of optimal policy) to estimate revenue raising capacity.

Figure 8.2 Effects of a 0.70 floor on marginal GST payments<sup>a</sup>



<sup>a</sup> Based on the GST pool and State populations used in the 2017-18 relativity calculations.

Source: Productivity Commission estimates based on CGC (2017h).

OECD experience suggests that where fiscal equalisation formulas do not or only partially capture all sub-central taxes, governments are tempted to avoid taxes that enter the formula and select taxes that do not, resulting in a distorted sub-central tax structure (Blöchliger and Charbit 2008, p. 9).

In principle, broad indicators (such as state/regional domestic product or disposable household income) could give a representative and policy-neutral indicator of true revenue raising capacity but, in practice, data limitations typically mean these are generally not a good indicator of the ability of sub-central governments to raise revenue (Shah 2008) (chapter 7).

Nonetheless, equalisation arrangements can be successfully designed to promote tax effort and economic development. An estimation approach that includes all major sub-central government taxes in assessing revenue raising capacity, for example, reduces strategic behaviour:

Many countries have moved towards comprehensive [representative tax systems] ... as indicators of sub-national revenue-raising capacity, thereby leaving jurisdictions less leeway to game the tax base. (OECD 2013, p. 107)

### The use of moving averages

In some OECD countries, changes in sub-central governments' revenue-raising capacity result in frequent and rapid adjustments to their equalisation payments. These adjustments

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can aggravate annual fluctuations in total sub-central revenue, with associated complications for sub-central governments' budget planning (OECD 2013, p. 111). The trade-off between contemporaneous assessments and budget stability in Australia's HFE system is discussed in chapter 5.

Some countries have addressed this instability by setting equalisation transfers as a fixed percentage of total tax revenue or introducing ceiling and floor provisions to dampen fluctuations. However, these measures can reduce the effectiveness of equalisation by limiting its ability to address disparities in the fiscal capacity of sub-central governments.

Another response to concerns about volatility effects of equalisation payments has been to use moving averages in calculating revenue-raising capacity:

Most countries harness equalisation as an automatic stabiliser, by linking equalisation payments to lagged fiscal capacity indicators or by applying moving averages, thereby avoiding excessive sub-central revenue volatility. (Blöchliger et al. 2007, p. 23)

In Canada, for example, equalization entitlements are based on a three-year weighted moving average of measured fiscal capacities with a two-year lag (as in Australia). This feature — introduced following an Expert Panel report in 2006 — was recommended to make it easier for recipient provinces to make budget plans and to reduce fluctuations in payments (Dahlby 2008, p. 8).

## **Cost (expenditure) equalisation**

Cost equalisation aims to compensate for differences in the per capita cost of providing public services among sub-central governments. However, cost equalisation offers jurisdictions scope to inflate spending needs and is inherently more prone to rent seeking than revenue equalisation (Blöchliger et al. 2007, p. 24). OECD experience shows that this tendency to inflate expenditure needs can be curbed by good design.

### **Methods of assessing expenditure costs have significant implications**

Cost (expenditure) equalisation that is based on actual spending has largely been phased out in OECD countries as it gives sub-central governments an incentive to inflate expenditures or, at the very least, to not contain costs or pursue efficiency improvements (OECD 2013, p. 104).

The extent to which cost variations should be taken into account in determining standard expenditures for public services is a contentious area. Although some differences in costs may be outside government control (such as those arising from diseconomies of scale), providing equalisation compensation for higher service provision costs is likely to preserve inefficient structures and institutions. This has occurred in the OECD, where several countries have introduced adjustments in their cost equalisation formulas to account for low



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population densities and smaller, scattered populations, and this has delayed efficiency-promoting reforms (Blöchliger et al. 2007, p. 20).

Today most countries use a form of representative expenditure systems that are based on a set of standard costs per public service delivered; doing so helps mitigate sub-central governments' incentive to inflate expenditures (Blöchliger and Charbit 2008, p. 18). This approach is essentially that followed by the CGC (chapter 4 outlines how the Australian system manages this problem).

### Cost equalisation payments should not be tied

In some OECD countries, equalisation transfers are conditional upon funds being spent in a particular area. This results in sub-central governments delivering the services, but doing so under the central government's overt direction. In Australia, tied or conditional payments (in the guise of payments for specific purposes) play a significant role in equalising the fiscal capacity of States.

These tied arrangements raise a number of concerns (OECD 2013, p. 110). First, equalisation transfers are intended to provide sub-central governments with the fiscal capacity to meet some standards of service provision if they choose to do so, but do not compel them to do this. Tied transfers contradict this notion of sub-central government autonomy. Thus, while some OECD countries (such as Switzerland) provide tied equalisation transfers, the majority of countries avoid this practice. In Germany, even transfers designed to address 'special burdens' in the poor Länder are not tied to a specific purpose. Similarly, in Canada, Territorial funding (which is designed to address the unique cost disadvantages faced by the Territories) is untied. Second, tied transfers can generate significant administrative burdens and compliance costs for central and sub-central governments.

Moreover, OECD experience suggests that conditional transfers are not necessarily the best way to achieve desired outcomes:

If central government is to retain control over the proper use of equalisation funds, it can do so more effectively through appropriate public service regulation — by, for example, setting minimum standards or using output and performance indicators. It should leave the operation and management of fiscal resources to the discretion of local and regional governments. (OECD 2013, p. 110)

This issue of tied versus untied equalisation payments and the appropriate balance between the two is discussed in chapter 9 and appendix B.

### Equalisation transfers need to take account of broader conditional transfers

Equalisation transfers must not be looked at in isolation of the broader fiscal system, especially conditional transfers (Shah 2012, p. 27). This has relevance for Australia, where, for example, elements of the National Specific Purpose Payments and National Partnership

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payments are distributed in accordance with population shares and can have an effect on the assessed own-source revenue raising capacity of States. Other conditional transfers, such as schools and hospital funding, embody their own explicit equalisation element (appendix B).

The extensive theoretical literature makes an implicit case for including these transfers in any examination of inter-jurisdictional fiscal equity. Conditional transfers affect net fiscal benefits through their impacts on state-based taxes and expenditures on public services. Moreover, in practice, some countries such as Canada, Germany and Finland explicitly compensate for differential fiscal needs through conditional transfers in order to keep the fiscal equalization system simple, objective and transparent. It therefore makes sense to consider these transfers while assessing inter-jurisdictional equity and the effectiveness of any horizontal equalisation scheme (Shah, pers. comm., 19 July 2017).

This position mirrors proposals in submissions that require GST distribution arrangements to be considered holistically with other Commonwealth–State transfers (for example, Queensland Government, sub. 32; Neil Warren, sub. 38).

## **Instituting change**

### **Redistributing revenue is universally disputed**

The current debate in Australia about whether the distribution of GST revenues is ‘fair’ or ‘equitable’ mirrors the debate in other countries where fiscal equalisation is part of the intergovernmental landscape. As an OECD working paper on fiscal federalism has noted:

The stakes of jurisdictions with high tax revenue and low cost of public services are almost inevitably opposed to those jurisdictions with low tax revenue and high public service cost. (Blöchliger et al. 2007, p. 5)

Because fiscal equalisation is an explicit redistributive program and tends to be a zero-sum game, by definition it creates winners and losers (OECD 2013, p. 119). Accordingly, any process of change is unlikely to be decided on the basis of the benefits and costs of alternatives to improve fiscal equalisation outcomes, but rather by lengthy processes to achieve political acceptance by sub-central governments. OECD experience shows that changes to equalisation arrangements must not only be assessed on technical grounds, but must also take account of political economy constraints (Blöchliger et al. 2007, p. 5).

This experience highlights the central role that identifying what is needed to achieve political acceptance must play in changing Australia’s equalisation system. In this regard, OECD research has identified some of the features that help in achieving reform of intergovernmental fiscal relations:

- reform success is strongly linked with a good economic situation and sound fiscal positions
- electoral mandates are important but not crucial

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- most successful fiscal reforms offered comprehensive packages of benefits to a large array of actors
  - transitional compensation is almost always necessary
  - communication should emphasise the long-term effects of the reform — wide and open communication creates support from dispersed winners, who are often unaware of potential reform gains (OECD 2012, pp. 9–10).

Not all of these are present in Australia today.

### The importance of societal consensus on the standard of equalisation

As noted, OECD countries have taken significantly different views on what should be the standard that ‘equalisation’ aims to achieve. But these views are not necessarily set in stone:

In pursuing this objective of eliminating [net fiscal benefit] differentials, some considerations should be born in mind. First, the objective of horizontal equity is not a given. (Boadway 2003b, p. 4)

If Australia is to revisit the objective of fiscal equalisation (an issue discussed in chapters 2 and 9), international experience provides some lessons for how we might go about doing so in a way that will ensure that any subsequent change is enduring.

Achieving societal consensus on the standard of equalisation is at the heart of fiscal equalisation arrangements (Shah 2012). This point underlines the view of the WA Government in its submission to the 2012 GST Distribution Review, which stated:

... current and prospective equalisation outcomes are so extreme as to destroy any consensus on their acceptability ... (WA Government 2011b, p. 23)

The Commission’s own work in the area of data availability identified the need for governments to develop a social licence to institute changes to facilitate improved accessibility and use of data (PC 2017a). This has parallels in the social licence of government to apply a ‘community accepted’ objective of equalisation to provide States with the capacity to deliver a similar standard of services to all Australians no matter what State they live in.

These lessons indicate the value of informing and educating stakeholders about the merits of any change to the standard of equalisation underpinning equalisation arrangements, to help ensure that changes are enduring. This theme is developed further in chapters 2 and 9, with regard to the Commonwealth Government needing to articulate the objective of HFE rather than leaving it to public officials to determine.

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## What does this mean for Australia?

OECD experience provides some lessons on ‘dos and don’ts’ for how to operate Australia’s HFE scheme. Many of the lessons from overseas experience are already embodied in Australia’s system of HFE.

- Avoid the use of a narrow representative tax base in assessing revenue raising capacity.
- Moving averages are valuable in reducing volatility in the level of transfers and, as a result, providing budget stability for sub-central governments.
- Avoid tied equalisation payments.
- Take account of broader conditional transfers.
- An independent grants commission provides less room for political manipulation of fiscal transfers.

Other lessons suggest Australia’s system could be improved.

- Avoid where possible high ‘equalisation tax rates’, as they can create incentives for sub-central governments to ‘game’ the system and can create development traps. As shown in chapter 4, Australia’s system can result in high equalisation tax rates in some circumstances (for example, increases in a tax base or changes to mineral royalty rates).
- Changes to equalisation arrangements must be accompanied by building political buy-in by sub-central governments to ensure that those changes are enduring.
- Building societal understanding and consensus is vital in setting and adhering to whatever standard of equalisation is chosen to be at the heart of any HFE arrangement.

Some of these lessons are picked up in chapter 9, which brings together the threads of earlier chapters in a discussion of how Australia’s system of HFE might be improved to better achieve its objectives.

### DRAFT FINDING 8.1

Fiscal equalisation to address disparities in the fiscal capacity of sub-central governments is common among OECD countries. But other countries’ approaches to fiscal equalisation are inextricably linked to their unique institutional frameworks — this limits those schemes’ applicability to Australia.

Despite this, overseas experience provides lessons that can inform the elements of our system in order to better meet the objectives of our fiscal equalisation scheme.

Australia is the only OECD country with a federal government that totally eliminates disparities in fiscal capacity between sub-central governments.

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## 8.3 Alternative approaches to distributing GST revenue

The Commission has been presented with a number of suggestions for reform of the system — some involving adjustments to the current system (discussed in chapter 7) and some involving fundamental changes to the way in which GST payments are distributed among the States. Some of these fundamental alternatives have been considered by previous reviews, for example, in 2012 by the GST Distribution Review and in 2014 by the National Commission of Audit.

These alternatives are:

- an equal per capita (EPC) approach (and a variant with ‘top-up’ funding)
- an actual per capita (APC) approach
- equalising to some level less than that of the strongest State
- a 3-stage process for grant allocation with the Commonwealth having a central role as the principle agency funding the vertical fiscal gap.

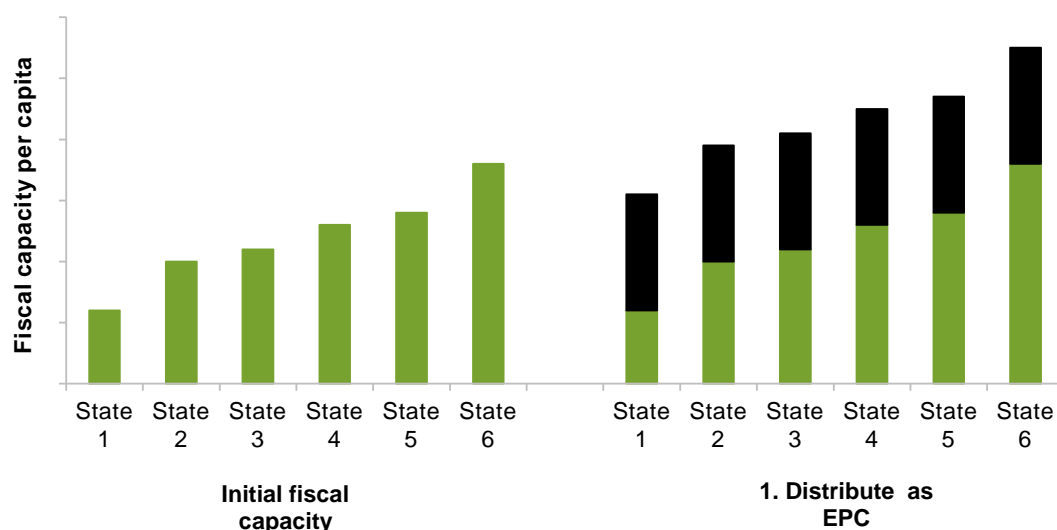
This section presents the basic ideas behind these alternative approaches to distributing GST revenue and assesses their merit against equity, efficiency and simplicity criteria relative to current arrangements and our proposed objective for HFE (chapter 2).

### Equal per capita approach

This approach was the most common alternative raised by participants.

Under an EPC approach, each jurisdiction would receive a share of the total pool of GST revenue equal to their share of the national population. A conceptual representation of this approach is shown in figure 8.3.

Figure 8.3 Conceptual representation of an EPC approach



The Commission has modelled the consequences of an EPC distribution and compared the States' resulting fiscal capacity against that resulting from the CGC's 2017-18 relativities (table 8.2). How States might fare under this approach will vary over time and, given the susceptibility of some to revenue shocks, their positions could change markedly from the snapshot portrayed in table 8.2. In the current environment, an EPC distribution would see more GST payments flow to New South Wales, Victoria and Western Australia (\$7.9 billion in aggregate), and commensurately less to the remaining States, with the Northern Territory experiencing the largest reduction in per-capita terms.

Table 8.2 Equal per capita distribution against 2017-18 relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
Equal per capita	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
<b>Change in GST Payments</b>								
\$m	2 432	1 032	-2 399	4 464	-1 955	-1 075	-203	-2 296
\$per capita	307	165	-485	1 665	-1 129	-2 059	-504	-9 338

Source: Productivity Commission estimates based on CGC data (pers. comm., 10 July 2017).

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## Assessment of this option

Submissions proposing a change to an EPC approach argue that it would be a ‘fairer’ system of distributing GST revenues — for example, Julie Matheson for Western Australia Party (sub. 4), Put Western Australia First (sub. 12) and the NSW Government (sub. 52).

However, this justification for a change to an EPC approach ignores the fundamental purpose of fiscal equalisation. That purpose is *not* to distribute GST revenues ‘fairly’ among the Australian population (that is, distribute an equal amount of GST revenue to each Australian). Rather, the purpose of redistribution is to ensure each State has the fiscal capacity to provide their residents with a similar level of services and associated infrastructure (chapter 2). The current system pursues this interstate equity by equalising the fiscal capacity of all States up to the capacity of the fiscally strongest State (presently Western Australia) via a redistribution of GST revenue.

Simply put, an EPC approach and HFE are mutually exclusive. This proposal is thus at odds with the general endorsement of the concept of HFE (box 2.2).

Community support for States being able to provide similar standards of public services for all Australians is widespread. The Tasmanian Government, for example, drawing on the results of Griffith University’s *Australian Constitutional Values Survey 2014*, noted:

Full equalisation is a cornerstone of the Federation and reflects the Australian public’s support that everyone should have similar levels of public services available to them with 77.5 per cent agreeing with the statement that ‘money should be transferred from richer parts of Australia to the poorer parts to ensure that everyone can have similar levels of public services’. (sub. 28, p. 36)

Further, as the SA Government observed, all States implicitly practice and thus endorse equalisation in their own backyards and it is inconsistent to suggest that this principle should not also hold nationally:

The principle of intrastate equity has also been at the centre of the NSW government’s commentary recently, which has emphasised a commitment to equity within the state, where regardless of their postcode citizens should receive a fair share of services and infrastructure. This intrastate argument is the same foundational principle that drives our current HFE system, and it is inconsistent to suggest that it should apply to intrastate government spending and service delivery but not a national approach. (sub. 25, p. 3)

An EPC approach does result in some equalisation from fiscally strong to fiscally weak States (in that GST payments per capita in fiscally strong States is generally higher than in fiscally weaker States) (Western Australia Parliamentary Liberal Party, sub. 22, p. 4).

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But an EPC distribution would take no account of the fact that some States face higher costs in providing services to their population as a result of factors outside their control (such as the share of their population that are Indigenous, or the degree of remoteness). As the Queensland Government noted:

An equal per capita distribution ... ignores the structural differences that exist between States (such as differences in geography, population distribution, and entrenched disadvantage) and would likely create the inequitable situation where vastly different levels of service would be provided across States. (sub. 32, p. 3)

Accordingly, an EPC approach would not redistribute GST revenues among States to the extent required to address those differences. This approach would therefore make a minimal contribution to equalising the level of services and infrastructure that States are able to provide to their residents.

An EPC approach would thus fail to meet the core underpinning equity rationale of HFE — which is to provide States with the fiscal capacity to provide a similar level of services and associated infrastructure (chapter 2).

Distributing GST revenues under an EPC approach is totally independent of States' revenue raising capacity and their expenditure on services. As Hancock noted, under this approach each State's grant is invariant to its own choices (sub. 54, p. 4). Accordingly, this approach should have no adverse effect on States' incentives to pursue increased prosperity (and revenue) or improved efficiency in providing services.

However, the significance of this inherent 'benefit' from an EPC approach is the inverse of the cost arising from the disincentives under the current system that States face to pursue increased prosperity or efficiency in providing services. Chapter 4 examines the extent of this disincentive effect and concludes that, while it exists in principle, the extent of any adverse effects in practice is unclear. Thus, while on efficiency grounds an EPC approach rates well in principle, any actual efficiency gains arising from this approach are likely to be small at best.

An EPC approach would be extremely simple to administer, as it would not require any assessments of States' capacities to raise revenue or of their costs of providing services and infrastructure. On this, the NSW Government observed:

An EPC model would ... not have the data requirements of the current system. The amount of resources dedicated to the system would be greatly reduced. (sub. 52, p. 33)

Against this simplicity criterion, the approach rates highly.

#### DRAFT FINDING 8.2

An equal per capita approach to distributing GST revenue is incapable of equalising the fiscal capacities of States. This approach is thus inimical to achieving the core equity rationale underpinning horizontal fiscal equalisation.



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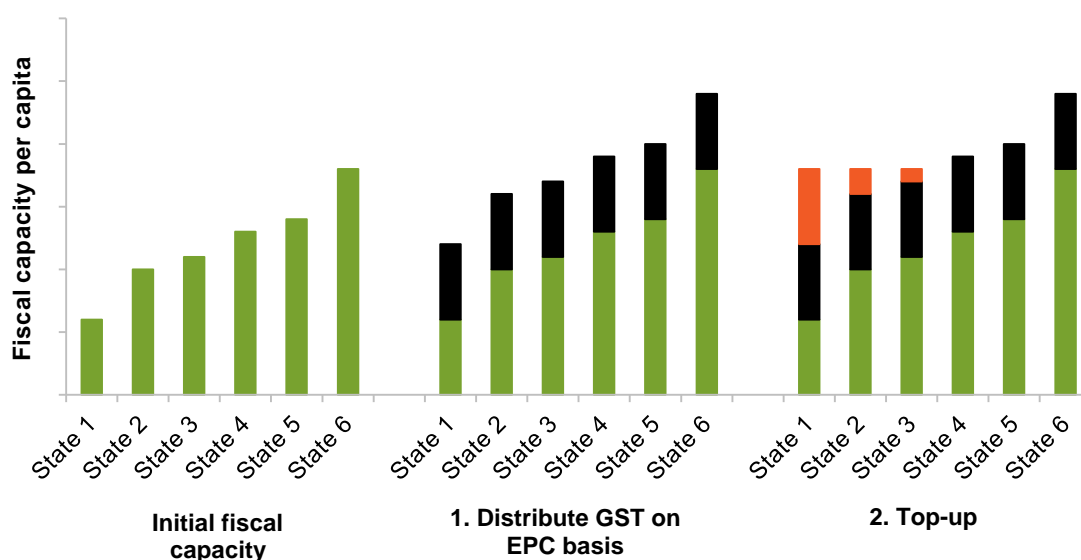
## Equal per capita with Australian Government ‘top-up’ funding

A variant on the EPC approach is for GST revenue to be distributed to States on an EPC basis, and for the Australian Government to provide added funding to top up any remaining gap between a State’s fiscal capacity and that of the fiscally strongest State, and to ensure that no State was worse off than under current arrangements. This approach would be similar to pre-1981 equalisation arrangements, when vertical and horizontal fiscal transfers were provided separately.

Figure 8.4 shows a conceptual representation of this approach.

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Figure 8.4      **Conceptual representation of an EPC with top-up approach**



Among participants, McAuley (sub. 7), Wealth Wisdom (sub. 10) and the WA Government (sub. 15) were attracted to this option. This approach was considered — but not recommended — by the GST Distribution Review in 2012 (Brumby, Carter and Greiner 2012a). It was at that time the preferred long-term policy position of the four fiscally strongest States.

The National Commission of Audit in 2014 considered and recommended an EPC distribution of GST revenue, with Commonwealth top-up funding to the fiscally weaker States (with the distribution of that additional equalisation grant from the Commonwealth being determined by the CGC) (NCOA 2014). Importantly though, that recommendation was a part of broader reforms to Commonwealth–State financial relations, including those to address the underlying causes of the vertical fiscal imbalance between the Commonwealth and State governments.

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Table 8.2 indicates that, were this approach applied for 2017-18, Queensland, South Australia, Tasmania, ACT and the Northern Territory would require top-up funding. However, in general top-up funding would primarily apply to South Australia, Tasmania, ACT and the Northern Territory — States whose relativities are usually above 1.0. Queensland has historically fluctuated above and below a relativity of 1.0 and would not always require top-up funding.

An EPC with top-up approach would tend to increase the GST payments received by States that currently have a relativity share of less than 1.0, but (by means of the top-up funding) would see States with relativities currently greater than 1.0 get no less revenue than they presently receive. At a simple level, this approach seems to break out of the zero-sum game bedevilling the redistribution of GST revenue.

However, the additional funding required under this approach is significant. The Queensland Government (sub. 32, pp. 14–15) indicated that if this approach applied in 2015-16 it would have required top-up funding of about \$6.8 billion. If applied for 2017-18, the Commission's estimates suggest it would require funding of \$7.9 billion (appendix C).

This funding would have to come from a relatively fixed (albeit broader) pool of Commonwealth Government revenue. This, in turn, would need to be sourced from higher Commonwealth taxes, increased debt, a significant rearrangement of existing payments to States or savings against other expenditure responsibilities. Thus, any top-up funding would also run into the winners and losers problem of the smaller, finite GST revenue pool. The only difference would be that the losers in this case (from higher taxes or redirected funding) would not be as transparent as is the case with any redistribution of the GST pool and, thus, any accountability for their loss would be muted to nonexistent.

More importantly, top-up funding of the magnitude needed to ensure no State is worse off (about \$8 billion in 2017-18) is unlikely to be forthcoming. This was an issue for the 2012 GST Distribution Review and was noted by the Tasmanian Government in this inquiry:

... the Commonwealth has made it clear there is no additional money available to compensate States that would be otherwise worse off under an EPC model. (Brumby, Carter and Greiner 2012a, p. 47)

[Top-up funding] raises the question of how, in the current economic climate, the Australian Government would fund the additional payments to the smaller States in order to leave no State or Territory worse off. (Tasmanian Government, sub. 28, p. 43)

Or, if top-up funding is forthcoming, it would always be subject to the vagaries of Budget pressures, with commensurate uncertainty for State budgets and planning:

Supplementary Australian Government funding would leave those States exposed to the funding priorities of the Government of the day. (Tasmanian Government, sub. 28, p. 43)

... it may create some uncertainty for States — even if the Commonwealth agreed to provide additional funding, there could be uncertainty as to how long additional equalisation grants would last — the Commonwealth may decide to withdraw its contribution to equalisation if faced with tight fiscal constraints. (Queensland Government, sub. 32, p. 15)

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## Assessment of this approach

By definition, this approach would provide all States with the fiscal capacity to deliver a similar level of services and, in principle, would meet this equity element of HFE. However, as the amount of any top-up funding would always be hostage to fiscal constraints faced by the Commonwealth Government (whereas the size of the GST pool is not), in practice this level of equity may not be consistently achieved.

Moreover, as the EPC distribution stage of this approach would provide some States with significantly larger GST payments than they currently receive, this approach falls short of the equalisation outcome achieved by current HFE arrangements. As discussed in chapter 2, though, the Commission considers the current goal of equalisation to the fiscal capacity of the strongest State is not desirable on a number of grounds.

From an efficiency perspective, relative to current arrangements an EPC distribution of GST revenue would enhance efficiency by removing any adverse effect on States' incentives to increase their revenue or pursue improved efficiency in providing services — as the State's share of the national population is the sole determinant of its GST payments. It could also engender a competitive dynamic among the fiscally stronger states. Although, as noted in the discussion of an EPC approach, any actual efficiency gains are likely to be small at best.

However, the Commonwealth Government top-up component introduces an elevation in moral hazard. Where a State faces the prospect that the Commonwealth Government will 'pick up' any shortfall in fiscal capacity or an increase in costs of providing services, this will tend to lessen the incentives faced by that State to pursue revenue raising reforms or efficiencies in providing services. Accordingly, this approach raises concerns about its efficiency effects on the fiscally weaker jurisdictions.

This approach (if implemented using the current CGC methodology), of itself, offers no gain in simplicity compared with the current approach. The same assessment of revenue and expenditure capacity undertaken currently would still need to be done for all the States, to identify the size of the top-up funds needed to equalise fiscal capacity. As the NT Government observed:

If additional Commonwealth funds were available to meet this gap, a process similar to the current CGC methodology would be required in order to distribute the funds based on expenditure needs, and hence, there would be no simplicity or administrative gains. (sub. 51, p. 35)

An EPC with top-up approach would highlight the scale of the transfers required to address horizontal fiscal inequity (the top-up component). This may improve transparency and accountability in the Federation. The OECD has found that systems that mix both horizontal and vertical equalisation are less transparent and accountable because they blur responsibility between financing and funding (chapter 5). Moreover, chapter 5 highlights how the HFE system has allowed for blame-shifting for States' fiscal circumstances and deficiencies in the delivery of some services.

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While this approach has some attraction, its practicality depends entirely on the willingness of the Commonwealth Government to tip extra money into the HFE bucket and continue to do so at the level necessary to deliver the level of desired equalisation. Given the fiscal ‘cost’ of this approach in isolation, it should only be countenanced in the context of broader reform to federal financial relations that may be able to generate some compensating benefits. This is explored further in chapter 9.

The assessment of this approach is necessarily partial in that it is made on the basis of this option being implemented on a stand-alone basis. In circumstances where this was implemented in combination to other changes to federal financial relations (for example changes to the vertical fiscal imbalance or roles and responsibilities), the nature of benefits and risks would be different.

**DRAFT FINDING 8.3**

An equal per capita with top-up funding approach would provide all States with the fiscal capacity to deliver a similar level of services. While this would meet the equity rationale underpinning horizontal fiscal equalisation, that top-up funding would always be hostage to fiscal constraints faced by the Commonwealth Government and, thus, this approach poses uncertainty for the fiscally weaker States. Such an approach should only be meaningfully considered as part of a broader reform of Commonwealth–State financial relations.

## **Actual per capita (gap) approach**

The CGC has presented this approach as a comparator to an EPC distribution (CGC 2017b). Under this option, GST payments would be used to fill any gap between States’ actual revenues raised and their actual expenditure on services and associated infrastructure to achieve a similar level to that of the fiscally strongest State. Once this has been achieved, the remaining GST revenue would be distributed on an EPC basis among States. In this respect, an APC system is conceptually the same as the current system except that it uses *actual* revenue and expenses rather than *assessed* revenue and expenses as the basis for distributing GST payments.

This option provides more GST per capita to States that have higher per capita spending and lower per capita revenue capacity. Depending on a State’s spending and revenue raising, it is possible for a fiscally weaker State to receive larger GST payments than under current GST distribution arrangements. Similarly, it is possible for a fiscally stronger State to receive less GST than would be provided under current arrangements (CGC 2017b, p. 7). Detailed estimates of State level effects for 2017-18 are available in appendix C.

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## Assessment of this option

An APC approach, by definition, would mean States receive GST payments sufficient to make up the gap between their actual revenue-raising capacity and their actual cost of providing some equivalent level of services Australia-wide. An APC approach would thus provide all States with the fiscal capacity to deliver a similar standard of services in much the same way as current arrangements. In doing so, this approach would meet the equity rationale that underpins HFE.

This approach, though, rates poorly from an efficiency perspective. On the revenue side, in principle, it could reduce a State's incentive to grow its economy, tax base and revenues as under an APC approach any increase in own-source revenue would result in a commensurate reduction in GST payments. Using actual expenditure on services also means that States would face a reduced incentive to contain costs or pursue more efficient service provision (as higher costs would be effectively paid for by a higher GST revenue distribution). As Hancock observed:

Suppose, for example, that the equalisation scheme responded to a State's hospital outlays simply by topping up its budget by whatever it spent, at the expense of grants to the other States. Under this arrangement, the effective price to the State of enhancements to the hospital would be reduced to zero. With such a system implemented across States, we could expect then to see excessive expenditures on hospitals as a result. (sub. 54, p. 4)

There would, however, be significant gains in simplicity, as this approach does not require the CGC to assess the States' capacity to raise revenue or cost of providing services.

### DRAFT FINDING 8.4

An actual per capita approach would provide all States with the fiscal capacity to deliver a similar standard of services and, in doing so, would meet the equity rationale that underpins horizontal fiscal equalisation. However, this approach has significant risks for adverse efficiency effects (less incentive to contain costs and pursue efficient service provision) — and on those grounds is an unacceptable alternative to current arrangements.

## Equalisation to less than the strongest State

The current approach to HFE can be adapted to deliver a level of fiscal capacity equalisation that is less than that of the strongest State.

One version considered by the CGC is to quantify the amount in excess of the average cost of services faced by fiscally weaker States and the amount less than the average revenue they can raise. These amounts would be removed from the GST pool and paid to the fiscally weaker States (including Queensland and Western Australia when relevant). The balance of the pool would be distributed on an EPC basis (CGC 2017b, p. 3). The CGC version of this

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approach essentially involves equalising fiscally weaker States up to the average level of fiscal capacity, but then no further.

The NT Government opposed this approach, noting (inter alia) that:

... [a] partial equal per capita distribution would result in fiscally weaker states being under-equalised and fiscally strong states being overequalised, which would ultimately lead to divergences in tax rates and the scope and quality of services and infrastructure between states. (sub. 51, p. 35)

This approach of removing some of the GST pool (sufficient to bring fiscally weaker States up to some agreed standard) was also suggested by Tuckey (sub. 6, p. 1), and variations on this theme were suggested by the Western Australian Parliamentary Liberal Party and the Business Council of Australia (box 8.2).

#### **Box 8.2      Variations on equalising to less than the strongest State**

The Western Australian Parliamentary Liberal Party (sub. 22, p. 5) proposed that 45 per cent of the GST pool be redistributed for equalisation purposes according to a modified HFE formula, with the remaining 55 per cent of the pool distributed on a per capita basis. Over time, it envisaged the 55 per cent limit would be progressively raised.

This is a significantly greater EPC distribution than the current equalisation process, where about 35 per cent of the GST pool in 2017-18 was distributed on an EPC basis after equalising the fiscal capacity of States to the level of the fiscally strongest (chapter 3).

If this option were to apply for 2017-18, this approach would effectively equalise the fiscal capacity of all States bar Western Australia to about halfway between the average fiscal capacity of all States and that of Western Australia (the fiscally strongest State), before the balance of GST revenue was allocated on an EPC basis.

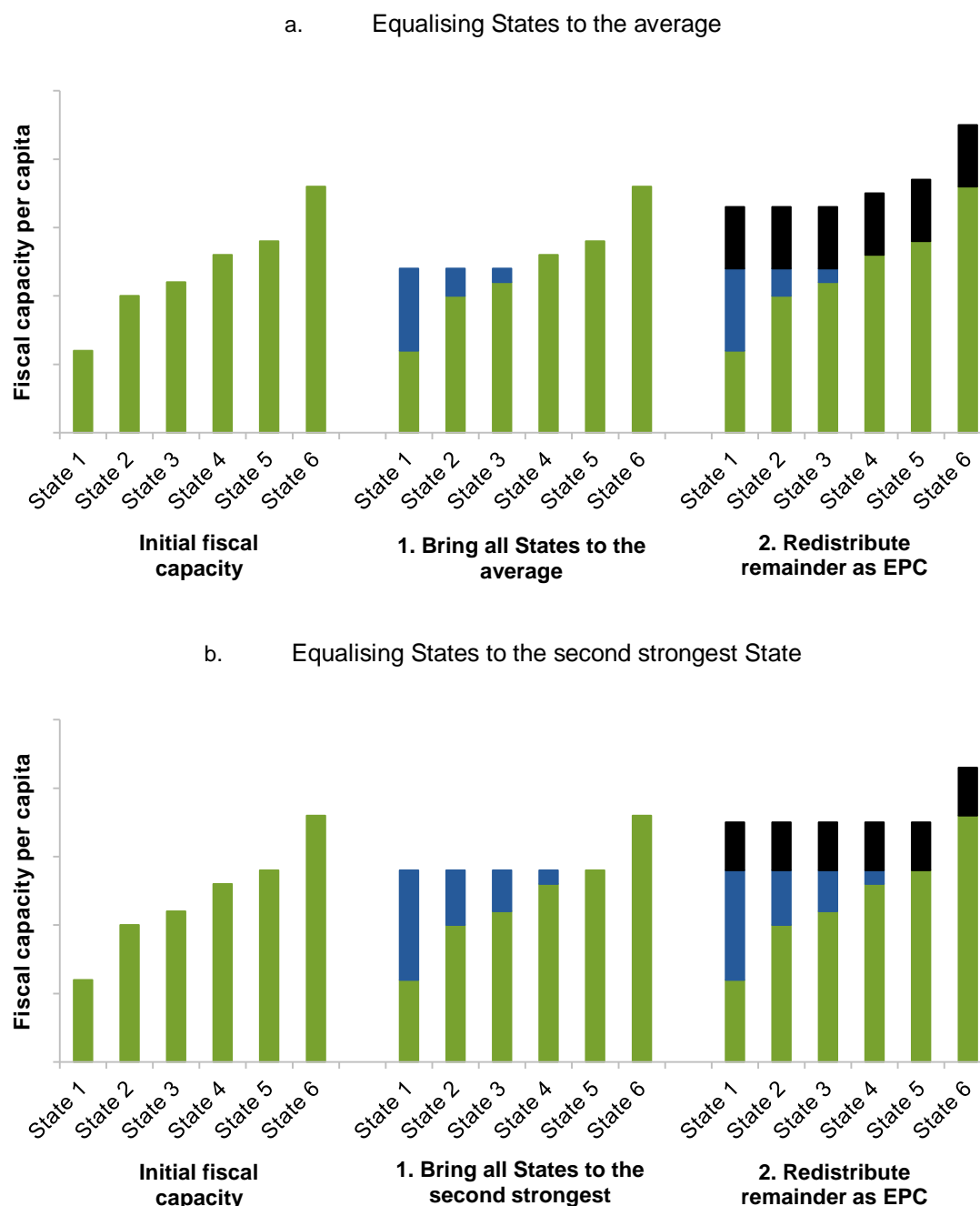
The Business Council of Australia recommended a different approach:

**Quarantining a certain percentage of the GST pool for equal per capita distribution** (say 25 per cent initially) with the remainder being equalised through a simplified process. Consideration could be given to progressively raising the amount of the pool distributed on an equal per capita basis. (sub. 47, p. 10)

This approach, at least in its initial year, would distribute a lower share of GST on an EPC basis than the current (2017-18) year.

This approach, though, could be used to bring States up to any level of fiscal capacity less than that of the fiscally strongest State. Figure 8.5 shows a conceptual representation of this approach using the examples of lifting most States' fiscal capacity to that of States' average fiscal capacity or to that of the second fiscally strongest State.

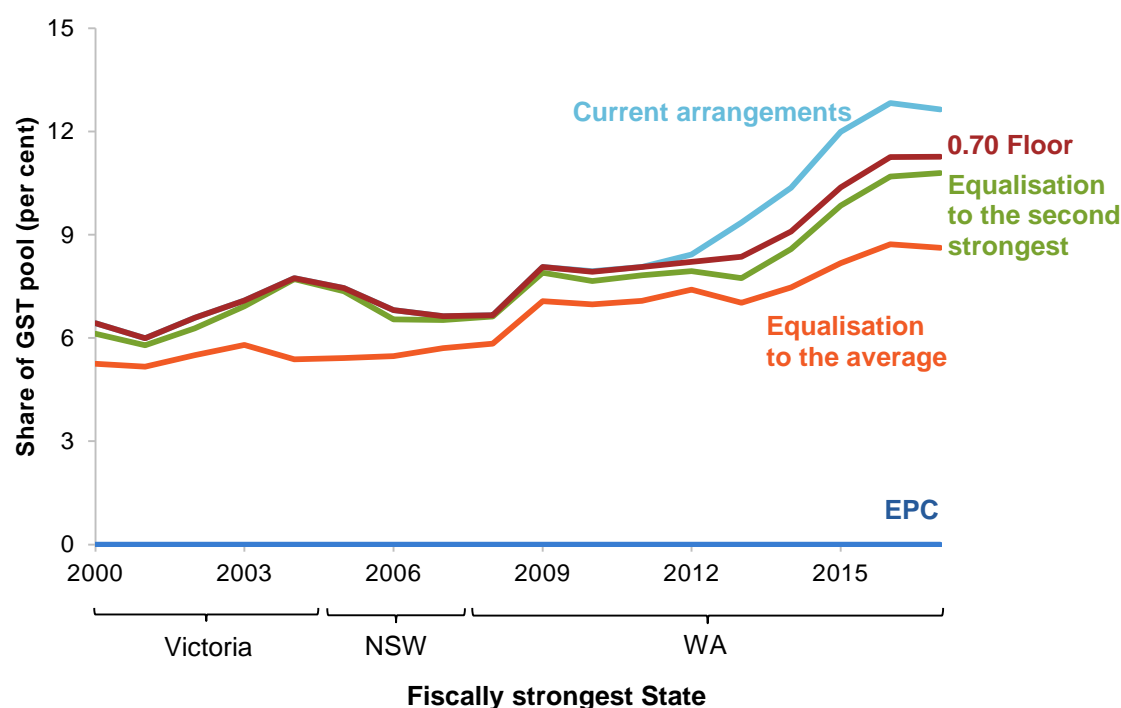
Figure 8.5 **Conceptual representation of equalising fiscal capacity to a level less than that of the strongest State**



Tables C.2 and C.3 in appendix C show the distributional effects of equalising to the average and equalising to the second strongest States in 2017-18. Both approaches would deliver less GST payments to all States bar Western Australia. This reflects the unique position of Western Australia in the current environment. Were such approaches applied across the period 2000–2017 (thereby also including the earlier period when Victoria or

New South Wales were the fiscally strongest States and the distribution of fiscal capacity was narrower), the redistribution would have been of a smaller magnitude and the relativity ranges reduced from 5.66 to 0.30 (under the current approach) to 5.57 to 0.87 (under equalisation to the average) or to 5.62 to 0.82 (under equalisation to the second strongest State) (figure 8.6). Table 8.3 shows the equalisation task and relativity ranges for these and other alternative approaches to equalisation against the current approach.

Figure 8.6 The equalisation task under alternative arrangements<sup>a</sup>



<sup>a</sup> The pool includes Health Care Grants in estimates made before 2009.

Source: Productivity Commission estimates based on CGC data (pers. comm., 10 July 2017).

Table 8.3 Equalisation task and relativity ranges of alternative approaches

Option	Equalisation task (per cent of GST <sup>a</sup> )			Relativity ranges	
	2000–07 Average	2008–17 Average	2017	2000–07	2008–17
Current approach	6.84	9.63	12.64	0.87 — 4.39	0.30 — 5.66
0.70 floor	6.84	8.92	11.26	0.87 — 4.39	0.70 — 5.64
Equalisation to the second strongest State	6.66	8.56	10.79	0.87 — 4.39	0.82 — 5.62
Equalisation to the average State	5.46	7.44	8.62	0.92 — 4.32	0.87 — 5.57
EPC	0.00	0.00	0.00	1.00 — 1.00	1.00 — 1.00

<sup>a</sup> The GST pool includes Health Care Grants in estimates made before 2009.

Source: Productivity Commission estimates based on CGC data (pers. comm., 10 July 2017).



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## Assessment of this option

This approach would bring fiscally weaker States up to some level below that of the fiscally strongest State (for example, to the average fiscal capacity of all States or to the level of the second strongest State), and provides that degree of equalisation and equity. And, as intended, it would not deliver equalisation of fiscal capacity to the level of that of the strongest State — given that the Commission considers this to be taking HFE too far (chapter 2).

The variation proposed by the Western Australian Parliamentary Liberal Party (box 8.2) would see 45 per cent of the GST pool redistributed for equalisation purposes compared to some 66 per cent currently. This would result in all States except Western Australia being equalised to a fiscal capacity about halfway between the average fiscal capacity and that of the fiscally strongest State — before the balance of GST revenue was allocated on an EPC basis.

These examples highlight that the equity implications of this approach depend on the level of fiscal capacity equalisation it is intended to achieve. As discussed in chapter 2, there are sound reasons why the current level — that of the fiscally strongest State — may not be appropriate, and a more ‘reasonable’ level would be preferable.

To the extent that any equalisation transfers introduce disincentives for States to enhance their revenue-raising capacity (for example, as a result of possible first-mover disadvantage effects from reforming taxes) or reduce costs of service provision, this approach could still have some adverse efficiency effects. However, as this approach would deliver less than full equalisation, it would have commensurately smaller disincentive effects on efficiency than current arrangements.

The same assessments of revenue-raising capacity and costs of providing services as occur with the current scheme would still need to be made for all States under this approach. As such, this approach does not initially result in significant improvements in simplicity. However, the CGC would be better placed to consider options for simplification when the objective is no longer equalising to the strongest State.

### DRAFT FINDING 8.5

Equalisation can be designed to provide a spectrum of fiscal equalisation outcomes — for example, from equalising to the average fiscal capacity across the States to up to equalising to that of the strongest State. The extent to which this approach would meet the equity rationale underpinning horizontal fiscal equalisation therefore depends on the level of equalisation this approach is intended to deliver.

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## A 3-stage grant allocation approach

This approach (box 8.3) was proposed by Neil Warren (sub. 38). The defining feature of this model is that it considers the operation of HFE in the context of all Commonwealth transfers.

### Box 8.3 A three-stage grant allocation approach

This approach involves:

- stage 1 — address the vertical fiscal gap via an equal per capita transfer
- stage 2 — address the horizontal fiscal gap through partial (not full) HFE, based around States' assessed revenue and expenditure
- stage 3 — allocate special needs grants that are quarantined from Stage 1 and Stage 2 deliberations.

This approach is intended to, first, ensure all States have the revenue they need to meet expenditure needs; second, provide a degree of horizontal redistribution based around capacity and disability, and factoring in incentive effects of transfers; and third, take into consideration special needs and national priorities.

Australia should move away from a full HFE relative needs-based model in Stage 2 to a partial equalisation model which directly factors in incentives. (Neil Warren, sub. 38, p. 3).

The Stage 2 HFE approach would be determined by negotiation across all governments to engender greater ownership, accountability and transparency. This implies an outcome of some unspecified — but less than the current — level of equalisation.

This approach would require the CGC to oversee collation and preparation of data to inform direct intergovernmental consultations and negotiations on equalisation, and COAG to assume a more central role in allocating Commonwealth grants to States.

The 3-stage grant allocation approach explicitly targets incentives. It envisages greater use of tied payments and a new independent agency to communicate and monitor grant performance against expectations and to oversee the allocation of a reward related grant pool tied to performance. While such measures can improve transparency and accountability (as occurred under the National Competition Policy), extending such an approach to the entire suite of Commonwealth–State transfers would be a significant departure from current practices.

Source: Neil Warren (sub. 38).

## Summing up the value of alternative approaches

Exploring alternative approaches to distributing GST revenue reveals the inherent trade-offs between equity, efficiency and simplicity, and all approaches have their advantages and disadvantages (table 8.4). EPC and APC are clearly not suitable. EPC with top-up funding and equalising to less than the fiscal capacity of the strongest State are more attractive. But EPC with top up funding (in and of itself) is not an unambiguous improvement on the current system.

An EPC with top-up funding approach seemingly breaks out of the GST zero-sum game dilemma, although providing top-up funding from the Budget would (in the absence of broader Commonwealth–State financial reform) still generate some losers elsewhere in the

system. Further, by removing the big three (and sometimes four) States out of the HFE process, it would reduce any disincentives they might otherwise face to increase revenue or pursue improved efficiency in providing services. But it may elevate moral hazard concerns among the fiscally weaker States, and would not necessarily lead to a simplified assessment process.

The main benefit of this model is that it would highlight the scale of the transfers required to address horizontal fiscal inequity (the top-up component), and that may lend itself to greater accountability over time. Given the ‘cost’ of this approach, it should only be pursued in the context of broader reform to federal financial relations that may be able to generate compensating benefits.

Equalising to less than the fiscal capacity of the strongest State could be used to provide all States with the fiscal capacity to provide a reasonable level of services. This approach would harness existing arrangements and have negligible (positive) effects for simplicity. But it does afford scope for some trade-off between equity and efficiency and reduces adverse efficiency effects (like the first mover disadvantage for major revenue reform).

However, it would result in less funding to the fiscally weaker States than the current system (the amount of which would increase, the further the level of ‘reasonable’ services was below the capacity of the strongest State). And while the Commission does not consider the current degree of equalisation to be an appropriate benchmark, creating ‘losers’ (in the current extreme circumstances) is politically and pragmatically problematic, so timing and careful transition are paramount, especially to ensure the fiscally weaker States are not significantly disadvantaged.

**Table 8.4 Summary rating of alternatives to the current HFE system**

<i>Approach</i>	<i>Assessment</i>
Current equalisation approach	Current arrangements deliver a high level of fiscal capacity equity between States, have some adverse efficiency effects, and require complex assessments to inform the redistribution task.
EPC	EPC would provide minimal equalisation and so performs poorly on equity grounds. It may deliver some modest efficiency gains, and would be very simple to operate.
EPC with top-up	In principle, this approach would deliver a high level of equity between States but, in practice, that outcome would always be hostage to budget pressures. It may deliver some modest efficiency gains, but would (at least initially) require a complex assessment process similar to current arrangements.
Equalising to less than the level of the strongest State	This approach could deliver a high level of equity between States. It would reduce adverse efficiency effects, but (at least initially) would require the same complex assessments to inform the redistribution task. Less than full equalisation may allow for less than precise, and therefore simpler, methods over time.
APC	This approach could deliver a high level of equity between States, but it comes with the risk of significant adverse efficiency effects. It would be very simple to operate.



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## 9 Scope for reform

### Key points

- While the horizontal fiscal equalisation (HFE) system performs well in some respects, it grapples with extreme circumstances, can discourage some policy reform and arguably takes equalisation too far.
- The inquiry has been presented with a range of options to reform the HFE system. Each option poses trade-offs in terms of equity, efficiency, transparency and simplicity.
- The Commonwealth Government should articulate a revised objective for HFE. The revised objective should provide for a less comprehensive form of equalisation compared with the current system.
- The Commonwealth Treasurer should ask the Commonwealth Grants Commission (CGC) to recommend relativities consistent with this revised objective. The CGC should also be directed to pursue significant simplification of its assessment process, even if it results in slightly less — or less precise — equalisation.
- There is also scope to improve the governance of the HFE system. In particular, the CGC should provide an independent and objective voice to inform the (currently ill-informed) public dialogue on HFE. It should also engage in a process with State Treasurers to provide the States with 'draft rulings' on how a proposed policy change would affect their GST payments.
- GST payments should continue to be provided on an untied basis. That said, there is scope to improve government accountability in the HFE system through the CGC making the data provided by the States (as well as its calculations using these data) publicly available.
- Accountability in the broader federal financial system is, unsurprisingly, elusive due to the vertical fiscal gap, the patchwork of payments from the Commonwealth to the States and the many shared service delivery responsibilities.
- The States' high reliance on Commonwealth payments makes it imperative that the whole system works effectively. Yet, the system is complex and appears to have been given little holistic consideration.
- There is only so much an improved HFE system can deliver in isolation. The greatest benefits potentially come from broader reform to Australia's federal financial relations. Governments should develop a process to work towards this as a longer-term goal.
  - This process should assess how Commonwealth payments to the States — both general revenue assistance and payments for specific purposes — interact with each other.
  - It should also include consideration of a practical division of responsibilities between the States and the Commonwealth, and accompanying accountability and performance arrangements. In particular, responsibilities and accountabilities for Indigenous policy — a policy area where there continues to be little improvement despite significant expenditure — should be given close attention.

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Participants to this inquiry expect much from the current HFE system. But that system — while central to equalising the fiscal capacity of the States — is only one component of Commonwealth–State financial relations. As such, any changes to HFE must be mindful of how they fit into that broader architecture of intergovernmental financial relations.

This chapter assesses the scope for reform to Australia’s HFE system, including by looking beyond the mechanics of the GST distribution process to examine the broader institutional and federal financial relations landscape. The broader landscape is a key driver of the effective working of the current HFE system and of possible alternatives that might improve the system.

The chapter brings together the key findings and discussion of alternative options in earlier chapters, and considers the scope to improve Australia’s approach to HFE (section 9.1). It then discusses options for improving institutional arrangements, particularly governance and accountability (section 9.2). Finally, it considers the scope for future reform of the HFE system as part of broader reform to Australia’s system of federal financial relations (section 9.3).

## **9.1 What scope is there to improve current arrangements?**

During the course of its inquiry, the Productivity Commission received differing views on how the system is performing, and on the associated need for reform.

Some participants were generally happy with the way HFE is achieved, and advocated only minor ‘tweaks’ to the CGC’s methodology. Other participants proposed major changes in methodology, such as to the mining assessment or the way in which the policy choices of governments are addressed. Still others argued for big bang reform. In their view, nothing short of a complete overhaul is needed, as the system has adverse impacts on productivity and efficiency, and focuses far too heavily on equity at the cost of rewarding reform efforts and the pursuit of growth-enhancing policies. A number of submissions commented on the unfairness of the outcomes under the present approach. These submissions included disparate perspectives on how the GST revenue should be distributed (chapter 2) and concerns that there is a disconnect between fiscal capacity afforded for Indigenous expenditure and outcomes in Indigenous disadvantage.

### **The importance of a policy objective**

While some participants argued that the objective of HFE is not within the remit of this inquiry, understanding what HFE is seeking to achieve is a key element of assessing whether the current system is working in the best interests of the Australian community, and for weighing up alternatives. Indeed, clear specification of objectives is particularly important where there are trade-offs, as is the case with HFE (chapter 2).

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The Commission has found that some of the disagreement and confusion about the HFE system is due to there not being an agreed and well-articulated policy objective by governments. As noted in chapter 3, since the late 1970s/early 1980s, the objective of HFE has been expanded through the CGC's processes, in conjunction with the States. While implicit approval is given to the objective through the CGC's update process and methodology reviews, the Commonwealth Government has provided little guidance in both setting the objective and in communicating it to the broader community.

## The overall view

Drawing on the evidence and analysis presented in earlier chapters, the Commission's overall assessment in this Draft Report is that the current HFE system is functioning reasonably well in regard to:

- *equity*: the principle of fiscal equalisation is strongly supported and Australia's HFE system achieves an almost complete degree of equalisation — this is unique among OECD countries with federal governments
- *an independent and transparent process*: the CGC, as an expert agency independent from governments, is well placed to conduct the HFE distribution process. It has well-established processes that involve consultation and regular methodology reviews
- *stability*: HFE results in reasonably stable GST payments and a level of predictability for (most) States regarding budget outcomes.

However, there are deficiencies in a number of areas, which have become particularly pronounced recently. These include:

- *equalisation is taken too far*: equalising comprehensively and to the fiscally strongest State means that when there is an outlier, the redistribution task is considerable and the standard being equalised to is potentially volatile
- *policy neutrality*: the current HFE system struggles with State circumstances that differ markedly from the other jurisdictions. The potential for HFE to distort State policy is pronounced for major tax reform exercises (especially for first movers) or in relation to mineral and energy resources (including royalty policies and restrictions on extraction)
- *simplicity and comprehensibility*: the CGC's drive for full and precise equalisation has meant that there has been an increase in system complexity over time. This has led to the system being poorly understood by the public, and even by many within government.

In terms of overall national efficiency and growth, Australia's HFE system has been typically found to have little direct effect. However, the current redistribution task is historically high, which may be elevating any efficiency effects.

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## Are there preferable alternatives?

The Commission has considered potential improvements to the current system (chapter 7) as well as more fundamentally different approaches to distributing GST revenue (chapter 8). Each approach variously trades off equity, efficiency and simplicity — the trade-off between equity and efficiency is inescapable — and has its advantages and disadvantages. To be ‘preferable’ to current arrangements, alternative approaches would need to meet the Commission’s objective for HFE and address some of the deficiencies identified in the assessment above.

A relativity floor has some simplistic attraction as it acknowledges that the current system works in a satisfactory way *on average*, and when jurisdictions are similar, but has difficulty with extreme circumstances. It may also provide greater incentives at the margin for States to pursue economic development opportunities. Further, an *explicit* floor would be more transparent than the *implicit* floor that has emerged through the additional payments to Western Australia in recent years. However, the introduction of a relativity floor is unlikely to provide a holistic fix to the various complexity and efficiency concerns, and could even increase complexity and unpredictability.

Ultimately, prevention is better than cure. Equalising to the fiscally strongest State is not desirable when that State is such an outlier, and when the pursuit of full equalisation may be resulting in broader (albeit in most instances small) costs to the economy. The Commission believes HFE should aim for a different — ‘reasonable’ — level of fiscal capacity and is seeking participant views on what level would be considered reasonable.

The Commonwealth Treasurer should articulate a revised objective for HFE, as envisaged in chapter 2. The benefit of this approach is that it vests policy responsibility with government, and leaves implementation to the CGC. As such, many of the positive features of the current system are retained, such as the CGC’s independence and regular methodology reviews. And by not specifying a specific model, it makes this approach more time-neutral and amenable to changing circumstances over time. Further, the Commonwealth Treasurer should direct the CGC to pursue significant simplification of the assessment process, even if it results in slightly less or less precise equalisation.

The alternative approaches considered in the inquiry offer a departure from the CGC’s full equalisation principles, and draw on practices used overseas or proposed in submissions.

One approach could involve first lifting States up to some agreed level of fiscal capacity (a standard the Commission views as ‘reasonable’) — but not bringing them up to the level of the fiscally strongest State as presently occurs — and distributing the balance of the GST pool on an equal per capita (EPC) basis. In principle, this approach could be used to bring States up to any level of fiscal capacity less than that of the fiscally strongest State, such as the average fiscal capacity, the average of the stronger States, or the fiscal capacity of the second strongest State.



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#### INFORMATION REQUEST

*The Commission seeks participant views on what level of fiscal capacity would be consistent with enabling States to provide a 'reasonable' level of services? For example, this could be the average fiscal capacity, the average of the 'donor' States, or the fiscal capacity of the second strongest State.*

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It could also be implemented by an efficient model standard, set using efficient costs for service provision and efficient revenue bases and rates. Although, as identified in chapter 7, this approach would have practical impediments, including data availability and would require relatively greater subjective judgment in determining the appropriate standard.

An equalisation approach that avoids the full equalisation of the current system would make way for consideration of efficiency issues where material, and it would be consistent with the Commission's revised objective of HFE.

An EPC with top-up funding approach also has some attraction. The key benefit is that it seemingly breaks out of the zero-sum game. It would also potentially provide more transparency about the size of the equalisation task. Further, by making the big four States' GST payments contingent on only their population, it would have no adverse effect on their incentives to increase revenue or pursue improved efficiency in providing services, though it may create another set of moral hazard concerns among the fiscally weaker States.

This model relies on the Commonwealth Government providing additional funding to the States. However, this top-up funding has its own opportunity costs and is unlikely to be forthcoming in the current environment. Given the cost of this approach, it should only be pursued in the context of broader reform to federal financial relations, where that reform could generate some compensating benefits. Indeed, it was in this context that the National Commission of Audit considered this approach (chapter 8).

The Commission is seeking further feedback from participants on these options and what might be the best approach to managing transition.

Any changes to HFE arrangements in the current extreme environment will result in less equalisation, and commensurately a significant redistribution of GST payments to Western Australia at the expense of all the other States. Reducing GST payments especially to the fiscally weaker States would be undesirable. Any changes would therefore need to be timed and implemented carefully, especially to ensure that fiscally weaker States are not disadvantaged. For example, changes may be implemented in the future, when Western Australia's relativity is expected to be higher, and could be introduced gradually over a number of years.

The CGC's 2020 methodology review may be a good vehicle for considering and consulting on the most appropriate way to transition to any new approach.

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Regardless of the changes to the HFE system ultimately adopted, the Commission considers that broader reform is warranted — both to the institutional arrangements and to federal financial relations.

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*INFORMATION REQUEST*

*The Commission seeks participant views on managing transition to any new approach, and the most amenable process for considering the transition path. For example, could it be considered via the CGC's 2020 methodology review?*

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## **9.2 Improving institutional arrangements**

### **Better governance**

Effective governance is essential for public understanding and confidence in the HFE system, and in Commonwealth–State relations more broadly. As well as ensuring the system operates effectively, sound governance can:

- help to reduce political tensions and accompanying misinformation, even where there is disagreement about the financial aspects of the system
- generate a greater sense of ‘joint ownership’ or ‘buy in’ by the State and Commonwealth governments (Brumby, Carter and Greiner 2012a, p. 63).

Many participants have been positive about the system of HFE governance. In particular, the CGC is generally highly respected and has well-developed and transparent processes for consultation and conducting its yearly updates and five-yearly methodology reviews (NT Government, sub. 51). This is demonstrated by the CGC’s schedule of work for its five-yearly methodology review (table 9.1). Further, its independence is considered by many participants to be positive (ACT Government, sub. 49), as it removes some (though obviously not all) of the political melee around the distribution process.

That all of the CGC’s recommendations since 1985 have been accepted by the Commonwealth Government also suggests that the Commonwealth Government has confidence in the system (CGC 2009).

However, some concerns have been raised by participants (box 9.1). Generally, concerns with the CGC are that:

- it makes decisions that are overly complex and detailed, that rely on questionable data and judgments, and which can produce unpredictable outcomes (WA Government, sub. 15, p. 1; Queensland Government, sub. 32, p. 3; NSW Government, sub. 52, p. 2)
- it overrules the decisions of elected officials (NSW Government, sub. 52, p. 5)
- the Commissioners make decisions with little direct contact with stakeholders and then leave it to the secretariat to answer questions (WA Government, sub. 15, p. 81).

**Table 9.1 The CGC's work program for the 2020 Review**  
Selected events

<i>Timing</i>	<i>Event</i>
<b>2016</b>	
December	State views on work program processes sought
<b>2017</b>	
February–April	States and Commonwealth consulted and work program finalised. Officer Working Party of CGC and State officials commence examination of specific issues.
End July	State submissions due on a CGC staff paper outlining the approach to the review, HFE, principles, and assessment guidelines.
August–September	Bilateral discussions between the CGC and States on submissions.
October–November	CGC staff and Treasury officer discussions on changes to 2015 Review assessment methods.
<b>2018</b>	
February	State submissions on approach to review, the objective(s), supporting principles and their implementation.
March–June	Officer Working Party meetings.
May–August	CGC visits to States for discussions on assessment issues, including service delivery needs. Bilateral meetings with Treasurers/Heads of Treasuries to cover key issues, if required.
End August	State submissions on scope and structure, treatment of Commonwealth payments, category and factor assessments.
<b>2019</b>	
February	Optional State submissions on Officer Working Party reports due.
June–July	CGC staff visit States to discuss the draft report.
July–August	Possible multilateral meeting between Commission and Heads of Treasuries to discuss draft report.
End August	State submissions on draft report due. New issues paper released by CGC staff.
End September	State submissions on new issues due.
Mid November	CGC paper sent to States on significant changes since the draft report.
Mid December	Final State comments due on proposed changes to draft report.
<b>2020</b>	
28 February 2020	CGC provides final report to the Commonwealth and States.

*Source:* CGC (2017e).

Concerns have also been raised with the role of the Commonwealth Government. As noted in chapter 3, the tax reforms of 2000 led to a reframing of HFE in the context of the distribution of GST revenue and meant a distancing of the Commonwealth Government from the workings and policy development of HFE. The NT Government (sub. 51, p. 40) commented:

... while equalisation is a central element of Australia's federation, the Commonwealth itself has rarely defended HFE and its intent, and more recently has blurred the conversation by talking about a possible relativity floor sometime in the future ...

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While Gray (2017, p. 31) concluded:

... we seem to have arrived at a situation in which no one is accepting accountability for one of the most critical aspects of federal financial relations and where there is confusion about the priority to be given to compensating the States for their loss of the power to levy income tax as against achieving HFE.

### **Box 9.1 States' views on HFE governance**

WA Government (sub. 15, p. 81):

The CGC's documentation for its 2015 Review of its methods comprised over 800 pages, yet many of the CGC's judgements are not clearly explained. ... There is a focus on very detailed calculations, rather than getting the overall result broadly correct, but there is much variation in the system ... The result is that, throughout Australia, the CGC process is seen as a 'black box'.

SA Government (sub. 25, p. 4):

The CGC, the independent expert arbiter, ... is best placed to oversee the distribution of GST funds among the states and territories.

Tasmanian Government (sub. 28, p. 39):

It has also been suggested that there could be more government involvement in the governance of the HFE system. Such an approach, where governments determine aims, objectives and definitions of the HFE system, leaving the administrative body (the CGC) to deal strictly with data and mechanical issues, may politicise the GST distribution process and reduce the independence, transparency and integrity of the equalisation system.

Tasmania supports the current governance arrangements underpinning the HFE system.

Queensland Government (sub. 32, p. 15):

Given the complexity of the system, the CGC's considerable efforts in achieving HFE over many years should be recognised.

ACT Government (sub. 49, p. 15):

All States continue to have concerns about the governance of the current HFE system. Unfortunately, many of the recommendations of the GST Distribution Review in this space have not seen the light of day but remain relevant more so today than ever. Specifically, governance arrangements for any system must reflect the need for the States and the Commonwealth to act as joint stewards of the system, rather than competitors or critics.

NT Government (sub. 51, p. 40):

The Northern Territory proposes that CGC should have a similar role to the RBA when it comes to equalisation and be given a clear mandate to regularly engage with the public on the purpose of the HFE distribution methodology and interpretation of GST relativities and their derivation, in order to strengthen public understanding and confidence in the system.

NSW Government (sub. 52, p. 35):

The system underpinning GST revenue distribution needs the support of the states, not just their acquiescence. If confidence in the system is to be re-established and maintained, a key element for good governance going forward is the full involvement of the states. Governments should have the responsibility of setting the objectives of HFE and ensuring that the HFE process is meeting those objectives in an appropriate way. The CGC should not be the primary decision-maker or final arbiter ...

Victorian Government (sub. 53, p. 18):

The Commonwealth Government alone issues the terms of reference for the CGC's advice, and is at liberty not to accept that advice if it so chooses. However, the importance of the CGC lies in their independence, given the distribution of the GST pool is a zero sum game. Provision of independent advice on relativities supports the agreed goals of HFE.

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More generally, the complexity of the system, as well as a sizable measure of self-interest on the part of the States, means that the public debate is plagued by myths, misunderstanding and misinformation.

... the recommended GST distribution between states is so poorly understood that it allows a degree of political gaming and misinformation, which can distort the public's views on HFE. For example, the consistent misinterpretation of relativities and statements such as 'Western Australia receives 34 cents out of every GST dollar raised in the state' are misleading, incorrect and indefensible. (NT Government, sub. 51, p. 40)

This confusion appears to stem from the absence of a strong neutral public voice to communicate the mechanics of the system and how it is meeting the policy objective, which, as noted in chapter 2, has not been clearly defined by the Commonwealth Government.

### Options for reform

Several participants to the inquiry have suggested changes to HFE governance structures. For example:

- Neil Warren (sub. 38, pp. 3–4) suggested the CGC should no longer be central to HFE but should oversee collation and preparation of data, with the Council of Australian Governments (COAG) to assume a more central role in the allocation of grants. A new independent agency would communicate and monitor performance and whether the system meets objectives, and oversee advice on the allocation of a reward-related grant pool.
- The NSW Government (sub. 52, pp. 35–36) suggested a body comprising representatives drawn from the States (the Commonwealth Government would not be a member) that would take direct responsibility for overseeing the CGC. A new HFE Board, made up of State Treasurers with voting powers reflecting population share, would be established, charged with overseeing the distribution of the GST revenue.

The Productivity Commission is of the view that such radical changes, entailing a shift away from an independent agency reporting to the Commonwealth Government, are not required to allay most of the concerns raised by participants. While there is not strong evidence from overseas (governance systems are highly dependent on the particular characteristics of the HFE system), having an independent agency leaves less room for political bargaining and reduces the potential for distortions to equalisation that politicisation would produce (chapter 8). Indeed, the 2012 GST Distribution Review reported along similar lines:

Experience shows that a politically indifferent, rules-based, system of allocating finances to States has advantages over the ad hoc negotiation of special deals, especially, but not only, when governments of opposite persuasions are involved. (Brumby, Carter and Greiner 2012a, p. 45)

That said, it has also been suggested that an independent agency can produce other issues, such as mission creep, incentives for complexity, and issues with public oversight (Shah 2005, pp. 12–13).

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## A more public role for the CGC

The CGC — through its Chairperson and Commission members — should take on a more prominent public communication and education role.<sup>13</sup>

The main aim of this role would be to communicate to the broader public the processes and decisions the CGC takes in order to ensure the HFE system meets its objective. The CGC would thus become the strong independent voice that many have said is missing from the HFE commentary.

As a guide, the CGC should look to other similar agencies that fulfil an independent educative role, including those that have similar responsibilities to the CGC such as the Parliamentary Budget Office (PBO). The PBO, in addition to its costings function, undertakes research and analysis of budget and fiscal policy settings, and makes its reports publicly available (PBO 2017). A recent review of the PBO by Watt and Anderson (2017) suggested a number of opportunities to enhance transparency, including consulting more broadly on its research work and explaining budgetary processes in nontechnical language.

The Reserve Bank of Australia (RBA) could also provide a model, as it has a large community education program, involving media releases, reports, public statements and the twice-yearly appearance of the Governor and senior officers before the House of Representatives Standing Committee on Economics (RBA 2017a). Williams (sub. 2, p. 1) commented:

[the CGC] and its leadership should play a larger role in communicating the operation of the scheme and its rationales. As does the Reserve Bank, the agency should see itself as playing a key role in public debate and in supporting policy outcomes that align with the rationales of the scheme.

There may be some concern that a stronger public voice would overly politicise the CGC. However, this should not be the case if the scope of the public role is clearly defined to inform, not advocate. It would be anticipated that the CGC would not become involved in the politics of the public debate, but rather, stick to issues of fact — much like the Parliamentary Budget Officer and the RBA Governor do today.

## The CGC's interactions with Governments

As noted, there is an extensive consultation process between the CGC and the States. This consultation occurs on both a formal level, through the Commission members meeting with State Treasurers and Treasury officials as part of the review process; and informally, with the CGC engaging with State officials as the need arises.

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<sup>13</sup> The 2012 Brumby, Carter and Greiner (2012a) GST Distribution Review recommended that the CGC engage with governments more broadly, including through an annual public address following the release of the year's relativities and briefing sessions for parliamentarians and State officials.

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However, there remains scope for further improvement. For example, the Secretary of the CGC tends to be the organisation's representative at Senate Estimates. Instead — and consistent with other agencies — this role should be performed by the CGC Chairperson and Commission members (and similarly for other engagement with Parliamentary Committees throughout the year).

Further, a formal process could be established to enable the States to consult with the CGC on the possible implications of a change in State policy (for example, a change to a State's revenue base). Such a process could be similar to the Australian Taxation Office's draft rulings, which set out a preliminary view on the way a particular tax provision applies and is then open for public comment. This may help reduce some of the fiscal uncertainty for the States and provide greater transparency about the CGC's deliberations on such decisions.

**DRAFT RECOMMENDATION 9.1**

The CGC — through its Chairperson and Commission members — should provide a strong neutral voice in the public discussion on the HFE system.

The CGC should also enhance its formal interactions with the State and Commonwealth Governments. In particular, it could provide draft rulings to State Governments on the potential HFE implications of a policy change.

## **Improving accountability**

As noted in chapter 3, the GST distribution is used to achieve both horizontal (redistribution among States) and vertical (transfer of resources from the Commonwealth Government to the States) equalisation. The OECD (Blöchliger et al. 2007) has found that systems that mix both horizontal and vertical equalisation are less transparent and accountable because they blur responsibility between financing and funding. Neil Warren (sub. 38, p. 3) identified this dual role in his submission and proposed a three stage process that addresses these elements individually (chapter 8).

Accountability is also blurred (and blame shifting occurs across levels of government) due to the States having significant expenditure responsibilities but limited potential to raise tax revenue, and to the patchwork of Commonwealth–State funding and service delivery arrangements that cut across most of the policy areas subject to HFE. These issues are discussed in section 9.3.

Participants have raised several accountability concerns with the HFE system more specifically. One concern — discussed in chapter 3 — is that a lack of direct accountability for the spending of GST payments means that some States do not deliver services to the national average level, despite being provided the fiscal capacity to do so. For example, the Northern Territory's very high GST relativity is driven by its high proportion of Indigenous

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and remote residents, yet critics have argued that its GST payments are not spent on improving outcomes for Indigenous people (NSW Government, sub. 52, p. 9).

While actual expenditure by most States is in line with assessed capacity in the majority of service areas, there are some significant outliers, as shown in chapter 3 (box 3.4). However, these outliers occur across all States, even those that are fiscally stronger States.

Further, as noted in chapter 2, State autonomy is an important feature of the HFE system. GST payments have never been intended to be designated for specific purposes, but rather to provide the States with fiscal capacity along with the freedom to choose how they prioritise spending (SA Government, sub. 25; Tasmanian Government, sub. 28; Victorian Government, sub. 53). Aside from a few exceptions, there is little appetite for tying the funding provided through HFE to drive reform.

Ultimately, States are accountable to their electorates for how they use HFE funds, not to the Commonwealth Government or the CGC. But as noted by Gray (2017, p. 3), electorates can face difficulties in assessing the performance of governments:

... the ballot box ... is a blunt instrument. It does not allow the electorate to distinguish among different aspects of the performance of a government, or likely performance of a potential government, nor is it practical to hold elections very frequently.

As a result, a number of other processes are in place for governments to ensure accountability. According to the SA Government (sub. 25, p. 22):

... accountability processes ... include annual budget processes, including Estimates Committee hearings, and the PC's annual Report on Government Services publication.

While the Commission is of the view that GST funding should not be tied, there are other opportunities available to improve accountability. One opportunity to improve accountability in the HFE system specifically is through increased disclosure of data used in the CGC's calculations.

## Data availability

While some data are available on the CGC's website, there remain considerable gaps in availability, particularly in the underlying data that inform the CGC's development of State budgets. As noted by Neil Warren (sub. 38, p. 1):

Transparency of process, open-data access and transparent equalisation mechanisms are essential if there is to be a transparent and accountable equalisation process.

Several States have raised concerns that some data are not publicly available. For example, the WA Government (sub. 15, p. 107) commented that: 'There needs to be full documentation of data and evidence used by the CGC in reaching its conclusions'. Other States, concerned about the confidentiality of their data, have remarked to the Productivity Commission that some data should not be made available.



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The data collected by the CGC have the potential to be extremely powerful. The CGC brings together data in a wide range of areas, including expenditure areas such as health, education, housing and infrastructure, information on taxation and demographic characteristics. Further, the data are collected across all States and updated on a yearly basis. As noted in the Commission’s *Data Availability and Use* (PC 2017a, p. 24) inquiry:

... significant improvements could come from aggregating data across the States and Territories in health, education, social welfare, child support, aged care, and better linking them with elements of datasets from other fields — the population census, taxation, employment, business ownership, telecommunications, private health insurance or housing.

As such, there is a strong national interest case — beyond that pertaining solely to the HFE system — for releasing the States’ HFE data. Drawing on these data has the capacity to improve government decision making across a wide range of sectors and improve the efficiency and productivity of the provision of services (PC 2017a).

In addition, the CGC should make public its calculations on these data, for example, adjustments to State tax bases.

Any potential concerns associated with the public release of the data should be considered in the context of the likely broader community-wide benefits. That said, the CGC should assess where there may be risks associated with making the data publicly available, and as far as possible, take steps to mitigate risks where they occur.

#### DRAFT RECOMMENDATION 9.2

The CGC should make the data provided by the States publicly available on its website, along with the CGC’s calculations on these data. Where there are risks identified with this approach, mitigating steps should be identified and taken.

## 9.3 Broader reforms to federal financial relations

### A complex policy environment

HFE is part of a broader Commonwealth–State financial relations landscape. Some reforms to this broader landscape over the past 20 years have been beneficial. In particular, the introduction of the GST and the abolition of a number of State taxes has provided a more efficient revenue base, and there has been a streamlining of the number of Commonwealth payments to the States, reducing complexity to some degree.

The vertical fiscal imbalance has persisted

However, Australia’s vertical fiscal imbalance (VFI) has persisted (figure 3.5). In some respects, the VFI reflects the comparative advantage in revenue raising and expenditure

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between levels of government in a federal system. By collecting relatively more revenue, a national government can improve the administrative efficiency of the taxation system through economies of scale and, for those businesses that operate across jurisdictions, lower compliance costs as a result of having to deal with only one set of rules and one collection agency.

However, it also creates challenges. As Moran (2014, p. 162) commented:

... the fundamental obstacle to change in our Federation has been one of the world's most severe cases of vertical fiscal imbalance, which since World War II has been our Federation's Achilles' heel.

The Australian Chamber of Commerce and Industry (sub. 40, p. 7) also noted the centrality of the VFI to Australia's federal financial relations:

... any discussion on horizontal fiscal equalisation must, by necessity, start at the heart of Commonwealth-State Financial relations — which (is) the vertical fiscal imbalance (VFI).

In particular, the imbalance can lead to:

- accountability problems due to a mismatch of revenue raising and expenditure responsibilities
- blame shifting, in which blurred lines in service delivery responsibilities mean that the community does not have clear lines of responsibility to hold governments to account
- the Commonwealth attaching conditions to funding, potentially constraining the flexibility and manner in which a State spends revenue (in some instances this may also be a positive)
- distortions in the types of services provided
- the maintenance (or even introduction) of inefficient State taxes.

While the level of VFI is high internationally, it is not solely a function of the decisions of the Commonwealth Government. There is equally a role for the States. Notably there is much within the current power of the States to address their revenue shortfalls and address VFI themselves, independent of the Commonwealth. For example, there are a number of potentially efficient revenue options, such as land taxes, which could be applied by the States if they so wished. As noted by Walsh (2008, p. 56):

... I have also frequently pointed out that the ostensible degree of fiscal dependence of the states on the commonwealth is, at least to some degree, a choice the states have made. The most immediately obvious sense in which that is so is their natural preference for the commonwealth to raise the revenue and for them to do the spending ...

However, this does not negate the need for broader reform.

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## Interaction with other Commonwealth transfers

The States' high reliance on Commonwealth transfers makes it imperative that the system of both general revenue assistance (largely GST) and payments for specific purposes (chapter 3) works effectively. Yet, the system is complex and appears to have been given little holistic consideration.

### *Payments to the States are calculated using a range of mechanisms*

Commonwealth payments to the States are calculated using a range of mechanisms. For example, the National Health Reform Agreement and National Education Reform Agreement (now named Quality Schools), representing close to \$38 billion and 32 per cent of all payments to the States in 2017-18, moved the basis of funding to States from EPC to an activity or needs basis (Commonwealth of Australia 2017b, p. 30). Other payments for specific purposes, such as skills and workforce development and housing, are based on an EPC approach (appendix B).

Several participants to the inquiry have commented on the conflicting approaches to determining payments for specific purposes and HFE. They suggest that HFE, as the fiscal capacity 'spirit level', can undermine other forms of States' payments (Queensland Government, sub. 32; ACT Government, sub. 49). As noted by the ACT Government (sub. 49, p. 87), 'In theory at least, there is significant potential for overlap or conflict'.

The scope for the CGC to 'counteract' the funding provided through specific purpose payments (SPPs) depends upon the extent to which the assessment of needs differs under each approach. The CGC commented in its 2015 methodology review:

The closer Commonwealth payments in total are to an EPC distribution, the more work the GST has to do in meeting State needs. A larger proportion of the GST will be required for equalisation purposes. If the payments are distributed in a manner consistent with the Commission's assessment of needs, this will reduce the extent to which GST is redistributed. (2015e, p. 63)

The WA Government (sub. 15, p. 88) submitted that under the schools education assessment, the CGC assessed Western Australia as needing to spend 6.6 per cent above the national average in 2015-16, while the Commonwealth's Students First funding model assessed the State as needing to spend 14.1 per cent above the national average in the same year.

While the CGC's approach to Commonwealth payments appears consistent with its overall approach to HFE (as discussed in chapter 7 and appendix B), it may not always be consistent with governments' other, more direct, objectives for those payments. This appears to be an inescapable trade-off inherent in HFE. That said, the HFE system does not actually reduce the specific funding allocated under SPPs — the nature of the tied SPP funding means that the States are required to spend the agreed amount in a specific area.

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### *The balance between tied and untied funding*

GST payments are provided as untied funding, while most other payments are tied. States that receive a small proportion of HFE funding relative to Commonwealth payments (the fiscally stronger States), have a greater percentage of their Commonwealth funding tied, and less flexibility in how they spend these payments.

Ergas and Pincus (2011, p. 6) argued that:

... greater equalisation has tended to reduce the fiscal resources of higher productivity jurisdictions, making them more dependent on transfers from the centre. The resulting pattern is one in which the higher a jurisdiction's long term per capita GSP [Gross State Product], the greater has been the equalisation 'tax' and the larger the share of tied funding in its total revenues.

That said, the fiscally stronger States also have a greater ability to supplement Commonwealth funding with their own revenue sources. Indeed, when considering both Commonwealth and State revenue sources, the proportion of overall State revenue that is tied exhibits little variation across States — it ranges from 23.1 per cent in the Northern Territory through to 28.6 per cent in Western Australia (figure 9.1).

A related concern, raised by the NSW Government (sub. 52, pp. 12–13), is that the States may engage in strategic behaviour to increase their share of untied revenue. This could potentially occur through States' selective participation in bilateral and multilateral agreements.

However, more crucially, there appears to have been little consideration of whether the current system results in an optimal balance between tied and untied funding across the States. There have been a number of recommendations in the past that would change the balance between tied and untied funding, generally as part of a broader suite of reforms to federal financial arrangements (discussed below). For example, the National Commission of Audit recommended a reduction in tied grants from the Commonwealth (accompanied by an equivalent increase in untied revenue raised by the States) (NCOA 2014). Similarly, in 2015, the Reform of the Federation Discussion Paper suggested an option that would provide the States with greater policy autonomy and reduce the Commonwealth's ability to prescribe conditions on its funding (DPMC 2015, pp. 94–95).

### *Blurred accountability*

Finally, the patchwork of Commonwealth–State funding and delivery arrangements blurs accountability. The scope of activities jointly covered by the Commonwealth and States is extensive, including for health, education and road transport. While the number of payments has declined from previous high levels, in recent years, there has been the re-emergence of more payments (chapter 3; appendix B).

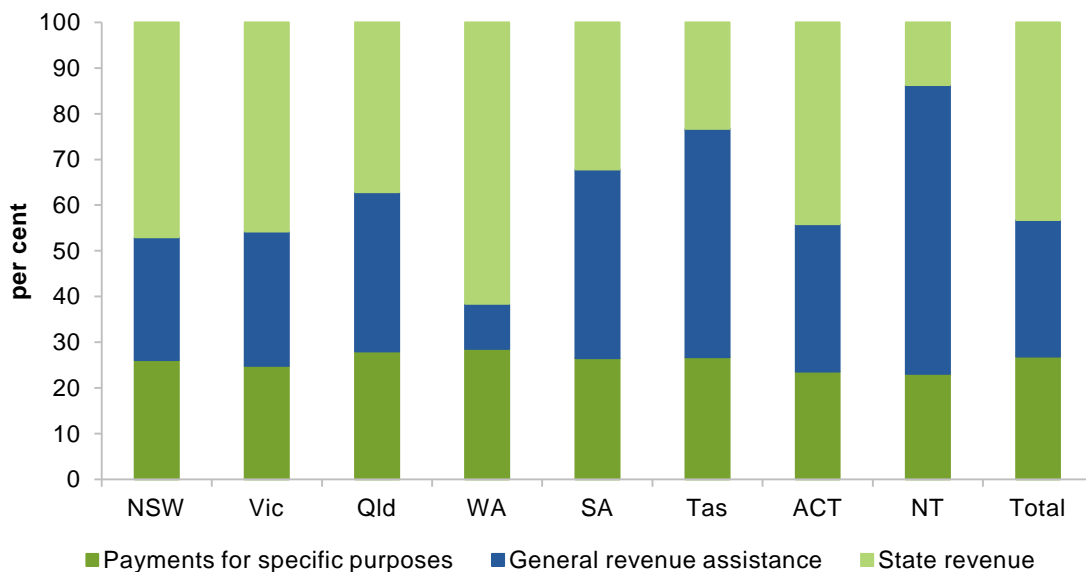
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As noted by Gray (2017, p. 3):

... powers assigned to the Commonwealth, but not exclusively so, create areas where both [the States and Commonwealth] may operate, at least in principle. ... this has created fertile ground for the growth of confusion about which government should be accountable for which function.

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**Figure 9.1 Sources of State revenue as a percentage of total revenue<sup>a</sup>**  
2016-17



<sup>a</sup> State revenue only includes state taxation revenue and revenue from royalties. It excludes other revenue, such as that raised through the sale of goods and services, interest income and dividends.

Source: Commonwealth of Australia (2017b); State Budget papers; Productivity Commission estimates.

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The difficulties that this creates for accountability have also been noted by the OECD. It advises that countries should only seek to fully equalise if the State Government is responsible for delivering services in its assigned policy area (Blöchliger et al. 2007, p. 10).

Broader reform to federal financial relations, as discussed below, would provide an opportunity to revisit these accountability concerns.

## The way forward

Undertaking the reforms to HFE as outlined here and in the earlier chapters of this report will be beneficial. However, the complex and intertwined nature of the policy landscape will constrain the benefits from reform to HFE in isolation. Over the longer term, the greater gains would be more likely to come from further reform to Australia's federal financial relations.

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Currently, there appears to be an impasse in achieving reform in Australia's federal financial relations. The termination of the Reform of the Federation White Paper provides one indication of the difficulties involved in the process. As noted by the ACT Government (sub. 49, p. 12):

While there is a broad consensus that the federal financial relations framework is relatively stable, underpinned by strong institutional and governance systems with reforms only undertaken when all parties agree, there are emerging problems with no clear path to reform. Although the States enjoy a strong degree of constitutional autonomy, with major rules articulated in Australia's constitution, their fiscal sustainability in the longer term is in need of fundamental reform, an overall strategic approach to which has yet to emerge.

This is not to say that there have not been a range of suggestions for reform in recent years. A number of reports have made recommendations regarding changes that would improve the VFI and the system of Commonwealth payments to the States, including in the National Commission of Audit (2014), the Henry Tax Review (2010a), and recent work by Stewart (2017). Other work, including from overseas (chapter 8) and that undertaken for this inquiry (Gray 2017), has outlined important preconditions for improving accountability and achieving reform (box 9.2).

#### **Box 9.2      Principles for the formulation of arrangements between governments**

In a paper commissioned for the Productivity Commission, Gray suggested a set of principles for enhancing accountability when forming arrangements between States. These principles include:

- accept that COAG is the appropriate body through which to develop, implement and oversee intergovernmental arrangements, and that all activities within these spheres should take place under its authority
- acknowledge that the overarching objective is the improvement of the welfare of the Australian community
- include measures in the arrangement to ensure that benefits are distributed fairly across jurisdictions
- be wary of unduly constraining participant governments in the ways they may choose to discharge accountabilities that they have accepted
- while recognising the role of cooperation where it may be in the national interest for more than one level of government to be involved in the provision of a service, also recognise the potential value in a variety of initiatives being undertaken by different levels of government in a given policy area
- ensure that SPPs are used in ways that improve community welfare rather than to give the Commonwealth a disproportionate role in matters that are properly the province of the States
- establish and maintain an independent body, funded by and reporting to COAG, to monitor and report on the discharge of accountabilities accepted under arrangements established by COAG.

*Source:* Gray (2017).

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As previously ascribed, the Commonwealth Government holds the critical role in driving reform, both to HFE and more broadly to federal financial relations. However, equally important roles exist for the States. Australia's federated system retains a high degree of concern for state autonomy, as evident in many HFE processes, and a respect for broader buy-in within cross jurisdictional reform processes. It also has a long and credible history of concerted and coordinated national reform which has delivered significant benefits across and within the States. For example, the National Competition Policy reforms, which were based on extensive engagement, consultation, and agreements between the States, are considered to have been an example of success (Gray 2017, p. 32).

In the Productivity Commission's view, reforming HFE in isolation will only go a small part of the way to improving outcomes within federal financial relations. There is a need to revisit the broader operating environment in which HFE takes place, and to renew efforts to reform federal financial relations *in the broad*.

Governments should develop a process, led by the Council on Federal Financial Relations, to work towards this as a longer-term goal. This process should assess how Commonwealth payments to the States — both general revenue assistance and payments for specific purposes — interact with each other.

The process should also consider a well-delineated division of responsibilities between the States and the Commonwealth, and accompanying accountability and performance arrangements. In particular, responsibilities and accountabilities for Indigenous policy — a policy area where there continues to be little improvement despite significant expenditure — should be given priority.

Genuinely reforming federal financial relations may then allow consideration of more fundamental reforms to HFE in the future and afford a greater focus on the needs of the fiscally weaker states.

#### DRAFT RECOMMENDATION 9.3

The Commonwealth and State Governments, through the Council on Federal Financial Relations, should develop a process that would work towards a longer term goal of reform to federal financial relations.

In the first instance, it should assess how Commonwealth payments to the States — both general revenue assistance and payments for specific purposes — interact with each other today, given the significant reforms to payments for specific purposes that have occurred in recent years.

The process should also work to a well-delineated division of responsibilities between the States and the Commonwealth, and establish clear lines and forms of accountability. Policies to address Indigenous disadvantage should be a priority in this regard.





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# A Public Consultation

In keeping with its standard practice, the Productivity Commission has actively encouraged public participation in this study.

A guidance note was released on 19 May 2017 and the Commission invited public submissions by 30 June 2017. A total of 56 submissions and 9 brief submissions were subsequently received (table A.1). These submissions are available online at: <http://www.pc.gov.au/inquiries/current/horizontal-fiscal-equalisation/submissions>.

As detailed in table A.2, consultations were held with representatives from the Australian, State and Territory government departments, agencies, several State grants commissions, a number of business groups, several past State Under Treasurers and a range of academics and others specialising in federalism and tax policy. The Commission also consulted with individuals who have worked on previous reviews of the HFE process.

The Commission thanks all parties who have contributed to this inquiry and now seeks additional input and participation for its final report. Further submissions are welcome which discuss this draft report, including responses to the information requests and draft findings and recommendations contained herein. Participants can also present their views at a public hearing.

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**Table A.1     Public submissions**

<i>Participant</i>	<i>Submission number</i>
Peter Abelson	9
ACT Government	49
Association of Mining and Exploration Companies	23
Australian Bankers' Association	55
Australian Chamber of Commerce and Industry	40
Australian Petroleum Production and Exploration Association	18
BHP Billiton	42
Peter Brohier	8
Doug Buckley	3
Business Council of Australia	47
Business SA	26
Chamber of Commerce and Industry Queensland	21
Chamber of Commerce and Industry of Western Australia	11
Chamber of Minerals and Energy of Western Australia	29
Michael Chaney, Andrew Forrest, John Poynton and Nigel Satterley	41
Commonwealth Grants Commission	1
Arthur Downing	56
Chris Egan	17
Senator Peter Georgiou	44
Grattan Institute	24
Great Northern Telecommunications	13
Jim Hancock	54
Janine Harding	19
Lock the Gate Alliance	20
Julie Matheson for Western Australia Party	4
John McAuley	7, 50
James McDonald	16
Minerals Council of Australia	34, 48
Wayne Muller	14
Northern Territory Government	51
Northern Territory Opposition	31
NSW Business Chamber	27
NSW Government	52
Parliamentary Liberal Party of WA	22
Parliamentary National Party of WA	43
Pauline Hanson's One Nation WA	45
John Pitman	5
Put Western Australia First Party	12
Queensland Government	32
Rio Tinto	37
SA Government	25
Tasmanian Greens	30
Tasmanian Government	28

(continued next page)

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**Table A.1**      (continued)

<i>Participant</i>	<i>Submission number</i>
The Australia Institute	33
Wilson Tuckey	6
Victorian Government	53
WA Federal Liberal Members and Senators	35
WA Federal Parliamentary Labor Party	36
WA Government	15
Neil Warren	38
Wealth Wisdom Pty Ltd	10
Western Australian Local Government Association	46
Rebecca White (Member of Parliament)	39
George Williams	2

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**Table A.2     Consultations**

*Participant*

ACIL Allen Consulting
ACT Treasury
Australian Bankers' Association
The Hon. John Brumby
Peter Brohier
Business Council of Australia
Bruce Carter
Don Challen
Chamber of Commerce and Industry Queensland
Chamber of Commerce and Industry WA
Commonwealth Grants Commission
Commonwealth Treasury
Department of Treasury and Finance, Tasmania
Department of Treasury and Finance, Victoria
Janine Dixon
Saul Eslake
Allan Fenna
John Freebairn
The Hon. Nick Greiner
Jim Hancock
Tim Hicks
Iain McLean
Minerals Council of Australia
Chris Murphy
NSW Government
NT Treasury
Office of the Economic Development Board of SA
Jeff Petchey
John Phillimore
Jonathan Pincus
Queensland Local Government Grants Commission
Queensland Treasury
SA Government
Mathias Sinning
Miranda Stewart
Michael Vertigan
Victorian Grants Commission
WA Government
Cliff Walsh
Neil Warren
George Williams
Lynne Williams
Ross Williams

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## B Other Commonwealth payments

This appendix considers the role that Commonwealth payments — excluding GST distributed as general revenue assistance — play in horizontal (and vertical) fiscal equalisation. These payments, referred to as payments for specific purposes, can have differing effects on the calculation of relativities by the Commonwealth Grants Commission.

### B.1 Types of payments for specific purposes

Payments for specific purposes comprise:

- National Specific Purpose Payments (National SPPs)
- National Health Reform funding
- Quality Schools funding
- National Partnership payments.

The relative sizes of these payments are illustrated in figure B.1.

#### National Specific Purpose Payments

There are currently three service delivery sectors supported by National SPPs: Skills and Workforce Development, Disability Services, and Affordable Housing. From 2018-19, the National Affordable Housing SPP is scheduled to be combined with homelessness funding, provided under the National Housing and Homelessness Agreement (Commonwealth of Australia 2017b).

National SPPs are allocated to the States based on population shares, and States must spend National SPPs in the sector for which they are granted. The share of federal fiscal transfers via National SPPs was much larger in the recent past (\$24.4 billion in 2009-10) (Commonwealth of Australia 2010), but two previous key national SPPs (health and education) take a different form now.

#### National Health Reform funding

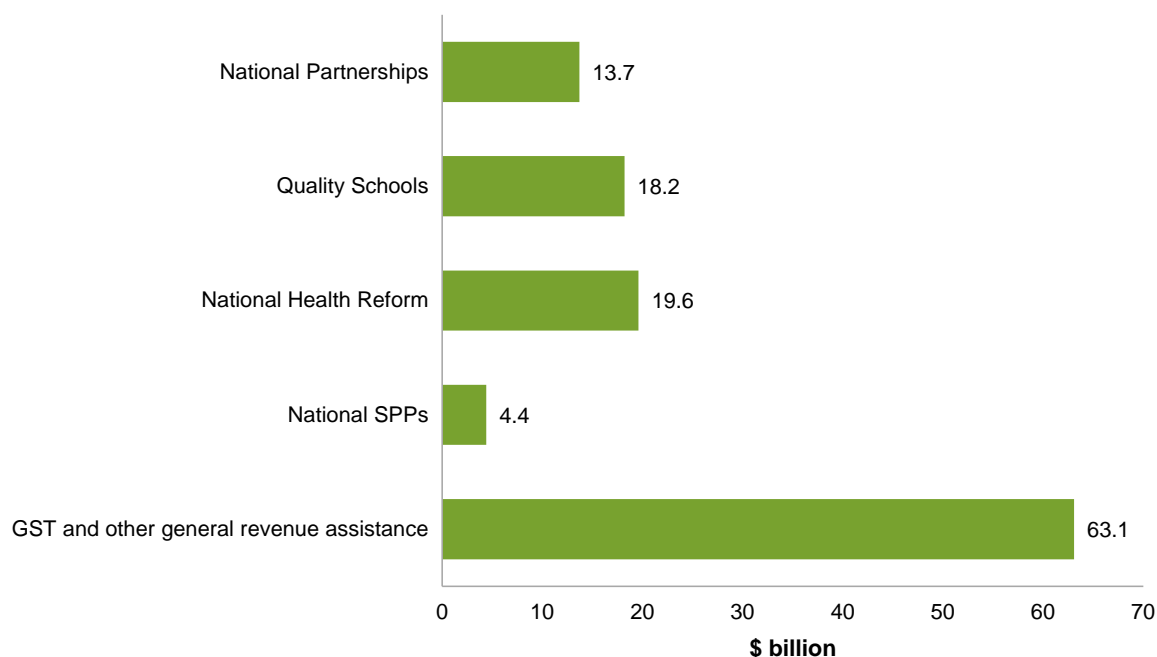
The National Health Reform Agreement, endorsed by the Council of Australian Governments (COAG) in 2011, made provision for the Commonwealth and States to share in the costs of funding public hospitals, with the States to continue as the managers of public

hospital systems. National Health Reform funding from 2016-17 to 2019-20 is linked to the level of services provided by public hospitals, with each State's entitlement directly linked to growth in public hospital activity in that State and the national efficient price for each procedure (adjusted for differences in patient characteristics), determined by the Independent Hospital Pricing Authority (Commonwealth of Australia 2017b). (This arrangement is effectively a form of usage-only equalisation, since it compensates hospitals for differences in usage, but not for most differences in costs between identical procedures. It therefore goes some way towards equalising States' health expenditure needs — section B.2 elaborates on this concept.)

The Commonwealth's contribution to hospital services between 1 July 2017 and 30 June 2020 will comprise funding for:

- public hospital services provided to public patients in a range of settings, as well as eligible private patients in public hospitals and a range of settings on an activity basis
- block grants, including relevant services in regional and rural communities
- public health activities (COAG 2017).

**Figure B.1 Total Commonwealth payments to the States<sup>a</sup>**  
2017-18



<sup>a</sup> The GST is projected to comprise \$62.3 billion (approximately 99 per cent) of general revenue assistance in 2017-18. Other general revenue assistance includes payments for municipal services in the ACT, Snowy Hydro Limited tax compensation, and royalties.

Source: Commonwealth of Australia (2017b).

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## Quality Schools

From 1 January 2018, new funding arrangements associated with the Quality Schools package will take effect. Under this arrangement, the Commonwealth will be the predominant funding source for non-government schools, with a target to fund 80 per cent of the School Resource Standard for those schools. By contrast, the Commonwealth will be the secondary funding source for government schools, with a target of funding 20 per cent of the School Resource Standard for these schools.

Nationally, on average, per student funding is to grow:

- 4.1 per cent each year to 2027 for the Independent school sector
- 3.5 per cent each year to 2027 for the Catholic sector
- 5.1 per cent each year to 2027 for the government sector (Commonwealth of Australia 2017c).

Students with the same need within the same school sector will receive the same support from the Commonwealth, regardless of the State in which they live. However, students with greater needs — assessed at the Commonwealth level and based on a range of factors, predominantly socioeconomic — will attract higher levels of Commonwealth funding (DET 2017b).

The schools that are regarded as ‘furthest behind’ will receive the fastest increase in funding (DET 2017a). This feature, along with the differing funding structures for government and non-government schools by the Commonwealth, will have implications for the amount of Commonwealth funding received by each State.

## National Partnership payments

The Intergovernmental Agreement on Federal Financial Relations makes provision for National Partnership (NP) payments to the States to support the delivery of specific projects or outputs, facilitate reforms, and provide a mechanism to reward jurisdictions that deliver nationally significant reforms (COAG 2011). National Partnerships (NPs) are usually entered into for a fixed period of time, contingent upon the nature of the project or reform involved (Commonwealth of Australia 2017b). There are three types of NP payments:

- **Project payments** are financial contributions to States to assist with the delivery of specific projects — such as improvements in the quality or quantity of service delivery, or projects that support national objectives (for example, specific infrastructure projects with national benefits). A project payment is typically (but not always) made in arrears, *after* a State has achieved particular milestones specified in the project agreement. Examples of National Partnership project payments include funding distributed under the Natural Disaster Resilience and Bushfire Mitigation Partnership Project Agreements.
- **Facilitation payments** are made to assist States with progressing or achieving nationally significant reform, typically in recognition of the costs of initiating reform or pursuing

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continuous improvement in service delivery (therefore, facilitation payments are less targeted towards discrete tasks than are project payments, but there *must* be a national benefit to the reform). Facilitation payments are primarily made in advance. Funding distributed under the (now concluded) National Partnership Agreement on Remote Indigenous Housing is an example of a facilitation payment.

- **Reward payments** are provided to States that deliver or progress nationally significant reform. They are contingent on the achievement of performance benchmarks and as such are paid in arrears. For example, the National Partnership Agreement to Deliver a Seamless National Economy makes provision for reward payments to the States based on the achievement of milestones in the areas of deregulation, competition reform, and regulatory reform (COAG 2009).

## **B.2 Treatment of payments for specific purposes in the GST distribution**

Given that many payments for specific purposes are targeted towards areas where States have direct responsibility for service delivery, many such payments are taken into account by the CGC in State fiscal capacity assessments — either as part of State revenue, or as an offsetting reduction in State expenditure needs.

Some payments, however, are excluded from fiscal capacity assessments (‘quarantined’), or heavily discounted (often by 50 per cent) — often, but not always, on the grounds that they support projects or reforms that reflect the broader needs of the nation, rather than the circumstances of individual States. Decisions to quarantine or discount Commonwealth payments are made by both the Commonwealth Treasurer and the CGC.

### **How is a payment’s inclusion or exclusion decided?**

There are three steps in any Relativity Update or Methodology Review process where a payment may be specifically included or excluded from fiscal capacity assessments.

#### **Step 1: The Intergovernmental Agreement on Federal Financial Relations**

The IGAFRR sets out three general principles for the treatment of Commonwealth payments (schedule D, s 66(a)):

- General revenue assistance (excluding GST) should be treated by inclusion, recognising that these payments provide States with untied general budget support (COAG 2011)
- National SPPs, National Health Reform funding, and National Partnership project payments should be treated by inclusion, in recognition of the fact that these payments provide States with budget support for providing standard State public services



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- National Partnership *facilitation* and *reward* payments should be treated by exclusion, so that any benefits to a State from achieving outputs or reforms specifically sought by the Commonwealth are not redistributed to other States through the HFE process.

This principle is typically reproduced in the terms of reference provided by the Commonwealth Treasurer for each Relativity Update and CGC Methodology Review.

Schedule D to the IGAFRR also provides for the CGC to exercise discretion over the inclusion or exclusion of some payments on a case-by-case basis:

- S 66(c): a particular component of general revenue assistance may be treated as ‘out of scope’ (that is, quarantined from HFE) if the CGC considers this to be appropriate.
- S 67: after consultation with the Commonwealth and States, the CGC may treat any National Partnership payment differently to the general principles, if it considers this to be appropriate.

## Step 2: The terms of reference for Relativity Updates or Methodology Reviews

Where the IGAFRR is silent on the treatment of a particular payment, the Commonwealth Treasurer is mostly responsible for decisions regarding the payment’s inclusion, discount or exclusion in HFE calculations, and facilitates this by specifying the treatment of particular payments in the Relativity Update and Methodology Review terms of reference.

It is not uncommon for the Treasurer to quarantine a Commonwealth payment where the funding agreement supports a project with national or cross-state benefits, or targets particular needs or shortfalls of individual States that may not be recognised in the CGC’s analyses. For example, table B.1 shows a sample of the Commonwealth payments that have been explicitly excluded from, or discounted for, the CGC’s assessment of fiscal capacities (by the Treasurer’s terms of reference) over the last five years. Many of these payments offer national or cross-state benefits.

However, in terms of value, only a small proportion of Commonwealth funding overall is quarantined — for example, in 2013-14, approximately 3 per cent of Commonwealth payments for specific purposes were excluded by terms of reference requirements (CGC 2015e, p. 46).

Schedule D to the IGAFRR also gives the Commonwealth Treasurer an explicit discretion to vary, via the terms of reference, the treatment of National Partnership payments from that laid out in the general principles (s 67(b)).

For some payments, the terms of reference do not stipulate a specific treatment, but do proscribe a particular *unwanted* outcome with regard to a payment. For example, the terms of reference for the 2015 Methodology Review state:

5. The [CGC] will ensure that the GST distribution process will not have the effect of unwinding the recognition of educational disadvantage embedded in the National Education Reform

Agreement (NERA) funding arrangements. The Commission will also ensure that no State or Territory receives a windfall gain through the GST distribution from non-participation in NERA funding arrangements. (CGC 2015d, p. vii)

**Table B.1 Selected Commonwealth payments quarantined or discounted by Treasurer, 2013-14 Update to 2017-18 Update<sup>a</sup>**

<i>Payment/partnership agreement</i>	<i>Recipient state</i>	<i>Year first quarantined/ discounted</i>	<i>Estimated value, 2013-14 onwards (\$m)</i>	<i>Treatment</i>
Centenary of Canberra – A Gift to the National Capital	ACT	2013	62	Excluded
Macquarie Point Railyards Precinct Remediation Project	Tas	2013	50	Excluded
Tasmanian Forests Intergovernmental Agreement	Tas	2013	132	Excluded
Stronger Futures in the Northern Territory (2 <sup>nd</sup> Implementation)	NT	2014	517	Excluded
South Australian River Murray Sustainability Program	SA	2014	285	Excluded
Commonwealth Government forgiveness of South Australian Government public housing debts	SA	2014	320	Excluded
Commonwealth payments for major roads <sup>b</sup> (including WestConnex, East–West Link, Western Sydney Infrastructure Plan, Perth Freight Link)	All except Tas and ACT	2015	9 400	50% discount
Asset Recycling Fund: Asset Recycling Initiative (all States eligible but not all recycled assets)	NSW, ACT, NT	2015	3 633	Excluded
Royal Victorian Eye and Ear Hospital Redevelopment	Vic	2016	100	Excluded
Infrastructure Projects in Western Australia	WA	2016	1 215	Excluded
Northern Territory Remote Aboriginal Investment	NT	2016	949	Excluded

<sup>a</sup> The value listed is the total amount of funding (as stipulated in the funding agreement or Commonwealth Budgets) to be distributed over the life of the agreement; for some payments this extends to the 2020-21 financial year. This is the case because the terms of reference usually stipulate that, once a payment has been quarantined, the CGC should continue to treat it in the same manner until the agreement expires.

<sup>b</sup> Some funding has been redirected to other State projects (following the cancellation of infrastructure projects such as the East–West Link and the Perth Freight Link) but has, thus far, remained discounted.

Source: CGC (2017l, p. 2); COAG (2012, 2014); Commonwealth of Australia (2012, 2013, 2014, 2015, 2016, 2017b).

### Step 3: The CGC's discretion

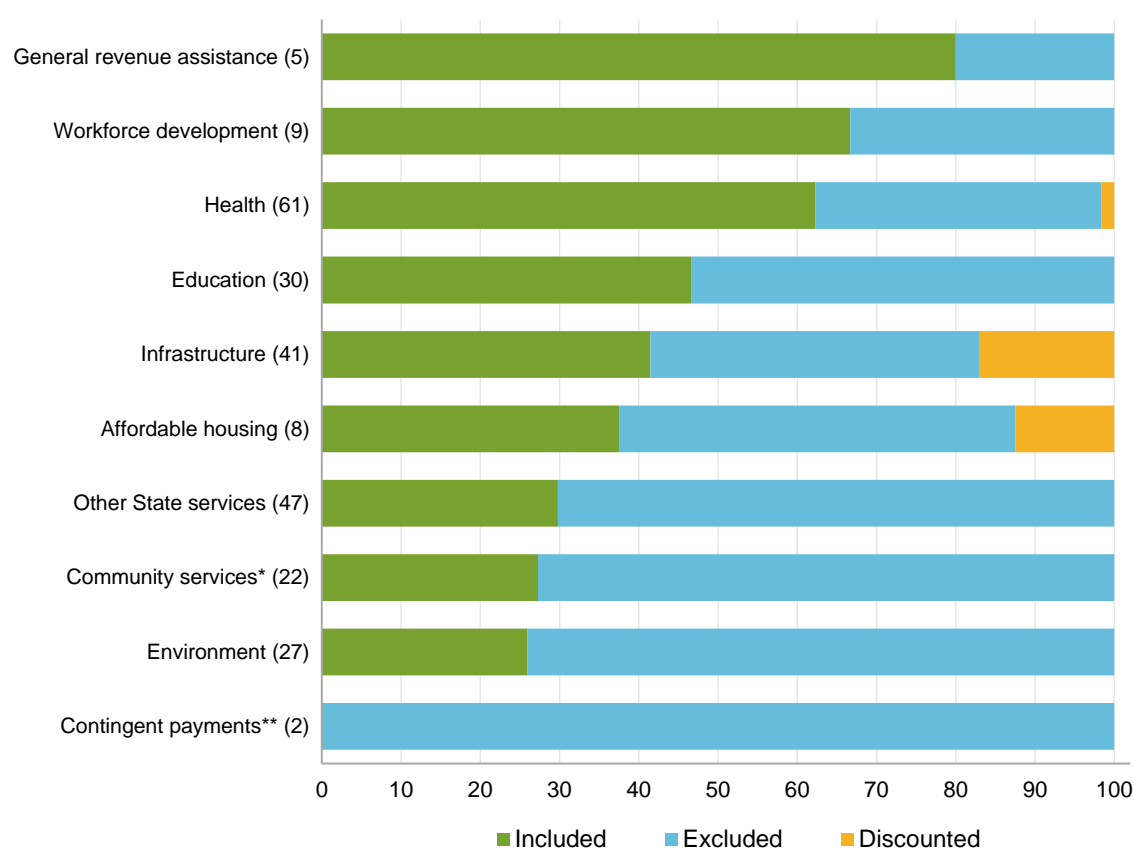
Where the Commonwealth has not specified the treatment of a particular payment in the terms of reference, or has given the CGC a discretion as to its treatment, the CGC may include, exclude or discount that payment according to the principles of HFE.

In the 2015 Methodology Review, the CGC adopted a new single guideline for *including* payments where a case-by-case discretion exists: ‘payments which support State services, and for which expenditure needs are assessed, will impact the relativities’ (CGC 2015e, p. 37). This guideline continues to apply.

Where expenditure needs are assessed, but the CGC is not confident that the assessment is entirely policy-neutral (or of its accuracy), the value of a Commonwealth payment will often be discounted so that its impact on relativities is mitigated. For example, in the 2017 Relativity Update, the CGC applied a 50 per cent discount on payments directed at improving the national road network, stating that the assessment may not have captured all non-policy influences (that is, structural disadvantages or ‘disabilities’) on State expenditure needs (CGC 2017l, p. 32).

Figure B.2 shows the number of Commonwealth payment agreements (by sector) that were included, excluded or discounted for HFE purposes in the 2017 Relativity Update. As the scale of funding varies enormously between agreements, this is not necessarily representative of the total amount of revenue included, excluded or discounted.

**Figure B.2 Treatment of Commonwealth payments, 2017-18<sup>a</sup>**  
Per cent of payment arrangements included, excluded and discounted by sector



<sup>a</sup> Proportions shown are the numbers of payments treated each way, not the values of those payments. The total number of payment arrangements for each sector is shown in parentheses. Some arrangements are nationwide programs (meaning they involve payments to all States); some are for individual States.

\* Including disability programs. \*\* Hepatitis C settlement fund; natural disaster relief and recovery funding.

Source: CGC (2017l).

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### *The effect of HFE on Commonwealth payment outcomes*

Needs-based Commonwealth payments have something of a symbiotic relationship with HFE — at least where the assessment of need for a particular payment is similar to the CGC's assessment — given that both arrangements target funding away from equal per capita (EPC) distributions.

The CGC highlighted this feature in the 2015 Methodology Review:

The closer Commonwealth payments in total are to an EPC distribution, the more work the GST has to do in meeting State needs. A larger proportion of the GST will be required for equalisation purposes. If the payments are distributed in a manner consistent with the Commission's assessment of needs, this will reduce the extent to which GST is redistributed. State needs have already been met by the Commonwealth payments. (CGC 2015e, p. 47)

For example, both education and health funding have moved from primarily EPC arrangements to more needs-based (or activity-based) arrangements, as detailed in section B.1. This partially offsets the gap between a given State's expenditure needs and available revenue for both sectors (though, given that different bodies assess those needs, it is not likely to compensate for the entire gap). As such, many — but not all — components of both funding streams are treated by inclusion:

The [National Health Reform] funding directly impacts on State fiscal capacities as it assists to fund health services. The expenses funded by these payments are included in the category expenses. ... The NPPs that assist States [to] fulfil *their* responsibility in delivering health services are treated in the same manner as the [National Health Reform] funding. Payments for purposes *outside* State responsibilities, such as to the Royal Darwin Hospital for the operation of a national critical care and trauma response centre, have no impact on State fiscal capacities and the payments are removed from category expenses. [emphasis added] (CGC 2015e, p. 175)

However, where a payment is targeted in a different fashion (or at a different policy objective) to overall equalisation, the application of the CGC's guideline may work against that policy objective unless the payment is specifically quarantined by the terms of reference:

We consider that in exercising our discretion we can be guided only by the objective of the GST distribution which is the principle of HFE. The appropriate treatment of a particular payment where we have discretion is that which improves the HFE outcome.

We are aware there are other policy objectives behind the distribution of Commonwealth payments. However, we do not consider we have been asked to choose among objectives in advising on the GST distribution. We have no discretion other than that which improves the HFE outcome. (CGC 2015e, p. 36)

### **Case study: treatment of school funding**

Commonwealth funding for government (public) primary and secondary schools is an example of a payment stream for which all three steps detailed above have included specific

inclusion or exclusion stipulations in recent years. Table B.1 shows the impact of movements in the government school funding distribution on GST relativities for the last five years.

**Table B.1 Effect of government school funding on GST payments<sup>a,b</sup>**

<i>Financial/update year</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Total</i>
	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>
<b>2013-14</b>									
Funding allocation	1 407	1 035	964	465	334	123	68	92	4 488
Assessed difference from EPC	-13	51	-37	12	4	-10	5	-13	73
<b>2014-15</b>									
Funding allocation	1 615	1 236	1 135	515	375	156	78	138	5 247
Assessed difference from EPC	68	63	-91	39	9	-31	8	-65	187
<b>2015-16</b>									
Funding allocation	1 758	1 361	1 291	562	405	164	83	144	5 766
Assessed difference from EPC	99	83	-134	36	13	-30	16	-83	247
<b>2016-17</b>									
Funding allocation	2 036	1 504	1 482	598	432	177	88	181	6 498
Assessed difference from EPC	46	105	-156	78	29	-33	17	-87	276
<b>2017-18</b>									
Funding allocation	2 261	1 609	1 622	648	463	186	96	196	7 081
Assessed difference from EPC	46	134	-142	17	22	-22	16	-70	235

<sup>a</sup> School funding includes funding provided under the National Schools SPP (until 2014) and under the Students First framework (from 2014 onwards). It does not include funding provided under the Building the Education Revolution framework or other National Partnership agreements. <sup>b</sup> 'Assessed difference from EPC' is calculated, per the CGC's standard formula, on the basis of a lagged three-year average. As such, the assessed difference for any particular year does not reflect the funding allocation for *that year*, but for all three of the assessment years overall.

Source: CGC (2013a, 2014a, 2015a, 2016a, 2017c); Commonwealth of Australia (2013, 2014, 2015, 2016, 2017b).

The treatment of the major government school funding arrangements has been as follows.

- At the time the IGAFRR was made (2011), school funding was provided under a National SPP on an EPC basis, and as such was automatically treated by inclusion (though 'Rewards for Great Teachers' bonus payments were excluded by the terms of reference).
- In 2013, this SPP was replaced by needs-based 'Students First' funding (which, as discussed above, will soon be replaced by Quality Schools funding arrangements). As such, the IGAFRR is now silent on the treatment of school funding.
- In 2016, the terms of reference for the CGC Relativity Update were also silent on the treatment of Students First funding. The CGC treated this funding as follows.
  - Funding for government (public) schools was treated by inclusion, and therefore had an impact on relativities (given that education is a standard State public service).

- 
- Funding for non-government (private) schools was treated by exclusion (and therefore had no impact on relativities) because States only act as an intermediary for such funding, transferring it to individual schools with no control over its spending. States' needs for non-government school funding is also not assessed by the CGC.
  - In 2017, the terms of reference for the Relativity Update stipulated that Students First funding (for government schools) should affect relativities. The treatment of funding for non-government schools was not prescribed. Accordingly, the CGC treated Students First funding in the same way as 2016 (CGC 2017l, p. 7).

The CGC (2017f, p. 18) has indicated that the differences between Quality Schools funding and the previous National Education Reform funding (Students First) are minor. The current terms of reference (for NERA funding) require that the CGC:

- not unwind the recognition of educational disadvantage embedded in the needs-based funding arrangements
- ensure that no State received a windfall gain from non-participation in the arrangement (CGC 2015d) — though this is less relevant for Quality Schools, as it is more of a unilateral process run by the Commonwealth, where Students First relied on States' cooperation (CGC 2017f, p. 18).

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## C Calculations and cameos

The Productivity Commission has estimated the GST implications of a range of relativity calculation methods in assessing the impacts of Australia's HFE system and evaluating alternative approaches to redistribution of the GST pool. The methods analysed include:

- alternative approaches, which represent significant departures from the current implementation of HFE by the Commonwealth Grants Commission (CGC) and alter the extent to which States' fiscal capacities are equalised. These include equalisation to less than the strongest State, and expense-only and revenue-only equalisation
- specific adjustments to the current HFE system.

This appendix also examines how a State's choice of tax rates and levels of expenditure can affect its GST payments. These 'average rate effects' are mechanical and driven by the CGC's implementation of HFE. Their effects on States' incentives and decision making are discussed in chapter 4. Finally, this appendix considers two in-depth cameos of budget-neutral State tax reforms to illustrate how unilateral and multilateral reforms can affect GST payments.

### C.1 Alternative approaches

The calculations presented below follow the CGC's approach of using three years of data (2013-14, 2014-15, and 2015-16 — the 'assessment years') to calculate each State's GST payment for the current year (2017-18 — the 'application year').

#### Equal per capita

An equal per capita (EPC) approach simply distributes the total GST pool (an estimated \$62.7 billion in 2017-18) by each State's share of the Australian population. Compared to current HFE arrangements, an EPC distribution would benefit fiscally stronger States at the expense of fiscally weaker States. How States might fare under this approach will vary over time and, given the susceptibility of some to revenue shocks, their positions could change markedly from the snapshot portrayed in table C.1. In the current environment, an EPC distribution would see more GST revenue flow to New South Wales, Victoria and Western Australia, and commensurately less to the remaining States, with the Northern Territory experiencing the largest reduction.

If a ‘top up’ payment was used to maintain the current approach so that fiscally weaker States would not lose out under an EPC distribution, this would come at a total cost of \$7.9 billion.

**Table C.1 Effects of equal per capita distribution**  
2017-18 GST payments and relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
Equal per capita	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
<b>Change in GST payments</b>								
\$m	2 432	1 032	-2 399	4 464	-1 955	-1 075	-203	-2 296
\$pc	307	165	-485	1 665	-1 129	-2 059	-504	-9 338

*Source:* Productivity Commission estimates based on data provided by the CGC.

## Equalisation to less than the strongest State

Equalisation to less than the strongest State involves lifting States up to some agreed level of fiscal capacity, but not bringing them up to the fiscally strongest State as presently occurs. The balance of the GST pool would then be distributed on an EPC basis.

One approach to this could involve distributing GST payments to raise fiscally weaker States to the average fiscal capacity. This involves using the current CGC approach to fund the weaker States based on the additional amount needed above their EPC share to address their (above average) assessed fiscal needs. It then apportions the remaining GST pool to all States on an EPC basis.

For the 2017 financial year relativity calculations, all States but New South Wales, Victoria and Western Australia require GST payments to reach this fiscal capacity. Achieving this involves distributing \$7.9 billion of the GST pool. This leaves \$54.8 billion to be allocated to States on an EPC basis. The difference between GST payments under this approach and current practices are presented in table C.2. For 2017-18, this approach would reduce GST payments to all States but Western Australia.



**Table C.2 Effects of equalisation to the average**

2017-18 GST payments and relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.8	1.19	4.66
Equalisation to the average	0.87	0.87	1.06	0.87	1.32	1.68	1.07	4.55
<b>Change in GST payments</b>								
\$m	-110	-972	-1 588	3 602	-557	-168	-130	-79
\$pc	-14	-156	-321	1 343	-321	-321	-321	-321
<b>Total redistribution from EPC</b>								
Current approach							\$7 928 million	
Equalisation to the average							\$5 407 million	

Source: Productivity Commission estimates based on data provided by the CGC.

An alternative approach is to raise States to the fiscal capacity of the second strongest State. This involves using the current CGC approach to fund the weaker States based on the additional amount needed above their EPC share (in the same way as table C.2), and then funding the six weakest States to raise them to the fiscal capacity of the second strongest (currently New South Wales). The remaining GST pool is then distributed to all States on an EPC basis. The GST payments and relativities associated with this approach are presented in table C.3.

**Table C.3 Effects of equalisation to the second strongest State**

2017-18 GST payments and relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
Equalising to the second strongest State	0.82	0.88	1.13	0.82	1.39	1.75	1.14	4.61
<b>Change in GST payments</b>								
\$m	-1 167	-920	-729	3 244	-256	-77	-60	-36
\$pc	-147	-147	-147	1 210	-147	-147	-147	-147
<b>Total redistribution from EPC</b>								
Current approach							\$7 928 million	
Equalisation to the second strongest State							\$6 771 million	

Source: Productivity Commission estimates based on data provided by the CGC.

## Actual per capita

An actual per capita distribution uses GST payments to fund the gap between a State's actual expenses (including infrastructure expenses) and the revenue it receives. New South Wales, Western Australia, the ACT and the Northern Territory would receive more GST payments

than they currently receive, while Victoria, Queensland, South Australia and Tasmania would receive less (table C.4).

**Table C.4 Effects of actual per capita distribution**  
2017-18 GST payments and relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
Actual per capita	0.93	0.87	1.03	0.61	1.26	1.63	1.88	5.57
<b>Change in GST payments</b>								
\$m	1 028	-1 055	-2 043	1 843	-814	-237	708	571
\$pc	130	-169	-414	687	-470	-454	1 754	2 324
<b>Total redistribution from EPC</b>								
Current approach							\$7 928 million	
Actual per capita							\$6 113 million	

Source: Productivity Commission estimates based on data provided by the CGC.

## Expense- and revenue-only equalisation

Expense-only equalisation removes all distribution of GST payments associated with differences in States' revenue raising capacities along with receipts of other Commonwealth payments. States vary significantly in their revenue raising capacity, and so this approach leads to increased payments for States with strong revenue raising capacities that also have high service delivery costs (which continue to be equalised under this approach). For example, Western Australia's GST payments would increase by \$2480 per capita, while the Northern Territory would receive an increase of \$1380 per capita (table C.5).

**Table C.5 Effects of expense-only equalisation**

2017-18 GST payments and relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
Expense-only	0.87	0.73	1.14	1.32	1.03	1.26	0.79	5.20
<b>Change in GST payments</b>								
\$m	-214	-3 220	-599	6 651	-1 805	-730	-421	339
\$pc	-27	-516	-121	2 480	-1 042	-1 398	-1 042	1 380
<b>Total redistribution from EPC</b>								
Current approach							\$7 928 million	
Expense-only							\$7 116 million	

Source: Productivity Commission estimates based on data provided by the CGC.

Revenue-only equalisation removes all distribution of GST payments attributable to differences in expense capacities. As such, this approach leads to decreased relativities for States with relatively large service delivery costs. States most affected by a move to revenue-only equalisation include the Northern Territory (which would receive \$11 068 per capita less) and Western Australia (which would receive \$762 per capita less) (table C.6).

**Table C.6 Effects of revenue-only equalisation**

2017-18 GST payments and relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
Revenue-only	1.01	1.23	1.03	0.05	1.36	1.44	1.36	0.32
<b>Change in GST payments</b>								
\$m	2 704	4 741	-1 986	-2 044	-374	-487	166	-2 721
\$pc	342	760	-402	-762	-216	-932	412	-11 068
<b>Total redistribution from EPC</b>								
Current approach							\$7 928 million	
Revenue-only							\$6 933 million	

Source: Productivity Commission estimates based on data provided by the CGC.

## C.2 Adjustments to the current HFE system

### Discounting a share of royalties

Mineral royalty assessments have had substantial effects on GST payments in recent years. Discounting mineral revenue for assessment involves calculating a proportion of assessed royalty revenue (the discount amount) on an EPC basis. Applying a 25 or 50 per cent discount to mineral royalty revenues to the current HFE system shifts GST payments to States with relatively larger mineral royalty revenue bases, including Queensland, Western Australia and the Northern Territory (table C.7).

**Table C.7 Effects of discounts to the mineral royalty assessment**  
2017-18 GST payments and relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
25% discount	0.85	0.89	1.20	0.51	1.42	1.77	1.15	4.68
50% discount	0.83	0.85	1.20	0.68	1.40	1.74	1.11	4.71
<b>Change in GST payments (\$m)</b>								
25% discount	-455	-624	99	1 141	-92	-42	-42	15
50% discount	-909	-1 248	197	2 283	-185	-84	-84	30
<b>Change in GST payments (\$pc)</b>								
25% discount	-57	-100	20	426	-53	-80	-104	60
50% discount	-115	-200	40	851	-107	-160	-209	121
<b>Total redistribution from EPC</b>								
Current approach							\$7 928 million	
25% discount							\$7 865 million	
50% discount							\$7 803 million	

Source: Productivity Commission estimates based on data provided by the CGC.

### Relativity floors

Relativity floors set a minimum value below which relativities cannot fall. This example applies a relativity floor of 0.70 or 0.50. The only State currently below 0.70 is Western Australia, and as such, introducing a relativity floor would require a transfer from all other States to Western Australia. For 2017-18, the size of this transfer would be \$2.4 billion (for a floor of 0.70). These funds are redistributed from the other States on an equal per capita basis, leaving all States but Western Australia worse off (table C.8).

**Table C.8 GST effects of a relativity floor**  
2017-18 GST payments and relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
0.50 relativity floor	0.86	0.92	1.17	0.50	1.42	1.79	1.18	4.65
0.70 relativity floor	0.84	0.89	1.15	0.70	1.40	1.77	1.15	4.63
<b>Change in GST payments (\$m)</b>								
0.50 relativity floor	-379	-299	-237	1 055	-83	-25	-19	-12
0.70 relativity floor	-870	-686	-543	2 419	-191	-57	-44	-27
<b>Change in GST payments (\$pc)</b>								
0.50 relativity floor	-48	-48	-48	393	-48	-48	-48	-48
0.70 relativity floor	-110	-110	-110	902	-110	-110	-110	-110
<b>Total redistribution from EPC</b>								
Current approach								\$7 928 million
0.50 relativity floor								\$7 552 million
0.70 relativity floor								\$7 065 million

Source: Productivity Commission estimates based on data provided by the CGC.

## Broad indicators

Broad indicator approaches to HFE use general measures of States' revenue raising capacities (typically economic indicators) to calculate relativities. Gross state product (GSP) and gross disposable income (GDI) have been identified as two potential broad indicators.

There is no consensus on the methodology for how broad indicators should be used to calculate relativities, and whether they should be applied to assess States' total fiscal capacity or solely revenue-raising capacity. The approach taken here is to calculate the shares of total revenue based on GSP and GDI. Either measure would replace the CGC's current approach of individually assessing State revenue items.

Table C.9 uses GSP and GDI as the revenue measures whilst removing all distribution of GST payments attributable to differences in expense capacities (which are not used to calculate relativities). Using this approach substantially decreases relativities for the ACT and the Northern Territory to a situation where they can even turn negative. In this situation the States would presumably not receive any GST payment and would also need to provide some of their own revenue to redistribute to the other States.

**Table C.9 GST effects of a broad indicators approach**

2017-18 GST payments and relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
Gross state product	1.03	1.28	1.08	0.10	1.29	1.48	0.29	-0.49
Gross disposable income	0.88	1.24	1.12	0.81	1.13	1.21	-0.58	-0.05
<b>Change in GST payments (\$m)</b>								
Gross state product	3 022	5 384	-1 437	-1 702	-664	-441	-933	-3 229
Gross disposable income	-2	4 751	-956	3 157	-1 381	-793	-1 824	-2 952
<b>Change in GST payments (\$pc)</b>								
Gross state product	382	863	-291	-635	-383	-845	-2 310	-13 135
Gross disposable income	-0.3	762	-193	1 177	-797	-1 518	-4 518	-12 007
<b>Total redistribution from EPC</b>								
Current approach								\$7 928 million
Gross state product								\$7 828 million
Gross disposable income								\$6 018 million

Source: Productivity Commission estimates based on data provided by the CGC.

Table C.10 also uses GSP and GDI as the revenue measures but it uses the CGC's current methodology for the expenditure side. This approach leads to large declines in GST payments for the ACT and the Northern Territory, and a large increase for Western Australia (in the case of GDI).

**Table C.10 Broad indicators for revenue with current expenditure approach**

2017-18 GST payments and relativities

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
<b>Relativities</b>								
Current approach	0.88	0.93	1.19	0.34	1.44	1.80	1.19	4.66
Gross state product	0.89	0.97	1.23	0.39	1.37	1.84	0.12	3.85
Gross disposable income	0.74	0.93	1.27	1.11	1.21	1.57	-0.75	4.29
<b>Change in GST payments (\$m)</b>								
Gross state product	320	647	550	342	-291	45	-1 102	-511
Gross disposable income	-2 714	13	1 033	5 215	-1 011	-307	-1 996	-233
<b>Change in GST payments (\$pc)</b>								
Gross state product	40	104	111	128	-168	87	-2 731	-2 078
Gross disposable income	-343	2	209	1 945	-583	-588	-4 945	-947
<b>Total redistribution from EPC</b>								
Current approach							\$7 928 million	
Gross state product							\$7 518 million	
Gross disposable income							\$7 958 million	

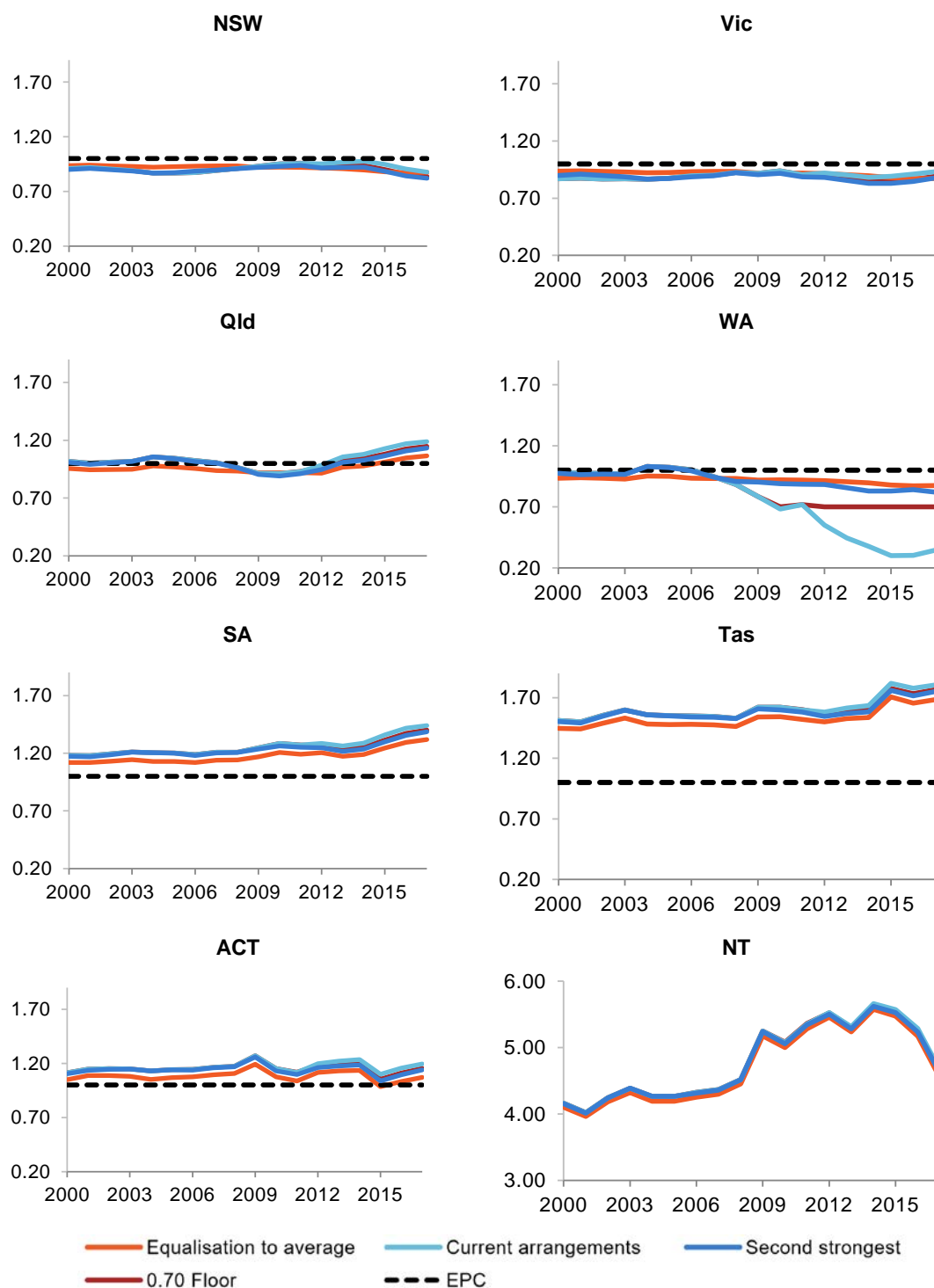
Source: Productivity Commission estimates based on data provided by the CGC.

## Historical GST impact of selected alternative approaches

The Commission has examined how alternative systems would have changed GST payments from the year 2000 onwards. Selected alternative approaches include a 0.70 floor, EPC distribution, equalisation to the average State and equalisation to the second strongest State (figure C.1).

**Figure C.1 GST relativities**

Under current and alternative distributions, 2000-01 to 2017-18



Source: Productivity Commission estimates based on data provided by the CGC.



### C.3 Average rate effects

Changes in any States' tax rate shifts the national average tax rate, driving a change in each States' assessed revenues and consequently its GST payments. A general measure of the effect of changes to revenue-raising effort on GST payments can be calculated by examining the change in GST payments due to raising an extra \$100 in revenue (in any State). Table C.11 presents this measure for selected revenue assessments.

**Table C.11 Change in GST payments of raising revenue by \$100**  
2015-16, dollars

<i>Revenue category</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Insurance tax	-1.9	1.6	0.2	0.5	-0.9	0.4	–	–
Land tax on income producing property	-6.6	-1.6	4.8	-2.1	3.3	1.2	0.7	0.3
Iron ore royalties	32.0	25.1	20.1	-87.6	6.0	1.8	1.6	1.0
Taxes on heavy vehicles	5.9	0.4	-1.4	-5.3	-0.2	-0.3	1.2	-0.4
Payroll tax	-2.2	1.5	2.1	-3.7	1.5	0.8	0.2	-0.2
Stamp duty on property	-9.3	-2.0	2.8	3.5	3.4	1.1	0.1	0.4

– Nil or rounded to zero.

Source: Productivity Commission estimates based on data provided by the CGC.

Average rate effects also occur for changes in States' expenditure. These changes affect the average levels of expenditure across States, leading to changes in each State's assessed expenses and consequently its GST payments. As with revenue rate effects, expenditure rate effects presented below are given by the change in GST payments resulting from a \$100 reduction in expenditure. These effects are presented in table C.12. They are generally smaller than revenue rate effects and in most cases less than \$1.

**Table C.12 Change in GST payments of reducing expenses by \$100**  
2015-16, dollars

<i>Expenditure Category</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Health: Admitted patients	-0.4	1.2	0.1	0.1	-0.3	-0.3	0.2	-0.5
Housing: Service expenses	0.8	2.8	-0.7	-0.5	-1.2	-0.1	0.6	-1.7
Post-secondary Education	0.3	0.9	-0.3	-0.3	–	–	-0.1	-0.4
Schools education: Service expenses	0.7	2.2	-1.6	-0.6	–	-0.2	0.1	-0.7
Welfare: Disability services	0.1	1.6	-0.7	0.3	-0.3	-0.3	–	-0.6

– Nil or rounded to zero.

Source: Productivity Commission estimates based on data provided by the CGC.

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## C.4 Cameos

The cameos presented here are used to illustrate how a change to a State's tax policy can influence its GST payments and its incentives to carry out a given reform. These include scenarios where only one State changes its tax policy (unilateral reforms), and when all States collectively change their tax policy (multilateral reforms).

Two cameos are presented here:

1. A revenue-neutral reform in which a State halves its stamp duty and introduces a broad-based land tax.
2. A budget-neutral reform in which a State introduces a congestion tax to fund public transport.

These cameos show the potential impact of an immediate reform to a State's GST payment. They show the *annual* GST relativity based on the most recent year for which CGC data are available (2015-16). This can be thought of as a comparative static analysis of the reform. In practice, however, the GST impact of the reform would come through gradually as it passes through the three-year moving average of the assessment period.

A State reform can have a positive or a negative effect on its GST payment. This depends on whether it is assessed as having an above-average capacity to raise revenue from the tax (where it receives a lower GST payment), or if it is assessed as having below-average capacity to raise revenue (where it receives a higher GST payment).

A reform can have two main impacts on the GST distribution (chapter 4). First, it can change the national average tax rate (the average rate effect). Second, it can change the size of the State's tax base (the elasticity effect). Both effects depend on the size of the State implementing the reform (a State with a large share of the overall tax base has a bigger influence on the national average tax rate), and on the size of the reform (where a large reform can cause a big shift in the tax rate and base).

How the reform is treated also depends on whether such a change has a 'material' effect on the GST distribution. At present, the CGC considers a redistribution of \$30 or more per capita to any State as a material effect that warrants inclusion in its assessment. This approach has been adopted in the cameos presented here. In scenarios where the assessment is not material, a simple EPC assessment has been used.

While these cameos are illustrative, there is considerable uncertainty in how a tax change would ultimately affect each State and its GST payments. The size and timing of the policy changes used in the cameos are not intended to reflect reality, but are instead used to demonstrate the influence on GST distribution, how it is determined, and what factors need to be considered.

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The cameos rest upon simple assumptions and share a number of limitations:

- First, the cameos assess the revenue bases for new types of taxes, and thus it is unclear how the CGC would treat these reforms in practice. For example, the CGC may follow a different approach to assess the revenue base (including what data sources are used to measure the base), to determine the average of what States collectively do, and to determine whether these impacts are material enough to require specific assessment.
- Second, the cameos assume that a State can fully and seamlessly offset its revenue and/or balance its spending in the same year the reform is implemented. This analysis does not consider the transition path for reform, such as the gradual phasing in of the new policy, or any indirect effects that might occur as a consequence. This analysis also does not consider the complexity of the tax reform, costs of administration or compliance rates.
- Third, the cameos do not forecast any future changes or any long-term impact of the tax change. The analysis also does not consider the consequences of other States that may respond to this reform.
- Finally, the impact of the reform on a State's tax base (the elasticity effect) is by assumption only. These cameos do not consider any further consequences of the reform (such as second-round economic impacts). For example, the cameos do not detail how businesses, consumers and households would respond to the tax change or whether people adapt to these reforms over time.

## **Replacing stamp duty with land tax**

This first cameo involves a State halving its stamp duty on property and replacing this lost revenue with a new broad-based tax on residential land (with policy in all remaining States remaining unchanged). The analysis was conducted separately for each State (unilateral reform) and jointly for all States (multilateral reform).

### **Rationale for reform**

Replacing stamp duty with a broader land tax has long been cited as an area for reform (for example, Henry et al. 2010a; PC 2004). Stamp duty is regarded as a highly inefficient tax that can discourage the turnover of property as people try to reduce or avoid paying the tax. As noted by the NSW Government (sub. 52, p. 14), this can lead to people living in homes that are not suited to them, which can increase commuting times and can constrain national productivity. It is also inequitable as it places a higher tax burden on those that need to move.

Land tax, on the other hand, is regarded as a more efficient tax. It is applied on the ownership of land and is therefore difficult to avoid paying, particularly if the tax is applied to a broad base. It is also collected annually and forms a stable source of State revenue.

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## Reduced stamp duty on property

The CGC currently assesses each States' capacity to raise revenue from stamp duty based on the amount of revenue actually raised by States (the tax rate) and the total property value of these transfers (the tax base). States vary in their legislated rates of stamp duty, as well as the scope of properties that attract the tax. Progressive rate scales are applied in all States, meaning that higher value properties attract higher tax rates.

A reform to reduce stamp duty on property can be shown by halving a State's average tax rate — total revenue divided by the total tax base. While States apply stamp duty using progressive rate structures in practice, the impact on different value categories has not been calculated as part of this analysis.

The reduced stamp duty revenue has two main impacts on the GST distribution. It reduces the national average stamp duty rate (the average rate effect), and it increases the size of the State's tax base (the elasticity effect). It is reasonable to expect that the tax base will change in response to a policy change of such magnitude.

A unilateral reform by a State to halve its stamp duty can have very different impacts on the average tax rate depending on how much of the revenue base it holds. For example, New South Wales held 41 per cent of the total stamp duty revenue base in 2015-16. If it were to halve its stamp duty rate (from 4 per cent to 2 per cent) this would halve its stamp duty revenue to \$4.2 billion. This would cause a big fall in the national average tax rate (from 4.1 per cent to 3.3 per cent, assuming tax bases do not change). The halving of the stamp duty rate would cause a smaller reduction in the average tax rate if it occurred in other States because they hold less of the assessed revenue base. If States collectively halved their stamp duty rates (a multilateral reform), the Australian average tax rate would also halve (table C.13).

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**Table C.13 Average-rate effect from halving stamp duty rates**  
Unilateral change by each State and a multilateral change by all States<sup>a</sup>

	<i>Units</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>All States</i>
Share of national revenue base	(%)	41	27	17	7	4	1	2	1	100
Reduction in stamp duty revenue	(\$m)	4 222	3 016	1 605	909	431	108	147	71	10 508
New State average tax rate	(%)	2.0	2.2	1.8	2.4	2.3	1.9	1.9	2.4	2.0
New national average rate	(%)	3.3	3.5	3.8	3.9	4.0	4.1	4.0	4.1	2.0

<sup>a</sup> State columns show the effect of each State unilaterally halving its own stamp duty rate. 'All States' shows the effect if all States halve their stamp duty rates.

Source: Productivity Commission estimates based on data provided by the CGC.

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Including elasticity effects would mean that the revenue base would also change (table C.14). This analysis uses lower and upper bound values for the elasticity of property transactions in response to a change in stamp duty rates, drawn from estimates published by Davidoff and Leigh (2013). The lower bound value is a 1.9 per cent reduction in transactions due to a 10 per cent increase in the duty rate (after one year).<sup>14</sup> The upper bound value is a 6.6 per cent reduction (after three years).

**Table C.14 Elasticity effect from halving stamp duty rates**  
Unilateral change by each State and a multilateral change by all States<sup>a</sup>

	<i>Units</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>All States</i>
<b>Lower-bound</b>										
Reduction in stamp duty revenue	(\$m)	3 821	2 729	1 452	823	390	98	133	64	9 510
New national average tax rate	(%)	3.2	3.5	3.7	3.9	4.0	4.1	4.1	4.1	2.0
<b>Upper-bound</b>										
Reduction in stamp duty revenue	(\$m)	2 829	2 020	1 075	609	289	72	99	48	7 041
New national average tax rate	(%)	3.1	3.4	3.7	3.9	4.0	4.1	4.0	4.1	2.0

<sup>a</sup> State columns show the effect of each State unilaterally halving Stamp duty. 'All States' shows the effect if all States halve their stamp duty. Lower and upper bounds refer to the elasticity estimates used to calculate changes in the tax base.

Source: Productivity Commission estimates based on data provided by the CGC.

A *reduction* in the stamp duty rate would therefore increase the number of property transactions that would occur in the State (while no change in the revenue base is assumed for the States that do not reform stamp duty). This means that the State's actual stamp duty revenue would not fall by as much as it would if elasticity effects were ignored. It also means that assessed stamp duty revenue for the State would be higher (although this is somewhat offset by the change in the average tax rate, which is also affected by the larger tax base in the reforming State).

Consequently, a State would receive a lower GST payment compared to a situation where the growth in their assessed tax base was ignored. When including elasticity effects, the halving of stamp duty rates is found to have a material effect on the GST distribution for any State that pursues this reform.

<sup>14</sup> This is the lowest elasticity estimate published by the authors. The estimate from their preferred specification is a 3 per cent reduction in transactions due to a 10 per cent increase in the duty rate (Davidoff and Leigh 2013, p. 403).

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## New broad-based land tax

To offset the loss in stamp duty revenue, it is assumed that a State introduces a broad-based land tax (a more efficient tax). This significant reform would involve the new tax being applied to residential property (including owner occupied), as the owners of such property would be the main beneficiaries of reduced stamp duty.

Such a reform would be different to existing land taxes. All States (apart from the Northern Territory) currently apply some form of land tax, and these tax scales are generally progressive. However, a number of exemptions apply, with owner-occupied housing and land used for primary production generally exempted from the tax. States also vary in their legislated tax rates and in their tax-free thresholds.

At present, the CGC assesses two types of land tax collected by the States:

- A ‘general property’ component (which includes fire services levies, metropolitan improvement levies and general rates in the ACT). None of these have a material effect on GST relativities, and thus are assessed on an EPC basis (meaning that they have no impact on the GST distribution).
- An ‘income producing property’ component (such as residential rentals and commercial property). These are assessed differentially, with taxable land values used to measure each State’s revenue-raising capacity. A progressive tax scale structure is used for this assessment. The CGC has ‘moderate’ concerns about the comparability and reliability of these data from State Revenue Offices and applies a 25 per cent discount to this component of its assessment (CGC 2015e).

The analysis here does not involve simply increasing existing taxes on income-producing properties because the tax base is narrow. Doing so would require a very large increase in these taxes (in some cases, over 100 per cent) to recoup the reduced stamp duty revenue. Moreover, such a policy change is very unlikely to be considered by a State government.

Instead, the analysis involves creating a new type of land tax. The tax base used for the analysis is the aggregate unimproved value of residential land in each State, sourced from the ABS (2017a). However, reflecting usual CGC practice, a differential assessment is only simulated where there is a material effect on the GST distribution. In scenarios where this is not material, a simple EPC assessment has been used.

The size of the land tax needed to offset stamp duty is shown in table C.15. For example, if New South Wales wanted to recoup the \$3.8 billion in revenue that it loses from the fall in stamp duty (under the lower-bound scenario), it would need to apply an annual flat tax rate of 0.23 per cent on the unimproved value of all residential land in the State. A lower land tax rate (of 0.17 per cent) would be required under the upper-bound scenario. This is because New South Wales does not lose as much stamp duty revenue because its lower duty rates increase the number of property transactions in the State.

Only a unilateral change to land tax in New South Wales or Victoria — or a multilateral change made by all States — is assessed to have a material impact on the GST distribution. A change to land tax made by any other State is treated on an EPC basis and would have no impact on the GST redistribution.

**Table C.15 Land tax required to offset stamp duty reduction**  
Unilateral change by each State and a multilateral change by all States<sup>a</sup>

	<i>Units</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>All States</i>
<b>Lower-bound</b>										
Land tax rate required to raise equivalent revenue	(%)	0.23	0.25	0.23	0.21	0.17	0.18	0.19	0.23	..
National average tax rate	(%)	0.09	0.07	0.03	0.02	0.01	0.00	0.00	0.00	0.23
<b>Upper-bound</b>										
Land tax rate required to raise equivalent revenue	(%)	0.17	0.18	0.17	0.15	0.13	0.14	0.14	0.17	..
New national average tax rate	(%)	0.07	0.05	0.03	0.01	0.01	0.00	0.00	0.00	0.17
Material impact on GST distribution? <sup>b</sup>		yes	yes	no	no	no	no	no	no	yes

<sup>a</sup> State columns show the effect of each State unilaterally reforming land tax. 'All States' shows the effect if all States concurrently reform land tax. Lower and upper bounds refer to the elasticity estimates used to calculate changes in the stamp duty tax base. <sup>b</sup> Material impacts refer to a redistribution of at least \$30 per capita in any State. .. Not applicable.

Source: Productivity Commission estimates based on data provided by the CGC.

The analysis shown here does not take explicit account of the impact on land values (the tax base). It also does not evaluate how the new land tax would affect the value and assessment of income-producing residential land that forms part of the CGC's existing assessment of land taxes on income-producing property. While land taxes do not affect the amount of land, they can have a significant impact on land values, even when tax rates are small (Henry et al. 2010b, p. 270). However, it is assumed that the reduction in stamp duty would offset the effect that the land tax would have in reducing land values. Including land value changes in the analysis does not change the pattern of the GST impacts presented.<sup>15</sup>

## GST impact

The combined GST impact from a unilateral reform of stamp duty/land tax is shown in table C.16 (for each reforming State only). Any State that carries out the reform would have lower GST payments, but the size of these impacts differ depending on the assumptions

<sup>15</sup> Incorporating a fall in land values following the land tax reform (not including any offsetting increase in values from reducing stamp duty) leads to a slightly smaller GST impact for States where the land tax change is material (New South Wales and Victoria). This fall in land values was calculated using simplifying assumptions of a 5 per cent discount rate and full capitalisation of the tax into perpetuity.

made about the elasticity of the tax base. In absolute terms, the net impact in GST payments for a unilateral reform by New South Wales or Victoria could exceed \$1 billion.

As a first mover on the reform, a reforming State would be made worse off in terms of its GST payments. This is because the State would be assessed as having a stronger capacity to raise revenue from stamp duty because of the growth in its assessed tax base, even though the reform would mean that it actually now raises less revenue. The land tax reform would also cause New South Wales and Victoria (which have a material impact on redistribution) to lose GST payments as they are assessed to have a stronger capacity to raise this tax.

**Table C.16 GST impact of stamp duty/land tax reform**  
Unilateral change made by each State, 2015-16<sup>a</sup>

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Baseline: GST annual relativity	0.84	0.93	1.14	0.60	1.44	1.83	1.20	4.28
<b>Lower-bound</b>								
Change in GST payments (\$m)	-317	-319	-302	-159	-83	-22	-30	-12
Change in GST payments (\$pc)	-41	-53	-63	-61	-49	-43	-76	-47
New GST relativity	0.82	0.91	1.11	0.57	1.42	1.81	1.17	4.26
<b>Upper-bound</b>								
Change in GST payments (\$m)	-1 233	-1 125	-920	-472	-250	-74	-103	-39
Change in GST payments (\$pc)	-161	-188	-191	-181	-147	-143	-263	-161
New GST relativity	0.77	0.85	1.06	0.52	1.38	1.77	1.09	4.21

<sup>a</sup> GST impacts are evaluated on a 'steady state' basis; that is, assuming the new policy was fully in place in 2015-16. No transition paths are evaluated. Lower and upper bounds refer to the elasticity estimates used to calculate changes in the tax base.

Source: Productivity Commission estimates based on data provided by the CGC.

If all States were to jointly reform stamp duty/land tax, the GST distribution effects would be smaller (table C.17). This is because the multilateral reform does not cause any State to deviate further from the average tax rate, while the assessed tax base increases for all States. This largely neutralises the impact on the GST distribution. In this scenario, the larger States (New South Wales, Victoria and Queensland) receive larger GST payments while all other States receive lower payments relative to the baseline.



**Table C.17 GST impact of stamp duty/land tax reform**

Multilateral change made by all States, 2015-16<sup>a</sup>

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Baseline: GST annual relativity	0.84	0.93	1.14	0.60	1.44	1.83	1.20	4.28
<b>Lower-bound</b>								
Change in GST payments (\$m)	161	55	185	-192	-167	-19	-14	-9
Change in GST payments (\$pc)	21	9	38	-74	-98	-36	-36	-35
New GST relativity	0.84	0.94	1.15	0.57	1.40	1.81	1.18	4.26
<b>Upper-bound</b>								
Change in GST payments (\$m)	119	41	137	-142	-123	-14	-11	-6
Change in GST payments (\$pc)	16	7	28	-55	-73	-27	-27	-26
New GST relativity	0.84	0.93	1.15	0.58	1.41	1.82	1.19	4.27

<sup>a</sup> GST impacts are evaluated on a 'steady state' basis; that is, assuming the new policy was fully in place in 2015-16. No transition paths are evaluated. Lower and upper bounds refer to the elasticity estimates used to calculate changes in the tax base.

Source: Productivity Commission estimates based on data provided by the CGC.

The GST impacts shown in these scenarios vary substantially, even though the reform itself is revenue neutral for the State. The size of the GST impact depends on the size of the tax, the size and elasticity of the tax base, whether a State is assessed as having above or below average capacity to raise revenue from the tax and how the tax is assessed. It also depends on whether other States also carry out the reform.

## Congestion tax with increased public transport spending

This cameo involves a State introducing road pricing to reduce urban congestion (that is, a congestion tax) and hypothecating its revenue to spending on urban public transport operational expenses. Though the level of congestion varies substantially across States (with smaller States experiencing particularly low levels), for completeness, this analysis examines the impact of reform for each State. Specifically, it measures the effects of reform undertaken on an individual basis (unilateral reform) and across all States (multilateral reform).

### Rationale for reform

The introduction of road pricing has been raised widely as an efficiency enhancing reform, as it has the potential to improve transport investment and reduce travel times, vehicle maintenance costs and pollution (for example, Henry et al. 2010b; PC 2014c). The Henry Tax Review suggested that the revenue from a congestion tax on existing roads should flow back to the community, initially to public transport in affected areas.

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## Introducing a congestion tax

Congestion taxes, implemented via road pricing, have not been introduced by any Australian State and are therefore not included in the CGC's current calculation of assessed revenues. The impact on GST payments of a State introducing a congestion tax depends on several factors, including the amount of funds raised by the State, the specific revenue base used and how the CGC would treat the new tax.

States will vary substantially in their capacity to raise revenue from congestion taxation, with States that have higher levels of traffic in metropolitan areas possessing a stronger revenue base. The Bureau of Infrastructure, Transport and Regional Economics has published several measures of traffic levels in Australian cities, including vehicle-kilometres travelled (VKT), passenger car equivalent units and some estimates of the costs associated with these levels of traffic.

For this cameo, metropolitan VKT has been used as a measure of a State's revenue base, rather than measures of congestion costs. VKT is likely to be less sensitive to States' policy choices on taxing congestion. Given that the intention of a congestion tax would be to reduce congestion costs, using costs as a measure of the revenue base would leave GST payments highly sensitive to policy settings.

This cameo involves scenarios of States raising revenue equivalent to \$200 per capita in both unilateral and multilateral circumstances. The amount of revenue raised does not affect the *direction* of the policy's effect on a State's GST payments. That is, whether New South Wales raises \$10 or \$200 per capita does not affect whether its GST payments increase or decrease as a result of the policy. It does, however, affect the *magnitude* of this effect and therefore whether a congestion tax is considered material. Raising \$200 per capita in New South Wales, for example, equates to raising on average 3.8 cents per metropolitan VKT. In a multilateral reform scenario, this represents a 30 per cent increase in urban public transport expenses.

Table C.18 presents the effect of unilateral congestion reforms on components of the revenue assessment. It shows that where the tax is introduced it has a large impact on the national average tax rate and its materiality. Assuming States raise \$200 per capita, the introduction of a congestion tax would be material only for New South Wales and Victoria. In the analysis below, assessed revenues have been calculated on an EPC basis in cases where the congestion tax is not material.

**Table C.18 Revenue assessment of a congestion tax**  
Unilateral change by each State and a change by all States<sup>a,b</sup>

	<i>Units</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>All States</i>
Share of national revenue base	(%)	30	29	16	13	8	1	3	1	100
Total revenue raised	(\$m)	1 534	1 200	962	521	341	103	79	49	4 788
State tax rate	(cents/VKT)	3.8	3.0	4.5	2.9	3.3	5.2	2.0	4.6	..
National average rate	(cents/VKT)	1.1	0.9	0.7	0.4	0.2	0.1	0.1	0.0	3.5
Material impact on GST distribution?		yes	yes	no	no	no	no	no	no	yes

<sup>a</sup> The tax rates presented above represent the cents collected per urban vehicle-kilometres travelled. <sup>b</sup> State columns show the effect of each State unilaterally undertaking reform. 'All States' shows the effect if all States concurrently undertake reform. .. Not applicable.

Source: Productivity Commission estimates based on data provided by the CGC.

## Hypothecated expenditure on urban public transport

In this cameo, the revenue raised from the congestion tax has been allocated to urban public transport operational and depreciation expenses. This differs from *investment* in public transport infrastructure. As such, this cameo does not consider transitional effects associated with introducing a congestion tax and increasing expenditure on public transport. Rather, it simulates a steady-state situation in which States have developed their transport infrastructure such that operational and depreciation expenses have increased by the amount raised from a congestion tax. These operational expenses could include expenditure relating to bus, rail, ferry, and any other services assessed by the CGC as urban transport expenses.

An increase in transport expenditure originating in any single State increases assessed transport expenses for all other States — for example, an increase in expenditure in New South Wales raises the assessed expenses of all other States. The size of the shift in all States' assessed expenditure will depend in part on the size of the change in spending and therefore the size of the State introducing reform. For example, changes in assessed expenses are much larger where New South Wales undertakes reform, compared with the Northern Territory (table C.19).

**Table C.19 Hypothecated spending and assessed transport expenses**  
Unilateral change by each State and a change by all States, \$ million

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>All States</i>
Current assessed expenses	3 752	3 278	1 803	1 268	690	58	144	22	11 016
Scenario assessed expenses	4 274	3 635	1 960	1 328	712	59	145	22	15 803
Difference	523	357	157	60	21	1	1	0	4 788

Source: Productivity Commission estimates based on data provided by the CGC.

The net effect of introducing a congestion tax and directing revenue raised to urban transport is presented in table C.20. The GST payment impacts are positive for New South Wales, Victoria, and Western Australia and negative for the other States. As a proportion of the revenue raised from a congestion tax, these effects range from 4.5 per cent (for New South Wales), to -3.7 per cent (for Queensland), and have trivial effects on GST relativities.

**Table C.20 GST impact of a congestion tax and public transport spending**

Unilateral change by each State, 2015-16

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Baseline: GST annual relativity	0.84	0.93	1.14	0.60	1.44	1.83	1.20	4.28
Change in GST payments (\$m)	69	6	-36	3	-3	-2	0	0
Change in GST payments (\$pc)	9	1	-7	1	-2	-3	-1	-2
New GST relativity	0.84	0.93	1.14	0.60	1.44	1.83	1.20	4.28

Source: Productivity Commission estimates based on data provided by the CGC.

The effects of multilateral reform are much larger, particularly for smaller States (table C.21). As a proportion of the revenue raised from a congestion tax, these effects range from 14 per cent (for New South Wales) to -92 per cent (for the ACT). The larger effect associated with multilateral reform is the result of a larger change in average expenses and therefore larger changes in assessed expenses.

**Table C.21 GST impact of a congestion tax and public transport spending**

Multilateral change by all States, 2015-16

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>
Baseline: GST annual relativity	0.84	0.93	1.14	0.60	1.44	1.83	1.20	4.28
Change in GST payments (\$m)	214	23	34	-67	-61	-43	-73	-27
Change in GST payments (\$pc)	28	4	7	-26	-36	-84	-185	-111
New GST relativity	0.85	0.93	1.14	0.59	1.42	1.79	1.12	4.23

Source: Productivity Commission estimates based on data provided by the CGC.

There are several factors that this analysis does not incorporate. It is assumed that VKT does not respond to the introduction of a congestion tax. For unilateral reforms, reduced VKT resulting from a congestion tax would increase GST payments to the reforming State. For unilateral reforms, the effects of reduced VKT would vary across States, depending on the relative size of a State's VKT and its responsiveness to the tax. Finally, as outlined above, as this analysis simulates a 'steady state' of increased urban transport operational expenses, it does not consider transitional developments.

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## D Modelling the efficiency of HFE

This appendix looks at the modelling studies undertaken in Australia and Canada that have aimed to quantify the efficiency effects of HFE. It describes the main approaches, assumptions and outcomes of these studies, as well as their limitations.

### D.1 Studies that model the efficiency effects of HFE

There have been several past attempts to measure the efficiency effects of HFE through modelling. These studies have primarily been conducted using either computable general equilibrium modelling or deadweight loss analysis. Both types of modelling aim to quantify whether people are better or worse off under different equalisation scenarios. This is measured in terms of the ‘consumer welfare’ of people in each State and for the nation as a whole. The model outcomes are shown to be broadly similar when using either a general equilibrium or a deadweight loss approach. However, using different underlying assumptions can have a significant bearing on the model’s outcomes, regardless of the estimation method.

The most comprehensive modelling of Australia’s HFE system has been undertaken by Dixon, Picton and Rimmer (2002, 2005), Independent Economics (2012, 2015) and Murphy (2015, 2017). These groups disagreed on whether HFE enhances or reduces national welfare (when compared to an equal per capita (EPC) distribution or some variant). However, despite these models applying different assumptions and leading to different conclusions, the overall efficiency impacts of all three models are generally found to be small (table D.1).

#### Dixon, Picton and Rimmer (2002, 2005)

Dixon, Picton and Rimmer (2002), from the Centre of Policy Studies, were commissioned by fiscally stronger States (New South Wales, Victoria and Western Australia) to undertake modelling for the *Review of Commonwealth-State Funding* (Garnaut and FitzGerald 2002). Their computable general equilibrium model included details on each State (such as their tax bases and costs of delivering services) and incorporated an assumption that fiscally weaker States have higher and increasingly inefficient levels of government discretionary spending.

They modelled a move to an EPC distribution. Their results suggest welfare gains of up to \$169 million per year (in 2000-01 terms), driven largely by the assumed higher government discretionary spending and the higher relative cost of delivering services in fiscally weaker

States under HFE. In a follow up study in 2005, they reported smaller welfare gains associated with a move to an EPC distribution — ranging from \$16 million to \$135 million, depending on how factor mobility, government spending, fiscal externalities and congestion externalities were treated.

**Table D.1 Modelling results summary: selected Australian studies**

	<i>Dixon, Picton and Rimmer</i>		<i>Independent Economics</i>		<i>Murphy</i>	
	2002	2005	2012	2015	2015	2017
Change in national welfare from moving to an EPC distribution (\$million per year)	+\$169 (2000-01)	+\$49 (2000-01)	-\$295 (2009-10)	-\$521 (2015-16)	-\$445 (2015-16)	-\$330 (2017-18)
Selected assumptions <sup>a</sup>						
EPC includes equalisation payments for Indigeneity	x	x	✓	✓	✓	✓
State preferences can differ from resident preferences	✓	✓	x	x	x	x
Single household utility function	x	x	✓	✓	✓	✓
Partial cost equalisation can improve welfare	x	x	✓	✓	✓	✓
Estimation method <sup>b</sup>	CGE	CGE	CGE	CGE	CGE/DWL	DWL

<sup>a</sup> Refers to the assumptions used in these specific scenarios. <sup>b</sup> **CGE** computable general equilibrium modelling, **DWL** deadweight loss analysis.

Source: Dixon, Picton and Rimmer (2002, 2005); Independent Economics (2012, 2015); Murphy (2015, 2017).

In 2006, the Queensland Treasury engaged the Centre of Policy Studies to repeat the 2002 modelling under a different set of assumptions that the Treasury considered were more realistic — this included a more consistent approach to fiscally strong and weak States' tax and spending decisions. In contrast to the earlier studies, these new assumptions produced results suggesting that a move to an EPC distribution would result in a \$620 million welfare loss (Queensland Treasury 2006; Tasmanian Government, sub. 28).

## Independent Economics (2012, 2015)

Independent Economics (2012), in work commissioned by the SA Government, constructed a computable general equilibrium model that included several features of the Centre of Policy Studies model, in addition to some assumptions of their own (table D.1).

Their study estimated that a move to a 'modified' EPC distribution system (in which equalisation for differences in States' spending needs for Indigenous populations are retained) leads to a welfare loss of \$295 million per year in 2009-10 terms. Independent Economics (2015) updated this model to account for some further differences between

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States. They reported a welfare loss of \$521 million associated with moving to a modified EPC system (in 2015-16 terms). They also found welfare losses associated with a move to a relativity floor of 0.75 and a scenario in which all payments to fiscally weaker States were funded by additional Commonwealth taxation.

## **Murphy (2015, 2017)**

Chris Murphy (director of Independent Economics) re-examined the efficiency impacts of HFE using an alternative approach and applied it to additional scenarios. This involved developing a theoretical ('optimal') model of fiscal equalisation that builds on the framework of Boadway and Flatters (1982) and Albouy (2012). Roughly speaking, this optimal equalisation formula only fully equalises States for source-based taxes (such as mining royalties and land taxes), for the fixed costs of government and for differences in States' demographic mixes. Other factors are subject to no or limited equalisation, so as not to distort price signals for migration (chapter 6).

Murphy (2015) estimated a welfare loss of \$445 million (in 2015-16 terms) associated with a move from the current HFE system to a modified EPC scenario (as described above for Independent Economics). A move from the current HFE system to his optimal scenario was estimated to lead to a welfare gain of \$260 million.<sup>16</sup>

In a further extension, Murphy (2017) added more detail to the design of the optimal equalisation approach. He also updated his estimates and added further equalisation scenarios. Compared to the current HFE system (in 2017-18 terms):

- A move to a modified EPC scenario is estimated to lead to an annual consumer welfare loss of \$330 million.
- A move to an EPC approach without equalisation for Indigeneity leads to a much larger welfare loss of more than \$1 billion.
- Using a system of Commonwealth grants to fund equalisation is estimated to reduce welfare by \$100 million, while a 0.75 relativity floor scenario reduces welfare by \$71 million.
- In contrast, a scenario in which all equalisation transfers are discounted by 25 per cent (from the 2017-18 recommended relativities) is estimated to improve welfare by \$48 million.
- A move to the optimal model is estimated to increase national welfare by \$71 million.

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<sup>16</sup> While Murphy used both computable general equilibrium modelling and deadweight loss analysis in his 2015 paper, he reported only the former, noting that the two sets of estimates were 'broadly similar' (Murphy 2015, p. 21).

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## Canadian empirical studies of the efficiency impacts of equalisation

Canadian studies find mixed results on the role of Canada's system of equalisation.

- An early study by Watson (1986) used a deadweight loss analysis to estimate small efficiency gains from its equalisation system of about \$1.4 million per year (in 1971 Canadian dollars), below the costs of raising these funds.
- However, Wilson (2003) was critical of some of Watson's assumptions and claimed that the efficiency gains were in fact much larger. He argued that when migration patterns are considered over a longer period (not just population movements in a single year) the efficiency gains would be about \$60.3 million per year (in 1971 Canadian dollars).
- Albouy (2012) also used a deadweight loss analysis to estimate what he considered to be the inefficiencies of Canada's equalisation policies. These include mining revenues being equalised only partially, and the Atlantic and Prairie Provinces being compensated for having lower nominal tax capacities, even though cost of living differences mean that their real fiscal capabilities are the same as the more populated Provinces. Albouy estimated that these inefficiencies cost Canada \$4.3 billion per year (in 2001 Canadian dollars).

## D.2 Limitations of the modelling

There are limitations to these economic models. As can be seen from the contrasting results of the studies described above, a model's results can depend strongly on the specific assumptions made. While certain assumptions are needed to simplify complex real world interactions, some are contentious. For example, assumptions around the behaviour of governments and people can drive the results, but the empirics of these behaviours are not well-known, and the assumptions are generally determined *outside* of the models.

In a situation where changes in fiscal transfers lead to a reduction in a State's revenue, it could encourage that State to borrow more, tax more, or spend less (and perhaps even become more efficient in delivering services). These different responses can have different impacts on overall efficiency. Also, States are assumed to take their equalisation grants as given in these models. That is, they do not engage in strategic behaviour or face any impact on their incentives to develop their tax bases. Chapter 4 notes that strong incentive effects can be found in Australia's HFE system, although there is no direct evidence that these have influenced specific policy decisions. Such incentives, if important, can also impact on the overall efficiency of HFE.

In terms of labour mobility, there is scant real world evidence that HFE is an important driver of interstate migration decisions. But the efficiency impacts of these models rely on how people respond to differences in wages, congestion, and expected utility across States.

In submissions to this inquiry, most stakeholders have questioned the use of models to assess the efficiency of HFE (box D.1). As noted in chapters 1 and 6, the Productivity Commission



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has not undertaken its own economy-wide modelling of the impacts of HFE. The small and ambiguous efficiency impacts found in past modelling attempts, as well as the extensive work already carried out in Australia, do not make a strong case for further modelling as part of this inquiry.

#### **Box D.1      Modelling HFE impacts: what participants say**

The SA Government (sub. 25, p. 1) noted the important findings of the modelling work that it commissioned:

The efficiency impacts of the current system of HFE were the subject of a detailed review undertaken by Independent Economics ... [the report] found that there would be a significant loss in overall national economic productivity if there was a departure from full HFE. This was a very important finding and represented a breakthrough in quantitative modelling in the Australian context.

Most other States, however, were more doubtful of the evidence from this sort of modelling. The ACT Government (sub. 49, p. 23) noted the importance of the underlying assumptions in modelling the efficiency effects of HFE:

There have been several attempts at quantifying welfare gains and losses from equalisation transfers. Some of the work has shown welfare gains due to equalisation, while other studies have found welfare losses as a result of equalisation. The differences in these findings depend significantly on the underlying theoretical assumptions.

The WA Government (sub. 15, pp. 37–8) was critical of the ‘essential limitations’ of general equilibrium models. It argued that such models follow the presumption of ‘a world of timeless relationships’ and use simple production functions fixed by recent economic data that ‘can provide no guidance on long-run efficiency’. Accordingly:

It is not technically feasible to develop a general equilibrium model that captures the efficiency impacts of HFE. Models that purport to do so demonstrate the effect of the assumptions, not what happens in practice. (sub. 15, p. 31)

Similarly, the Victorian Government (sub. 53, p. 4) noted that:

Computable general equilibrium models should not be used to assess the magnitude of any economic costs, given that these models are largely assumptions-driven. These models can show large differences in results, and/or contradictory results, when inputs and assumptions are changed slightly.

In contrast, the Minerals Council of Australia (sub. 48, p. 11) said that further modelling would be valuable, despite its limitations:

Further modelling of fiscal equalisation in Australia would be valuable to measure the broad economic benefits of the existing system and any potential changes, but such modelling must be based on more realistic or empirically relevant assumptions that represent both the theory of efficient equalisation and the actual distribution system in Australia. In particular, this modelling must consider the extent to which Australia is actually implementing HFE with its transfer methods and the impact of incentives on government behaviour.

The Parliamentary Liberal Party of WA (sub. 22, p. 5) also noted how the economic impact of HFE is likely to be felt most strongly at the State and regional level, rather than the national level:

The Productivity Commission Inquiry will no doubt do some modelling of the impact on the national economy, though the results are likely to be modest. The true impact is felt at a State or regional level. The recent experience of Western Australia is an obvious example.



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