

Jim Hancock Deputy Director

South Australian Centre for Economic Studies University of Adelaide SA 5005 AUSTRALIA

Level 3, Nexus Tower 10 Pulteney Street Adelaide SA 5000

Telephone +61 8 8313 5515 Facsimile +61 8 8313 4916

CRICOS provider number 00123M

31 July 2017

Ms Karen Chester and Mr Jonathan Coppel Productivity Commission GPO Box 1428 CANBERRA CITY ACT 2601

Dear Ms Chester and Mr Coppel,

# **Horizontal Fiscal Equalisation Inquiry**

I present the attached submission in connection with your Horizontal Fiscal Equalisation inquiry.

My submission is in two parts. The first outlines the role for horizontal fiscal equalisation in a federal system. There is a widespread lack of awareness of these issues. The second part responds to specific issues in your detailed consultation questions.

I have been involved in the analysis of federal financial issues in Australia for two decades and I draw on my thinking over that time in preparing this material. I have acted as a consultant to the South Australian Government.

I wish you well in your task.

Yours sincerely,

Jim Hancock Deputy Director South Australian Centre for Economic Studies

Encl ...

U:\jim\Submission to PC HFE inquiry Jim Hancock.docx

# Submission to Productivity Commission Horizontal Fiscal Equalisation Inquiry Jim Hancock<sup>1</sup>

## A. The role of fiscal equalisation

Political Decentralisation

The role for horizontal fiscal equalisation (HFE) is best understood by stepping back and considering the system that gives rise to it. In Australia, this is a federal system, with a national government and eight State governments, and free movement of goods and services and people within the nation. Australia's federal arrangements have evolved over time in an ongoing process of adaptation to emerging pressures and needs.

It is instructive to think about how one would design a federal system if one were to start with a "blank sheet". The design of a federal system involves choices about what powers to retain at central level and what powers to devolve to State governments. There are both advantages and disadvantages of devolution, and it will prove desirable to retain some powers at the central level and to devolve others. In addition, it will be important to take advantage of institutional mechanisms that can minimise the disadvantages associated with devolution and capitalise on the potential advantages. Of course when we consider an existing federal system we do not start from a blank sheet, and established institutions and interests will constrain the design options available.

The advantages of decentralisation are as follows. First is the "subsidiarity" argument: a system of decentralised governance locates political decision making closer to the communities that are affected by decisions. It is likely to permit greater differentiation of policy settings across regions, and this permits a better alignment of policies with regional needs and priorities. Secondly, because decentralisation involves numerous governments addressing similar challenges in different geographic regions, the decentralised structure supports experimentation and innovation. Thirdly, since a decentralised arrangement involves a number of regional governments, it may give rise to competitive pressures that lead to better government performance.

There are also disadvantages of decentralisation. First, regional governments tend to have a narrow focus of interest. For decisions that have only local consequences this need not be a problem. But for decisions with impacts beyond a jurisdiction's border it can be a problem. A self-interested region will ignore costs and benefits that fall elsewhere as a result of its actions. Secondly, decentralisation can also lead to costly duplication. There are costs when government administrative services are duplicated and also businesses face duplicated costs when they have to come to terms with different regulatory arrangements in different jurisdictions. Thirdly, since decentralisation involves a number of governments operating on a smaller scale, it may lead to lost economies of scale in government service provision.

As one works through the pros and cons of decentralisation, it will become apparent that some tax, spending and regulatory powers will best be assigned to the central government and others to the States. There is no reason to expect that the ideal assignment of tax and spending functions will lead to budget balance at the central and State levels. Therefore fiscal transfers from the centre to the States may be an element of the ideal system. So-called "vertical fiscal imbalance" is a likely outcome of an optimal design. In principle, transfers from the regions to the centre are a possible outcome of an ideal design although less likely.

While regional governments will have autonomy over some decisions, they are still enmeshed with their neighbours and the central government to greater or lesser degree. And the linkages between neighbouring jurisdictions will impinge on the optimal design of the federation. There may be free trade in goods and services (a customs union), free movement of population (a migration union), freedom to purchase assets and invest across jurisdictions, mutual recognition of credentials such as corporate or individual licenses to operate, and so on. In Australia, the States offer access to government services simply on a residence basis, meaning that a person from the Northern Territory may travel to Victoria and have the same service eligibility as a Victorian native.<sup>2</sup> In contrast, within the European Union member states can and do determine access to some services on the basis of country of origin. Rules such as these all have a bearing on location decisions. The federal design needs to avoid undue distortions to those location decisions.

Whenever we consider a public policy question, our conclusions about what might be the best course of action will depend greatly on the perspective that we take and the objectives that we set. Here we will assume that we have a national perspective and are interested with the wellbeing of all of the residents of Australia. This contrasts with the narrower perspective that a State might take, having regard primarily to its own residents. And we will consider the case where the national government is concerned with objectives of efficiency and

South Australian Centre for Economic Studies, University of Adelaide and Research School of Economics, Australian National University. The views herein are personal views and should not be attributed to either university. The author has acted as a consultant to the Government of South Australia on federal financial increase.

Section 117 of the Australian Constitution relates to the rights of residents in States and says that "A subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State."

equity without discriminating between residents of different States. We ask: What design would promote the goals of efficiency and equity? Efficient design involves maximising the income that is available for the community to consume and also ensuring that that the income is used to procure things that are valued in the community.<sup>3</sup> The concepts of "income" and the things that are "consumed" need to be considered broadly, taking into account all things that are of value to the community. So we are not just interested in consumption of hot dinners or haircuts, but also in consumption of clean air, safe streets, and so on. The equity of the design relates to the way in which the system impacts on individuals with different circumstances. One aspect of this is whether an institutional design leads to a more or less equal distribution of consumption opportunities—"vertical equity". Another aspect of equity is whether the institutional design brings about like treatment of like individuals—"horizontal equity".

There are other goals that are from time to time raised in discussions of federal design: the need to "glue" the federation together, the case for "cutting off" poorer parts of the country, maintenance of "states' rights", and so on.<sup>4</sup> I leave these issues aside here. While it is possible that they are relevant in the political process, here we consider policy design criteria that are concerned with the wellbeing of the people who live in Australia, rather than the pursuit of strategies to excise those who are seen as burdensome or to retain the prerogatives of particular political players. The focus is utilitarian subject to the requirement to observe certain personal rights.

#### Horizontal fiscal equalisation

In a decentralised system, it is likely that there will be differences in the fiscal circumstances of States. For example, one State may be resource-rich while another may not. A State with a high prevalence of elderly residents will need to spend more per capita on health services, at least if it offers the same service level, than will a State with a younger population profile. One State may choose to finance a hospital and another State may choose not to, the former needing to accommodate the hospital in its budget. We could think of many more examples.

A central government can diminish differences in States' fiscal circumstances by transferring resources from one State to another in such a way as to "equalise" States' circumstances. In practice the easiest way to do this is for the centre to raise funds from taxpayers and then make grants to States, with those grants determined so as to meet the equalisation objective. A grant distribution that is designed to offset differences in fiscal circumstances is a scheme of "horizontal fiscal equalisation".

It is notable that in a unitary system of government HFE is practiced implicitly across the constituent regions of a country. If a central government provides health services and funds them with an income tax, then in high-income regions tax collections will tend to exceed the disbursements made on health, while in low-income regions tax collections will tend to fall short of health expenditures. No separate accounts are kept for the distinct regions, but implicit surpluses in high income regions are implicitly transferred to cover implicit deficits in low-income regions. This issue is explored further in Australian Government (2012)—see Appendix B.

Each State's fiscal circumstances will depend on both avoidable and unavoidable factors. Avoidable differences in a State's circumstances are those differences that arise as a result of its own decisions. Unavoidable differences in circumstances are those arising from factors beyond the State's control. For instance, whether or not a State is resource rich is a factor beyond the control of a State. Whether or not a State effectively develops its resources is a factor within the control of the State. The population profile of a State will to a substantial extent be beyond its control although its own decisions may also have an impact. Whether or not to build a hospital clearly is a discretionary decision. We describe differences in State fiscal circumstances that arise from unavoidable factors as differences in "fiscal capacity".

There are strong grounds to design a horizontal fiscal equalisation scheme so as to offset only the unavoidable differences in State fiscal circumstances. Relatedly, no adjustments would be made in respect of avoidable impacts. To illustrate the distinction, if one State chose to have a new hospital and a higher level of debt, then it would not be compensated for the higher debt servicing charges that it then faced. But if a State had a higher prevalence of the elderly in its population and therefore a greater need for capital expenditures on hospitals with associated debt, it would be compensated for its higher debt charges. To implement HFE in this way it is necessary to make indirect assessments of State fiscal capacities.

There is an efficiency case for confining equalisation to unavoidable differences in States' fiscal circumstances. If the equalisation scheme offsets the consequences of State decisions, it will affect incentives in undesirable

Submitted by: Jim Hancock July 2017

-

Producing a large pie that nobody wants will not raise living standards.

In the matter of States' rights, I note that Section 96 of the Constitution provides that "During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fir"

ways. States' will be able to make poor budgetary choices knowing that the impacts will be borne elsewhere. And the incentives to make difficult but "good" budgetary choices will be weakened because the gains will be enjoyed elsewhere. In contrast, if equalisation offset only the consequences of unavoidable differences in circumstances, then there is no distortion to States' decisions. States are equalised for factors beyond their control and are left to do as well as they can over matters in their own control knowing that they will reap the rewards of their successes and bear the burden of their failures.

There is also a horizontal equity case for confining equalisation to unavoidable differences in budgetary circumstances. This is the idea that individuals should bear the consequences of their own choices. That principle does not rule out adjustments to individual circumstances for factors beyond the individual's control.

In practice, there will be some difficulties dichotomising differences in State circumstances into "unavoidable" and "avoidable" components. The requirement is to achieve a "good enough" identification of unavoidable influences on the budget. The perfect should not be the enemy of the good.

## Horizontal fiscal equalisation and equity

Fiscal equalisation has limited implications for vertical equity nationwide. The scenario analysis in Harding et al (2002) provides empirical support for this view. They conclude taking the Australian grant distribution back from fiscally equalising to equal per capita would lead to small increases in inequality. This conclusion is what one would expect a priori. Changes in grants to States probably do not impact very much on the within-State extent of vertical redistribution. And even if, say, a change in the grant distribution led a losing State to increase it vertical redistribution, then so long as there are symmetric responses the gaining State would reduce its vertical redistributions, so that the changes in gaining and losing States would tend to offset each other.

The horizontal equity principle—the idea that like individuals should receive like treatment from the fiscal system —is likely to be breached in the absence of fiscal equalisation. To illustrate, suppose we have two States, each with three people, each earning \$100 per year. Two people in State A are sick and one person in State B is sick. Conventional treatment costs \$30 for each sick person. Suppose the health system is funded from State head taxes. If each State provides the conventional treatment, State A will have a head tax of \$20 while State B will have a head tax of \$10. But this breaches the horizontal equity principle which says that the head taxes should be the same in each State if each State has the same level of services. A healthy person in State A pays more than a healthy person in State B purely because State A has the burden of a larger unhealthy population. And by a similar argument an unhealthy person in State A pays more than an unhealthy person in State B. Yet the horizontal equity principle requires that equals should be treated equally. This requires that a healthy person in State A should face the same support burden as a healthy person in State B. And an unhealthy person in State A should receive the same net support (value of health service net of head tax) as an unhealthy person in State B.

Horizontal fiscal equalisation can remedy this inequity. Suppose now that the head tax is collected by central government. It needs to fund support for three people at a total cost of \$90. It sets a uniform head tax of \$15, and makes payments of \$60 to State A (in respect of its two unhealthy people) and \$30 to State B (in respect of its one unhealthy person). Horizontal equity is thus achieved. But note that to achieve this State A is receiving \$20 per capita in grants while State B receives only \$10 per capita.

This example also illustrates that simplistic rules of thumb such as "equal per capita allocation of grants" can actually be quite misguided. At a superficial level, an equal per capita allocation may sound like the fairest approach. But when one takes into account differences in the population characteristics, it becomes clear that an equal per capita grant allocation leads to quite unequal impacts at the personal level. We would not argue that the old age pension should be distributed equal per capita, i.e. paid to everybody regardless of age or circumstances. We would accept that a fair distribution involves some people getting no payment. If we adopt the goal of enabling States to provide like services with like taxes, then the implication is that some States may at times get quite low GST distributions.

HFE does not impose any particular redistributive policy on States. In Australia the States' activities bring about substantial redistributions from the well-off to the less well-off, but the HFE arrangements neither require this nor reward it. Decisions about the nature and extent of redistribution at the State level are driven by State electoral processes. It is notable that the States come to broadly similar positions on the activities that they fund from their budgets and the ways in which to fund them. This is perhaps unsurprising given the similarities that exist between the residents of the different States and the values and aspirations that they hold. Australians are Australians first, and New South Welshmen, or Tasmanians, or Western Australians second.

The impacts of the States on vertical and horizontal equity stand alongside the impacts of the Australian Government. The Australian Government's own operations have impacts both through the direct financial

transfers implemented by the tax-transfer system and in-kind via the provision of partly or fully subsidised services to the community.

# Horizontal fiscal equalisation and efficiency

Fiscal equalisation has the potential to improve the efficiency of location decisions within a federation. But if it is designed poorly it has the potential to introduce inefficiency to governmental decisions. An ideal system will be designed to support location efficiency and to prevent distortions to State governments' decisions.<sup>5</sup>

Decentralisation can cause distortions to location choices. This is especially so when one's fiscal treatment at the hands of States is determined on a location basis (as opposed to an origin basis). Returning to the horizontal equity example, suppose that each State supports its own budgetary needs independent of each other. The healthy person in State A earns \$100 and pays a head tax of \$20, for a net income of \$80. Suppose that the healthy person would earn \$95 in State B. In this case it will be personally advantageous for the healthy person to move, because although her income falls to \$95, her tax falls to \$10, for an after tax income of \$85 (I leave aside budgetary adjustments required as a result of the move). The end result of this is that there will still be three unhealthy people to support at a cost of \$90. But national income will have been reduced from \$600 to \$595. Thus there is an inefficiency in location choices.

Horizontal fiscal equalisation can avoid these distortions to location choices. In the discussion of equity it was shown that horizontal fiscal equalisation can restore horizontal equity. The centre implemented this by setting a uniform head tax of \$15 and distributing the proceeds to the two States on the basis of needs to support treatment costs of \$30 per unhealthy person. And it turns out that this same structure is the one that is neutral over location choices. Because healthy people pay \$15 wherever they locate, and unhealthy people pay \$15 and receive \$30 in health services wherever they locate, horizontal fiscal equalisation redresses distortions to location choices that would arise in its absence.

A fiscal equalisation scheme may also impinge on the efficiency of State decisions, and careful attention to its design is therefore required. The issue is that if a State's grants are affected by its own decisions, then its incentives are distorted, with potentially undesirable consequences. 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. A State taking a decision about a hospital would require only that the social benefits exceed the low effective cost of the hospital, so that hospitals with quite low benefits would proceed. The social cost of the hospital would be far higher than the effective cost to the State that built it, and it is likely that we would see hospitals built for which social costs exceeded social benefits.

In contrast, a grant that is conditioned on circumstances beyond a State's control avoids these unwelcome incentive effects. If we know, for example, that one State has gold deposits with a net value of \$1 billion while another State has none, then we can make an adjustment to the grants that effectively shares the \$1 billion equally between the two States and thus removes differences in fiscal capacity. The gold owning State's decisions are not distorted because the grant decision is independent of what it chooses to do with its gold deposit. And there is nothing that the State without gold can do to affect its grant.

A grant distribution that makes each State's grant invariant to its own choices is said in the economics literature to be "lump sum". A number of lump sum distributions exist. A distribution conditioned on unavoidable differences in State characteristics is lump sum. So too is an equal per capita distribution, at least if we leave aside State influences on population levels. Another lump sum distribution is the one that is reached by adopting the current relativities for ever, without the prospect of adjustment in light of changing State circumstances. These distributions are equally good in terms of avoiding distortions to States' decisions, but they will probably not be regarded as equally good on other criteria.

#### Summary

Horizontal fiscal equalisation is an important adjunct to a decentralised system of government. Although it is true that equalisation is "zero sum" on a grant pool, a well-designed equalisation scheme is positive sum on efficiency and horizontal equity objectives. If poorly designed, it can produce adverse consequences, particularly in the form of distorted State decisions. But if designed and implemented well, it has the capacity to remove horizontal inequities and location inefficiencies.

Here I leave aside the case of conditional grants, which have the purpose of changing State decisions

## B. Response to issues raised by Productivity Commission

1. How does the current HFE system impact the Australian community, economy and State and Territory governments?

The primary aim of HFE is to ensure that each State can provide services to the average standard of the States if it makes a States-average level of effort to raise revenue. In its 2015 Update the CGC expresses the objective in the following way:

State governments should receive funding from the pool of goods and services tax 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. [Commonwealth Grants Commission 2015, Report on GST Revenue Sharing Relativities, 2015 Review. Volume 1 – Main Report. P.2.]

There is no independent benchmark from which to assess the Commission's success in pursuing this goal. However, the Commission's methods have been refined over many years, on the basis of extensive consultations, and there is no doubt that its assessments have the effect of reducing differences in the fiscal capacities of States.

While HFE operates through State Governments, it should ultimately be evaluated for its effects on the people that make up the Australian community. The community of each State is affected by the fiscal capacity of its State Government. It is also affected by the extent to which that Government uses its resources efficiently and equitably. And it is affected by the impacts of the equalisation system on resource allocation across the Australian States.

The primary consequence of HFE is to narrow the differences between States in the service levels that they provide and the revenue raising policies that they impose. Differences still exist, but they would be greater in the absence of fiscal equalisation.

HFE leads to a greater extent of horizontal equity in Australia but has only marginal impacts on vertical equity. Horizontal equity relates to the like treatment of like individuals across jurisdictions. HFE contributes to horizontal equity because it means that individuals will not face differences in service levels and tax rates resulting from interstate variations in mineral deposits and associated royalties of interstate variations in populations that are costly to service. HFE probably has only a marginal (positive) impact on diminishing vertical inequality. State budgets have a significant redistributive impact but this would still be true in the absence of HFE, and there is no reason to believe that the existence of HFE impacts on the extent of redistribution within a State. Fiscal equalisation may marginally reduce inequality because it will typically shift resources towards States in which the poor are over-represented and away from States in which the rich are over-represented.

A second consequence of HFE is that it impacts on the achievement of efficiency in the Australian economy. It has potential efficiency impacts in terms of location and in terms of State policy choices. These efficiency issues are addressed below.

Finally, HFE has largely brought to an end a culture in which grants to the States were subject to extensive backroom lobbying and sweetheart deals between the Commonwealth and favoured States. Grant distributions are now based on careful assessments of fiscal capacities and needs, made after extensive consultations with the States and Territories.

a) Is the current HFE system getting in the way of States pursuing higher economic growth and productivity, and at the expense of higher national prosperity? If so, how?

No. It is an inherent weakness of a federal system that the pursuit of parochial objectives by States may lead to outcomes different from what is desired in the national interest. This should not be laid at the door of HFE. 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.

One of the limitations of a decentralised system of government, with or without HFE, is that State governments will tend to base their decisions on the balance of costs and benefits within their boundaries and without regard to consequences beyond their boundaries. This can lead to policy choices that are suboptimal from a national perspective.

The narrow perspective of States may either depress or inflate their efforts to achieve prosperity. A State that considers its school education system as an investment in future income levels for its community will rationally discount the benefits to allow for the fact that some students will live elsewhere later in their lives. This dynamic leads in principle to an under-investment in schooling. Another State might turn a blind eye to illegal extractions of water for in-State irrigation activity but to the detriment of activity in downstream States. This will subvert a market mechanism which leads water to be allocated to its highest valued uses across the nation, with a depressing effect on national productivity. In this example, the State excessively pursues its own growth to the detriment of the nation as a whole. For practical policy development one needs to make judgments about the scale of these impacts.

In my view it is mistaken to believe that States are insufficiently motivated, from a national perspective, to pursue growth and productivity improvements. I will suppose that the national objective policy is to maximise some holistic measure of per capita wellbeing. This holistic measure would need to take into account community valuations over aspects of life other than households' own direct consumption—for instance values placed on environmental preservation, safety, avoidance of poverty, and so on. These valuations might be high, or they might be low, but they are in the scope of the societal objective. I will describe the national objective as the maximisation of per capita consumption, understood in this broad sense.

If each State also sought to maximise per capita consumption, but taking into account only its own residents, what would the consequences be? For those State decisions that have no related "externalities"—impacts on residents of other States—we would expect each State to adopt the policy setting that maximises its own per capita consumption. And in the absence of externalities this would be the policy choice that also maximises national per capita consumption. For those decisions with net positive externalities we could expect self-interested States to stop short of the effort levels that would be optimal from a national perspective. And for decisions with negative externalities we could expect them to make efforts that go too far from the national perspective.

Distortions of this type exist with or without HFE. They are best remedied by central interventions that remove the distortion. The Commonwealth can pay for certain activities or it can subsidise State expenditures—"matching grants" in areas of concern. It can also offer "incentive payments" that are contingent on certain State behaviours, such as steps to implement nationally desirable reforms. But they are unlikely to be either remedied or exacerbated by implementing or abolishing horizontal fiscal equalisation.

The impacts of HFE on incentives to pursue measures that support growth/productivity/ prosperity at the national level are potentially negative but small in degree. This will be true if efforts to boost growth/productivity involve costs that are in their entirety borne locally while part of the benefit is enjoyed nationally. The reason that the impact will be small is that the impact on a State's "retention rate" is likely to be small—see Box 1. (It is assumed here that each State is motivated by the welfare of its residents and that it has no intrinsic interest in the welfare of non-residents.)

The residents of a State are unlikely to be very receptive to a State Government that argues "it may look like we've just wasted \$100 million but actually we've only wasted \$95 million because we'll get \$5 million of it back in extra grants".

## Box 1: Impact of horizontal fiscal equalisation on a State's retention rate

Suppose a State had it in its power to implement a policy that would boost real incomes in its jurisdiction by 1 per cent and that this boosted Commonwealth and State tax bases by 1 per cent. Then if the income gain were realised and flowed into taxes at economy-wide average rates, about 4 per cent would flow to the State, 22 per cent would flow to the Commonwealth and 74 per cent would stay in the within-State private sector. Suppose that the State fully internalises the interest of the in-State private sector and its own fiscal gains (in right of the private sector). In the absence of HFE, the State community would internalise 78 per cent of the income gain. With fiscal equalisation it would retain 74 per cent of the income gain.

In this scenario the State's "retention rate"—the proportion of the income gain kept by State residents—is only marginally reduced by the operation of HFE. We would expect only a small diminution of activities to boost real incomes. Only initiatives that had a cost in the range 0.74 to 0.78 per cent of income would be displaced.

We have discussed State behaviour when States seek to maximise per capita consumption. But what if they try to maximise aggregate consumption? This corresponds to the situation when States seek population and job growth quite apart from growth in per capita incomes. In this case States are willing to accept some diminution of per capita incomes in return for a larger population. If States behave in this way, they will tend to pursue growth to excess. The national population is given, so one States' population gains come only at the expense of another States' losses, and each State accepts lower per capita consumption to get a larger

population. The end result of the dynamic is per capita consumption at the national level is reduced. In the jargon, the "Nash equilibrium" involves the States excessively pursuing growth. My impression is that States are to some extent motivated by considerations of aggregate economic size as distinct from maximising per capita living standards. Of course this dynamic is quite distinct from HFE, and exists with or without HFE.

b) What evidence is available on whether and how the current HFE system affects the movement of labour and capital across State borders, particularly if a region is experiencing high labour demand?

See Independent Economics (2012) for empirical analysis relating to the mobility effects of HFE. The results therein suggest that HFE produces welfare gains over a "modified equal per capita" distribution, but that the gains are quite small: \$295 million on a 2009-10 economic base, or about ¼ per cent of GDP. However, the population impacts that lie behind this are quite pronounced. Under the modified equal per capita distribution, Western Australia's population would be 6.5 per cent larger and Queensland's would be 1.3 per cent larger. The other States would have reduced populations as follows: Northern Territory 10.6 percent, Tasmania 6.1 per cent, South Australia 3.4 per cent, Australian Capital Territory 1.7 per cent, Victoria 1.2 per cent and New South Wales 0.4 per cent.

HFE supports efficient location decisions in general, and this is true under circumstances of high labour demand in a few regions. Relocating from one State to another has costs for those who relocate and it is efficient to take these costs into account. Where there are many projects in a region of high demand seeking extra labour, allowing wages to rise serves a number of useful allocative roles. First, it ensures that the most valuable projects in the region proceed while the less valuable are shelved. Secondly, the only projects shelved are those that cannot cover their costs. These costs include the need to compensate labour that is required to relocate. 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.

c) Does the current HFE system create perverse incentives or unintended consequences for reform at the State level? What evidence is there on how these incentives affect State policies and ultimately outcomes for the Australian community?

See discussion under (a). In principle HFE could diminish returns to a State from carrying out reform. This would be true if the gains from reform are equalised away while the costs of the reform are not.

There is no evidence to suggest that HFE has had material adverse impacts on State reform efforts. It should be noted that this is by design—the Grants Commission goes to lengths to uphold the principle of "policy neutrality" in its assessments.

If the Commonwealth believes that State reform efforts are different from what they should be, the "first best" approach is to target them with measures such as tied grants, matching grants and incentive payments. Mechanisms of this type have been used in the past in Australia—for instance National Competition Payments for pro-competitive reforms in the 1990s, Intergovernmental Agreements around the introduction of GST which provided for abolition of specified State taxes. Tinkering with HFE is an indirect, "second best" approach.

d) Does the current HFE system influence State policies to facilitate, restrict or tax the development of economic activity, and in particular energy and mineral resources?

See (a). Although HFE generally has only a small impact on retention rates there may be some activities where the impacts are larger. This is true in respect of mineral resources for Western Australia.

Mining revenues are unusual among the categories in the States' budgets in the extent to which one State—Western Australia—is dominant. In the four years leading up to 2015-16 Western Australia accounted for more than half of the all-States total mining revenues. For every other category New South Wales has the largest share of the all States total, typically with about one-third but as much as 40 per cent in the case of stamp duties.

In a hypothetical world where all States were small, the only grant design inefficiencies to worry about would be effects on the State-level bases that determine grants. For instance, if a State had discretion over whether to permit mineral deposits or not, with the deposits developed then forming a basis for assessment, we might worry whether HFE affected States' development decisions. If the fiscal benefits of development—mining royalties—were equalised while the fiscal costs of development—State initiatives to support development such as infrastructure provision, exploration databases and support—were not equalised then there would be an induced tendency for States' to underinvest in mining development. And these concerns would not arise in a world without HFE.

In a world with large States, there is a further issue in that a large State has the capacity to affect the national average level of effort or service that is measured in a category. For example, if Western Australia raises its iron ore royalty rate, it knows that the national average royalty rate will increase, and because it has above average capacity its GST requirement will then be reduced. In contrast, if it raised its insurance taxes, there would be a small upward impact on the average tax rate, but because Western Australia has below average capacity to raise insurance taxes its GST requirement would then increase. In the absence of HFE, an optimal tax mix could be chosen taking into account the marginal cost of funds from mining royalties and insurance taxes. With the introduction of GST, the States' revenue decisions would be distorted away from mining royalties and towards insurance taxes.

These two influences are both instances of "grant design inefficiency". Distortions to decisions about whether to develop or not would be removed if the assessment base for mining royalties were based on a factor independent of State decisions. And distortions to the tax mix would disappear if a State had no influence on the average tax rate—as would be approximately the case for a "small" State.

The construction of an equalisation scheme that recognises States' necessary costs of promoting development requires the use of broad judgment and one can therefore argue about whether "enough" allowance is made (or whether "too much" is allowed). But what is indisputable is that a mining boom on an unprecedented scale has occurred in Western Australia over the past 10-15 years. If grant design inefficiencies exist, it is possible that the boom would have been more pronounced, but certainly mining investment levels in Australia do not give any indication that HFE has got in the way of development.

e) How does the current CGC relativity process affect States' fiscal management from year to year and over time? How does this affect policy outcomes and economic activity in each State?

The current grant distribution is lagged rather than fully contemporaneous. This is because the current-year GST pool is distributed using estimates of current population combined with an average of relativities (fiscal capacity measures) for budgets 2, 3 and 4 years previously. Thus lagged relativities are used to distribute a contemporary GST pool. So long as the relativities are mean-stationary, equalisation is achieved over the long run although it may not occur within a particular budget year. In some years a State gets more than is required for equalisation and in some years it gets less and discrepancies offset each other in the long run. If relativities are not mean stationary—i.e. if they are trending—then rather than having actual distributions average out over the long run we will have some States perpetually left short of equalisation and others perpetually overequalised. There is some evidence that there is trending in the relativities, but the associated departure from full equalisation is probably small.

Because equalisation is achieved over a run of years, it should in principle be possible for a State to operate at average revenue and expenditure policies and "bank" the surplus from an overly generous distribution within an application year or "borrow" a deficit. The amount that had been banked could then be drawn against later on, in a year when the distribution was lower than warranted on the basis of contemporary circumstances, so that the State could continue to operate with average revenue and expenditure policies.

There is some question as to whether State Governments are capable of taking this "long view" in their budgeting. Government inevitably involves negotiation and compromise between political players, and it may be difficult to resist pressures for expanded spending or tax cuts when headline measures of the budget position show it to be strongly in surplus. The Western Australian experience during this decade is a case in point—the fall in its GST relativities to temporary lows around 0.300 could have been anticipated and provisioned for but this did not happen.

It should also be noted that HFE actually protects States from some of the volatility inherent in their own budgets. No State can escape the fiscal consequences of a collective downturn in the Australian States' fiscal position. But HFE protects a State from isolated variations in its own fiscal position at the cost of some exposure to variations in the States' collective fiscal position. HFE is a risk pooling mechanism and can be seen as providing "insurance" for State budgets.

- 2. What preferable alternatives are there to the current HFE system (as adopted by the CGC in its calculation of GST relativities) of equalising States' fiscal capacities?
- a) What should be the objective of HFE?

The objective of HFE should be to enable each State to provide a broadly similar level of support to individuals of a particular type while imposing broadly similar levels of taxation on them. This needs to be done in a way that maintains incentives for States to choose efficient policy settings having in mind the preferences of their

residents. Residents preferences will encompass both their own market consumption opportunities and also broader factors such as environmental quality, public safety and equity.

Australia's population is highly diverse in its personal characteristics. Some individuals are relatively disadvantaged and considerations of equity require that they receive support from State budgets in excess of their contributions to the State budget. Other individuals are relatively advantaged and make contributions to State budgets in excess of the costs that they impose. State budgets implement a substantial amount of interpersonal redistribution.

Because of the interpersonal redistribution that is intrinsic to State budgets, States with a high prevalence of disadvantaged community members will have diminished fiscal capacity while States with a high prevalence of the advantaged community members will have enhanced fiscal capacity. If States are to have similar capacity in respect of particular types of individuals, HFE transfers will be needed to offset underlying differences in budget capacity.

There is also a need to maintain discipline on States to operate efficiently. For this reason States cannot be given a "soft budget constraint" that simply compensates them for poor fiscal management. Instead, they should be compensated for unavoidable differences in their fiscal capacities. Where a State's fiscal capacity is undermined by its own choices it should not be compensated for the consequent weakness. The reason for maintaining States' accountability for past policy decisions is that they will be held accountable for their future decisions. That is the compelling reason for not excusing them for the consequences of poor past decisions.

It is important to acknowledge that what looks like a bad decision today may not have looked like a bad decision at some time in the past. Some rural communities that today are fiscally burdensome were in the past promoted as a matter of policy—e.g. soldier settlement schemes. Moreover, some State policy positions are adopted with the strong encouragement of the Commonwealth—e.g. establishment of domestic manufacturing capability post WWII. Should States be considered responsible for the patterns of activity that resulted? Especially when their loss of viability is a consequence of Commonwealth decisions such as tariff cuts?

Accountability is an essential check on the choices of governments. The primary accountability mechanism for State governments in a federal system is the ballot box. States are accountable to their electorates for every dollar that they spend. At the margin, every dollar spent in one area requires a dollar of tax effort or a dollar of foregone spending elsewhere in the budget. This is not to rule out that in some areas of operation there may also be a case for accountabilities to the national government. But it is important to keep in mind that State governments are not administrative agencies of the Commonwealth whose only accountability is through the Commonwealth Parliament.

I can see no reason to exclude either structural of cyclical factors from consideration of State fiscal capacities. Moreover, the separation of structural and cyclical factors would be a challenging task, especially on a contemporary basis. Nor do I see a case for partial HFE.

b) What are some alternatives to the current system and how would they affect States' incentives to pursue higher prosperity? How would the alternatives perform, relative to the current system, in terms of efficiency, equity and simplicity, and ultimately which approach is best for national productivity and wellbeing?

### Grant design efficiency

In this submission I have emphasised the goals of efficiency and interpersonal equity. The current system produces desirable results in respect of locational efficiency and interpersonal equity. There is a potential for some distortion to State decisions although on the available evidence the extent of it is minimal.

The tone of the Commission's detailed questions indicates a substantial degree of concern about potential distortions to States' decisions by the HFE system. I am unconvinced that there is a substantial problem in this regard, but I will suggest potential remedies for it.

Distortions to a State's decisions can be avoided absolutely by using a grant distribution that is invariant to any individual State's actions. In broad terms, the following schemes all would meet that criterion:

- Option A: equal per capita shares of the grant pool—i.e. a relativity of 1.0—in all future years;
- Option B: an average of the last few years of relativity-adjusted per capita grants to be applied to all future years—see Table 1; and
- Option C: a scheme that modifies States' shares in light of evolving fiscal drivers but excludes any indicators affected by States' decisions.

Table 1: Long average of historical relativities for future application

NSW	Vic	Qld	WA	SA	Tas	ACT	NT
0.942	0.911	1.056	0.465	1.326	1.681	1.172	5.306

Option A and Option B are equally good in terms of grant design efficiency, so the choice between them comes down to other criteria. Option B is superior to Option A on grounds of both location efficiency and horizontal equity. If a relativity is to be locked in, the harms to location efficiency and horizontal equity will be minimised by making the best possible prediction of equalising relativities in the future. There is considerable momentum in relativities, and an average of historical relativities will be a better predictor than a relativity of 1.0—better in the sense that we can expect the prediction errors to be smaller. There is no difference in the administrative costs of the two schemes.

But would there be general acceptance of Option B over the status quo of HFE as currently implemented? My guess is that there would not be, even among those who have put much weight on grant design inefficiencies in arguing for something like Option A. The point is that most States anticipate that their relative fiscal positions will be broadly sustained into the future. So for a fiscally strong State, Option A is more appealing than the status quo, and for a fiscally weak State it is not. But when the comparison is with Option B, the expected (in the statistical sense) gain from changing from the status quo is roughly zero. But what is different in the comparison of Option B with the status quo is that Option B leaves each State fully exposed to future developments in its fiscal capacity over time: if its fiscal capacity strengthens it gets to keep the gains and if it deteriorates it must live with the loss in capacity. If a State was risk averse, it might want insurance against an uncertain future.

This leads us to Option C, which offers States some limited insurance against that uncertain future. We could take as the starting point the relativities in Option B, but allow them to change over time on the basis of a narrow set of indicators that are clearly uncontaminated by States' decisions. But this would be hard to do. We could, for example, commission surveys of the extent of mineral deposits in States to determine their royalty capacity. But given the inevitable uncertainties in the results it seems unlikely that this approach would be regarded as robust enough for distributing GST. And, to take another example, if we were concerned that observed payrolls were contaminated by policy influences to an unacceptable degree, it is not clear how we could assess capacities to raise payroll tax. We would be left with the historical relativities.

All of this suggests that a compromise on Option C might be warranted, which takes us back to something like HFE as it is presently implemented. Rather than insisting on indicators that are absolutely beyond contamination by State behaviour, we might accept indicators that are largely uncontaminated. We might, for instance, conclude that the prospects of a State suppressing wages so as to increase its grant are sufficiently low that the problem need not really be addressed. And in that case we would use observed wage levels as an indicator of capacity to pay—as is the practice now. We accept the potential for some limited feedback onto State policies as the price of achieving HFE more effectively.

It follows form this line of thinking that I do not believe that any of the fundamentally different alternatives to the current arrangement are superior. The difficulty with a fiscal equalisation model that seeks to immunise the grant distribution absolutely from State policy action is that it will not produce robust assessments of fiscal capacity. We could implement a model that locks in current levels of fiscal need, and in that way avoids any loss of expected grants for each State. Each State could then enjoy the benefits of being "freed" from any adverse grant design effects but this would come at the cost of a new long term risk exposure. My guess is that if the States were offered that alternative they would prefer instead a model that adapts to their evolving circumstances.

Of course there will from time to time be improvements that will arise, and they can be adopted when their merits are demonstrated. For instance, if it is possible to develop a reliable indicator of untapped onshore petroleum reserves in the States, a revenue capacity assessment can be based on it.

## Pub tests and alternative distributions

Over the last couple of years and more there has been discussion of Western Australia's low GST relativity. In 2015-16 Western Australia's per capita GST grant fell to 30 per cent of the States' average. (The Commonwealth provided it with top-up funding so that it received what it would have had if the 2014-15 relativity had continued to apply.) Western Australia's currently low GST share has been said to be "unfair" and to fail a "pub test".

But while Western Australia's GST share is low, its share of mining royalties is very high, and even further from the average than its GST share—in 2015-16 its mining revenue capacity was 5 times the States' average. It is in fact this anomaly that leads to Western Australia's low GST relativities.

This disparity suggests an alternative approach which would better satisfy the "pub test" objective of relativities not too divergent from 1.000. Mining revenues could be reassigned from the States to the Commonwealth, and the Commonwealth would then combine these revenues with GST payments to form an expanded "GST and mining revenue replacement" pool for distribution to the States. Table 2 shows the relativities that would have applied under this arrangement for 2015-16, and also the relativities that actually were applied. Whereas Western Australia's relativity was 0.300 on the GST pool, it would have been 1.182 on the combined GST and mining revenue replacement pool, meaning that it would actually have received 18 per cent more than per capita. The lowest relativity on the GST and mining revenue replacement pool would be 0.742 in Victoria. It is notable that although the relativities applied would be vastly different under these two models, the after-equalisation fiscal capacities of the States would be the same under each. The changes in relativities are in this sense superficial, but they satisfy the purpose of passing the superficial "pub test".

Table 2: Relativities on alternative distribution pools, 2015-16

Pool	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
GST	0.947	0.893	1.128	0.300	1.359	1.819	1.100	5.571
GST plus mining								
revenue replacement	0.858	0.742	1.128	1.182	1.192	1.539	0.907	4.795

# References

Australian Government (2012), GST Distribution Review. Interim Report.

Harding, Ann, Neil Warren, Gillian Beer, Ben Phillips and Kwabena Osei (2002), "The Distributional Impact of Selected Commonwealth Outlays and Taxes and Alternative Commonwealth Grant Allocation Mechanisms", *Australian Economic Review*, vol. 35 no. 3, pp. 325-334.

Independent Economics (2012), *Horizontal Fiscal Equalisation: Modelling the welfare and efficiency effects.*Report prepared for South Australian Department of Treasury and Finance.