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Chapter Four

The Future of Federal Financial Arrangements in Australia

4.1 Introduction

The previous two Chapters have documented the changes since Federation to Australia's grant sharing arrangements, and the intellectual and political forces behind those changes. Now, at the Centenary of Federation, Australia can reasonably be characterised as a mature federation, in the sense that the rules of the Federation are fairly well established through the emergence of conventions, case law and political balances. However, the wide degree of latitude that the founders of the Federation left to subsequent generations still allows a significant degree of political choice in the detailed implementation of federal arrangements.

The purpose of this chapter is to consider how Australia's federal financial relations might evolve in the future.

Section 4.2 considers issues in the vertical structure of Australia's federal financial arrangements. A particular issue is the dominance of the Commonwealth Government in the taxation field, and associated with that large funding grants to the States to enable the States to fulfil their substantial spending obligations. The reliance of the States on untied Commonwealth grants has been said, in recent Australian debate, to constitute a major structural flaw in the federal financial arrangements. In fact, economic analysis provides little support for that view. A more significant problem is the States' inability *at the margin* to access, and vary effort levels on, broad based taxes. This could be addressed by allowing States access to the personal income tax field.

Section 4.3 reviews the horizontal structure of Australia's fiscal arrangements, and in particular Australia's practice of a fairly comprehensive system of fiscal capacity equalisation. It is found that the economics literature of the past five decades provides a strong case for equalisation. This then raises a question as to whether Australia's system of fiscal capacity equalisation corresponds with the type of equalisation that is supported in the literature, and the answer given is that broadly speaking it does.

4.2 Vertical issues: the allocation of fiscal roles between the Commonwealth and State tiers of government

4.2.1 Introduction

Establishment of a federal system requires some allocation of spending and revenue powers between federal and state governments. There is therefore a debate to be had about where should lie those powers. There is no reason to believe that the outcome reached will be one in which revenue capacities at each level of government will meet the spending needs of each level of government, and in that case a system of intergovernmental grants may be a central feature of the federal financial system. To the extent that grants from one level of government to another are required to offset imbalances in the allocation of spending responsibilities and revenue powers, a situation of 'vertical fiscal imbalance' is said to exist.

Australia's federal financial system exhibits a high degree of 'vertical fiscal imbalance'. For instance James (2000) reports that '... *Australia is characterised by the highest degree of vertical fiscal imbalance of any other federal system*'.

Collins (2000) measures Australia's vertical fiscal imbalance by reference to State own-revenues as a proportion of State own-source expenditures – he reports a ratio of just 58 per cent in 1998-99 (balance would imply a ratio of 100 per cent). Unfortunately data deficiencies render it impractical to replicate this series since Federation. However, Figure 1.2 shows trends in Commonwealth untied recurrent grants (plus specific purpose payments in respect of debt charges) since Federation. It is apparent that, with the introduction of the GST, the level of general revenue grants is at a relatively high historic level, while the High Court's interpretations of the Constitutional preclusion on state excises, and the abolition of some State taxes under the *ANTS* reforms, leave the States with the most limited tax powers since Federation. It seems reasonable to conclude that vertical fiscal imbalance is near to, if not at, an all-time high.

New South Wales Treasury (1997) says of Australia's vertical fiscal imbalance:

> Most commentators see VFI as the root cause of the problems in Commonwealth-State financial relations including duplication/overlap, ineffective service delivery, confused accountability, the growth in specific purpose payments and the dysfunctional interaction between Commonwealth and State Governments.

The next sub-section considers, in conceptual terms, the consequences of an imbalance between spending and revenue powers. It finds that there is little conceptual support and dubious empirical support for the view that vertical fiscal imbalance is a problem. However, problems may arise when states are forced to rely on inefficient tax bases. The sub-section after that considers the implications for Australia's federal system.

4.2.2 Theory

4.2.2.1 Devolution and efficiency

A key feature of a federal system is that there are at least two levels of government. Thus there is a lower tier of governments, with each lower tier government having essentially the same range of powers and responsibilities, but each operating in a distinct geographic area. There is of course some risk of duplication and overlap, both between the lower tier governments themselves and between the lower and higher tier of government. So why not simply have one centralised government and avoid costs of overlap, duplication, etc? Oates (1999) describes the rationale for fiscal devolution in the following terms:

> Decentralised levels of government have their raison d'etre in the provision of goods and services whose consumption is limited to their own jurisdictions. By tailoring outputs of such goods and services to the particular preferences and circumstances of their constituencies, decentralised provision increases economic welfare above that which results from the more uniform levels of such services that are likely under national provision. The basic point here is simply that the efficient level of output of a 'local' public good (i.e. that for which the sum of residents' marginal benefits equals marginal cost) is likely to vary across jurisdictions as a result of both differences in

> preferences and cost differentials. To maximise overall social welfare thus requires that local outputs vary accordingly. (pp.1121-1122)

This argument is widely accepted in principle. Even nations which notionally have unitary systems of government often establish decentralised decision units with democratic input to allow better tailoring of local decisions to local costs and preferences.

Oates' analysis is in the classic public finance tradition, of which Richard Musgrave is a leading proponent (see for instance Musgrave 1959). Musgrave considers public finance questions in terms of three governmental functions – allocative, distributive and stabilising. Allocative functions relate to decisions about what goods and services should be produced; distributive decisions relate to the distribution of resources between people and organisations; and the stabilising role relates to the use of budgetary policy for macroeconomic management purposes. Musgrave argues that sub-national governments have a useful role to play in allocative decisions, but that distributive and stabilising roles will generally be best left to national government.

Oates' argument is couched in terms of efficient decisions about public good provision. It is not couched in terms of income distribution decisions. Nor does it necessarily involve a matching of intra-marginal revenue raising and expenditure responsibilities for each level of government. What it amounts to is an observation that, whatever the resources available to a particular sub-national government, there are decisions about public goods which will be better taken at the sub-national level than by a central planner at the national level (and the argument could extend to some private goods).

The appropriate extent of devolution is an empirical matter, with assessment taking into account that, in some instances, lower levels of government are better at creating value through public spending decisions, while in others economies of scale, the costs of duplication, and externalities mean that better decision making is achieved with a centralised process. In addition, the presence of separate sub-national governments may offer more in terms of policy innovation and experimentation, and this needs to be set against the extra costs associated with multiple governmental units.[90]

A decision about where to locate a school, for instance, might be most appropriately taken at a low tier of government. However, decisions about management of a river catchment are unlikely to be very efficient if made by a number of separate governments with coverage of the same catchment — there are too many externalities. In reality many of the choices to be made are not so clear cut, and there is often heated debate about them. Should education spending be determined on a national basis? Should the national government involve itself in detailed choices about urban renewal at the local level? Although there is a set of underlying conceptual principles, the answers to these questions are inevitably judgemental.

With regard to distributive matters, Musgrave (1989) argues that differentiated distributive schemes from state to state may be tempting in terms of localised choice, but break down in the face of high population mobility, as people move to the state with the best scheme for them. Between nations, barriers to migration avoid this phenomenon. Musgrave notes that

90 To the extent that differentiated state government policies are deemed desirable on grounds of knowledge spillovers, there may be a case for some pooling of the *ex post* deviations from *ex* ante costs and returns, rather than having each separate unit carry its own risks.

migrations between states could be checked by non-fiscal factors (e.g., barriers to migration), but that *'as such restrictions are introduced we leave the spirit of the unitary model and move to the other extreme of non-cooperating sovereign jurisdictions'*. (p. 455)

Pauly (1973) constructs a case for devolution of distributive decisions on the basis that individuals have different preferences for giving via redistributive processes, and that individuals with like redistributive preferences may group together in jurisdictions which best match their distributive preferences.[91] To the extent that redistribution is a 'local' public good – i.e. people care only about the pattern of redistribution in their own jurisdictions – decentralised distributive decisions allow differentiation of distributive schemes in accordance with those local preferences. However, devolved distributive decisions still involve inefficient migrations by recipients of distributive transfers. And, to the extent that the geographic coverage of a jurisdiction varies from the geographic area over which an individual has distributive preferences, another source of inefficient migrations arises.

4.2.2.2 The 'flypaper' effect

Federal systems often involve transfers of funds from one level of government to another, typically from higher to lower levels of government. When funds are transferred on an unconditional basis, they have little or no influence on the price of public and private goods, but have the effect of boosting incomes in the recipient jurisdiction. Theory would suggest that, in the absence of any fiscal illusion or other systemic failure, residents should treat the rise in income via higher grants in the same way as any other increase in income.[92] In fact, there are empirical studies which find the contrary. Rosen (1999) says that:

> A considerable amount of econometric work has been done on the determinants of local public spending ... Contrary to what one might expect, virtually all studies conclude that a dollar received by the community in the form of a grant results in *greater* public spending than a dollar increase in community income. Roughly speaking, the estimates suggest that a dollar received as a grant generates 40 cents of public spending while an additional dollar of private income increases public spending by only 10 cents. (p. 502)

This phenomenon is known as the 'flypaper effect'. A possible explanation is that there is fiscal illusion, in the sense that taxpayers demand less for grant moneys than they do for taxes imposed on them directly. To the extent that this fiscal illusion drives the outcome, a 'flypaper effect' is said to exist. However, there are other explanations for the empirical data.

First, there is a tendency to regard grants from central to regional governments as exogenous, and to consider changes in government spending as a direct consequence. However, given that these grants are (at least if aggregated across regions) funded by corresponding taxes, it may be more realistic to regard them as a product of decisions through the political process

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91 Pauly's work is in the vein of Hochman and Rodgers (1969) who, by introducing the incomes of other individuals to an individual's preference function ('utility interdependence'), introduce the possibility of 'pareto optimal redistribution'. This redistribution could be carried out voluntarily, but because it is a public good (non-rival, non-excludable) under-provision will result. Therefore a case exists for governmental redistribution as a 'public good'. In the absence of distributive elements in the preference function, no redistributive scheme can be pareto superior to another because changed redistributions leave at least one party worse off.

92 Formally, theory would suggest that the income elasticities of private and public goods would be the same regardless of the way in which the rise in income occurs.

reflecting the community's tax/spending choices. Certainly econometric analyses that establish *correlation* do not necessarily establish *causation.*

Secondly, Brennan and Pincus (1996) show that if federal taxes are more efficient than state taxes then a combination of federal taxes and grants may justify state spending programs that are not justified when states must raise their revenue from less efficient tax bases. They conclude that one can find '*... a theoretical flypaper effect that does not rely on distortions in public choice mechanisms ...* ' (p. 244).

Hines and Thaler (1995) also note a range of potential deficiencies in the econometric evaluations, although they conclude that '*... the explanations based on econometric misspecification apply only to certain studies, yet flypaper effects are observed elsewhere*'(p. 222). They suggest that there are individual behavioural phenomena which explain the presence of the flypaper effect – such as loss aversion and lack of fungibility (for instance as is revealed in different household responses to equivalent increases in cash wages and net wealth in superannuation funds). They go on to point out that corporate investment activity has also been linked to internally generated earnings, which is akin to a flypaper effect in the corporate sector – the phenomenon is not unique to the public sector.

In fact the strongest objections to the fiscal illusion, or failed public choice, explanations of a flypaper effect are at a conceptual level. Brennan and Pincus (1998) raise two powerful criticisms.

First, if a deficiency of revenue raising responsibility creates profligacy at the state level, should not the excess of revenue raising responsibility at the federal level have the opposite effect? Large funding transfers from federal to state government can only be explained if voters are free of the sorts of fiscal illusion which are said to lie behind the flypaper effect – otherwise a federal political party could enhance its electoral prospects by reducing transfers.

Secondly, vertical fiscal imbalance means that *on average* states do not raise the full amount of every dollar that they spend. But *at the margin* they must raise their own revenues to fund spending programmes, and as such face a situation in which they must raise every additional dollar that they choose to spend. That is to say, the marginal cost of a dollar of spending is a dollar of revenue effort. So long as states raise some revenues of their own, the incentives facing State decision makers are not obviously distorted by the existence of vertical fiscal imbalance.

In summary, even when flypaper effects can be empirically identified, there are difficulties in determining whether or not their causes are malign (in the sense of a failed public choice mechanism) or not. However, there are strong arguments against their existence, including that the political dimension of marginal funding decisions is that a dollar must be raised for a dollar spent. Therefore the view that a high level of unconditional grants – 'vertical fiscal imbalance' – necessarily causes a failure of public choice mechanisms is difficult to support as a general proposition.

4.2.2.3 Choice of tax instruments

An optimal set of tax instruments for a given revenue yield and distributive outcome will be one which minimises the costs associated with those taxes. These costs include readily apparent elements such as administrative and compliance costs, and induced avoidance costs. They also include less visible deadweight losses associated with distortions to patterns of economic activity, these deadweight losses arising from tax-induced distortions to relative prices.[93]

In fact there is often a reluctance to have simultaneous occupancy of a tax base by different levels of government. As a consequence, one or other level of government may be forced to raise revenue by means of an inferior tax base. The end result will be a sub-optimal set of taxes within a federation.

The problem can be addressed by means of inter-governmental grants, or by simultaneous occupation of efficient tax bases. Dual occupancy of efficient tax bases, with coordinated tax arrangements, is potentially more efficient than having one or both levels of government rely on inefficient tax bases. This is especially so when one allows for the fact that tax bases which at face value are distinct may in fact have a high degree of overlap in reality. Tax bases employed by different levels of government may differ in terms of initial incidence and legal definition, but the differences in terms of ultimate incidence are generally smaller. A tax on financial transactions, for instance, is like a value added tax applied at a differential rate to financial services providers. A payroll tax is like a tax on incomes of employees (but applied in a discriminatory way in the case where a payroll threshold is in place).

4.2.3 Analysis of Australian issues

The level of Commonwealth grants to State governments in Australia is high in comparison to the practice in other federations. This is sometimes interpreted as meaning that Australia has a centralist system, but it is arguable that other factors, such as the allocation of spending powers between national and sub-national governments, are more meaningful. A unitary state, for instance, has no vertical fiscal imbalance but is highly centralised. Australia has a greater degree of fiscal centralisation than some other federations, but is less centralist than unitary states. The degree of fiscal centralisation in Australia, far from being extreme, lies somewhere in the middle of the continuum of possible governmental arrangements.

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93 These distortions relate to 'allocative inefficiencies' which are induced by the tax system. 'Allocative inefficiencies' are inefficiencies which arise when patterns of consumption (and thus production), and choices of input mixes for production, are changed in response to prices which are not reflective of underlying resource costs. Inefficiency arises because the failure of price signals to reflect costs means that consumers' and producers' choices are not based on opportunity costs, and consequently sub-optimal consumption bundles will be chosen by consumers and sub-optimal input mixes will be chosen by producers. For this to happen there must be 'substitutability' between some commodities in the optimal consumption or input bundles, and the greater the degree of substitutability the greater the extent of substitution that occurs and consequently the greater the efficiency loss. Narrow based taxes may induce greater allocative inefficiencies per dollar of revenue because they discriminate between substitutes to a greater extent than broad based taxes. Higher wholesale tax rates for utilities than station wagons, for instance, would cause some substitution of utilities for station wagons, a distortion that does not arise when the two are subject to equal tax rates as under a goods and services tax. (In fact, in the absence of complete coverage of all 'commodities' – including leisure and household non-market production, Ramsay principles would suggest the use of differentiated tax rates according to demand elasticities for different commodities, but this then requires that those elasticities be known. Given the inevitable uncertainties, such an approach would create incentives for rent-seeking behaviour, and this is probably why it is generally avoided in practice.)

Furthermore, the degree of devolution which is implicit in the Australian structure needs to be understood in terms of two different types of grants: specific purpose payments, which involve national level spending decisions financed by national taxes, and general purpose payments which involve state level spending decisions financed by national taxes. General purpose payments clearly have a more decentralist character than do specific purpose payments. Vertical fiscal imbalance may in fact be symptomatic of the devolution of spending decisions to sub-national governments, with the devolution supported by unconditional grants. A policy to reduce vertical fiscal imbalance by centralising spending decisions would have a centralist character, even though it would diminish the imbalance.

Recent reforms to Australia's federal financial structure as a result of the *A New Tax System (ANTS)* package are best understood as incidental outcomes of a reform process which was primarily motivated by the desire to replace a range of 'bad' taxes with a 'good' tax. The reforms were driven primarily by the twin objectives of linking government revenues to a tax base growing in proportion with the economy (rather than shrinking as with the wholesale sales tax) and improving the Australian tax mix (viewed collectively, across governments) in line with 'optimal taxation' considerations. Aside from reductions in income taxes, the goods and services tax (GST) allows for the abolition of wholesale sales tax and reductions in a range of transaction based State taxes, these taxes being arguably more costly than GST in terms of the allocative inefficiencies that they induce. The optimal taxation literature tends to de-emphasise the issue of which level of government imposes taxes, and focuses instead on the relative merits of alternative tax mechanisms. Those taxes which involve least costs in terms of distorted allocative outcomes and compliance costs are then, prima facie, to be preferred. It is thinking along these lines that has led recent fiscal reforms in Australia.[94] Replacement of narrow based taxes with broad based taxes had been recommended by the Asprey Committee as long ago as the 1970s (see Taxation Review Committee 1975).

The *ANTS* reforms increase the degree of vertical fiscal imbalance in Australia. This is because the GST is a Commonwealth tax, notwithstanding attempts by the Commonwealth to represent it as a State tax.[95] A part of its proceeds is used to make grants which replace State taxes, and as such the degree of vertical fiscal imbalance is increased. There is thus an apparent acceptance of a move towards a federation based on centralised tax collections and substantial devolution of spending choices to the States.

Although vertical fiscal imbalance has often been criticised, it has not been demonstrated from a national interest point of view that a pressing problem exists. The States do conduct substantial revenue raising in their own right. This means that although *on average* the States do not raise the full amount of every dollar that they spend, *at the margin* they must raise their own revenues to fund their own discretionary spending programmes. That is to say, the marginal cost of a dollar of spending is a dollar of revenue effort. The incentives facing State

94 Changes to the federal financial arrangements have been given emphasis in ANTS but its arguable that these aspects are more in the nature of 'window dressing', which enabled the Government to sell GST, than a primary objective. Hypothecating the GST to the States, and the Commonwealth's declared policy of requiring unanimous agreement of the Commonwealth and the States for any changes in the GST rate, helped to reassure the electorate that the GST rate would not easily be changed.

95 For instance the decision to exclude it from revenue tables in its 2000-01 Budget – see Covick (2000).

decision makers are not obviously distorted by the existence of vertical fiscal imbalance. If electors believe that a State government has wasteful spending programs, there is always room for another party to campaign on a pledge of reduced spending and State taxes.[96]

The traditional arguments in favour of decentralised government relate to better knowledge of specific local constraints and preferences, and these issues are likely to be most important in government spending decisions on a case by case basis. A state of vertical fiscal imbalance per se does not apparently undermine the decentralised choice and inter-jurisdiction competition benefits of sub-national jurisdictions, while still achieving the benefits of an optimised taxation structure.

Perhaps a more fundamental motivator of criticisms of vertical fiscal imbalance is that it changes the balance of power between the Commonwealth and States. This interpretation is lent support by casual observation: the most vocal critics have been State Governments, while those with the power to rectify the situation – Commonwealth Governments – have elected not to do so.

This is not to say that a lower level of vertical fiscal imbalance is undesirable, only that there is not a compelling case for it.

A more evident problem is the States' continued lack of access to broad tax bases of their own. At present there is a constitutional preclusion to the States imposing consumption taxes, which is unfortunate because consumption taxes are probably at least as good as income taxes for the States to access. But a feasible alternative is to allow States access to income taxes — presumably access to the personal income tax base without capacity to vary the progressivity of the structure. As described in Chapter 3, an initiative along these lines was introduced by the Fraser Government, but in a rather half-hearted way, and it was subsequently repealed by the Hawke Government. Subsequently, upon unanimous representations from the States, Hawke considered reintroducing such an arrangement in the 1991, but was forced to abandon the idea when it became apparent he did not have support for it.

Even with a change of government in 1996, a return of income tax powers to the States has not re-gained impetus. The focus of the Howard Government's reform efforts has been on diminishing the States' reliance on tax bases that arguably are narrow and distorting, with the shortfall made up by Commonwealth grants. However, this process has not been taken as far as it might; if the States were allowed to have some presence in the income tax field – constrained to a common base definition and prevented from interfering with the progressivity of the income tax[97] – they would then be able to substitute income taxes for narrow based taxes and improve the tax mix at a national level. The presence need only be at the margin, and might not involve any large change in the existing statistical indicators of vertical fiscal imbalance.

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96 A possible qualification is that the narrow based nature of State tax bases makes it difficult for the States to reach the same groups of taxpayers as could be reached with changes in broad based taxes such as income tax or GST. However, payroll taxes and motor vehicle taxes still have significant breadth, and might achieve the desired result to a reasonable approximation. To the extent that the qualification does hold, it could be remedied by a State presence *at the margin* in a broad based tax or taxes – it does not require elimination of vertical fiscal imbalance.

97 How this would be done is unresolved. Consideration would need to be given to the potential distributive consequences of State actions in the personal income tax field. Variations in the income tax rate affect high income owners much more than low income earners, while associated variations in spending are probably distributed per capita or even in inverse relation to income. If these impacts were significant, there would be a case for structuring the States' involvement in such a way as to have smaller distributive consequences.

4.2.4 Conclusions

Criticisms are often levelled at Australia's degree of vertical fiscal imbalance (and its primary cause, the centralisation of high quality revenue bases), and the degree of centralisation of governmental functions to the Commonwealth (manifest in the extent of Commonwealth own spending and specific purpose payments).

The recent ANTS reforms amount to centralisation of revenue raising, with that centralisation being justified on the tenets of optimal taxation structure. The scope for further revenue centralisation in Australia is limited, and further centralisation of a structural type is unlikely.[98] On the other hand, there appears to be scope for devolution of revenue raising without introduction of inferior tax mechanisms, for instance by allowing States access to a part of the personal income tax base. But for this to happen, one would need to convince the Commonwealth and the States that it is a desirable change. The advantage for the States is that they could have greater flexibility in their own budget management, and less vulnerability to Commonwealth intervention. Yet this may not be appealing to the Commonwealth, which has actively used State funding as, inter alia, an instrument of fiscal policy. An additional benefit would be the potential to see Australian governments, collectively, use a better tax mix. But without agreement between the Commonwealth and the States, a partial return of income tax powers to the States is highly improbable.

Ultimately the question of what is the most efficient degree of devolution is an empirical one. However, in the absence of much hard empirical evidence, most of the Australian debate relies on assertion. Although there is broad agreement that a federal system is in principle a good thing, there is not much convergence of thought on the appropriate degree of governmental centralisation. The Commonwealth, by virtue of its powers, tends to dominate the outcome. Sceptics attribute this to malign motives, and supporters attribute it to benevolent motives. So it is hard but to remain agnostic on the evils of the current degree of governmental centralisation. Although the Australian arrangements seem centralised when compared to other federations, the same cannot be said in contrast to nations with unitary systems.

4.3 Horizontal issues: the allocation of resources between the States

4.3.1 Introduction

Federal financial relations have important impacts upon the distribution of resources between States. These impacts can occur by means of national level budgetary actions, such as tax and spending decisions, and decisions about grants to state governments. There are also instances outside of Australia of grants between states (for instance in Germany).

The distinguishing feature of Australia's federal financial arrangements is the application of a comprehensive fiscal equalisation process to State budgets. This is done by means of Commonwealth general purpose assistance to the States, which is divided between the States so as to make it possible for each State to provide a like level of services at like level of effort. Federal flexibility is achieved by leaving with the States the discretion to choose whether to provide services and taxes at average levels or whether to vary them.

[98] Statistical indicators may show a further centralisation of revenue raising, as the GST is believed to be a growth tax in the longer term.

This section considers the design principles from the public finance literature for the allocation of resources between States. The conceptual discussion is quite complex, but unavoidably so. It then considers Australia's fiscal equalisation system, its important role as an instrument to equalise budget capacity, and some of the contemporary debate about the role of fiscal equalisation.

4.3.2 Theory

4.3.2.1 The Concept of Net Fiscal Benefits

The impact of the fiscal system upon an individual can be considered in terms of a 'net fiscal benefit', this being the difference between the cost of unrequited benefits provided to the individual by government and the unrequited contributions extracted from the individual. Unrequited benefits include direct cash transfers to individuals and also the cost of services provided by government on a non-recouped basis, such as education, roads and defence. Contributions include taxes levied on the individual (e.g. income tax) and taxes which ultimately are borne by the individual (e.g. excises). Where government creates artificial monopolies, and allows those monopolies to create transfers between individuals and government and between individuals, these transfers should also be included as unrequited contributions and benefits.[99]

Obviously the task of assessing an individual's net fiscal benefit is a substantial one, with significant practical obstacles.

First, the assessment needs to be conducted in terms of the ultimate incidence of fiscal impacts, rather than the legal incidence. The two may be the same in some cases — personal income tax being a possible example. However, there are many instances where they will not be the same: a tax on tobacco retailers largely has its incidence on smokers. In fact, in many instances the incidence will be shared between buyers and producers, who may in turn pass it on to their customers and suppliers.

Secondly, some attribution of the costs associated with public goods needs to made. The desirable attribution scheme is to use the individuals' own valuations, which would need to be measured.

Thirdly, a decision needs to be made in respect of some government services about whether to attribute costs on the basis of the notional cost of fair value insurance premiums or the cost of actual services used. For instance, it would probably be more realistic to allocate costs of a fire service as a fair value premium rather than the costs of actual services rendered in any one year. The fair value stipulation would imply, however, that likely variations in costs relating to 'high risk' and 'low risk' areas would be reflected in the premia entered into the net fiscal benefit calculation.

In fact, the discussion that follows is not primarily concerned with how to quantify net fiscal benefits. Instead, the net fiscal benefit is introduced because it allows an assessment of the redistributive impact of government activity. This in turn allows the use of conceptual models

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99 For example, taxi plate arrangements enforce transfers from users of taxi services to taxi plate owners.

to assess the impact of governmental redistributive activity, via net fiscal benefits, in terms of equity and efficiency.

The discussion maintains generality and realism by considering a world in which the fiscal system is used actively by governments for redistributive objectives. The redistributive content of government policy is captured in the distribution of net fiscal benefits that its policies bring about.

The net fiscal benefit is an important component in a comprehensive – i.e. all-encompassing – measure of individuals' incomes. 'Comprehensive income' consists of private cash income, private non-pecuniary income and net fiscal benefits; the sum of the three can be referred to as 'comprehensive income'. The total of these three components, rather than any one component alone, represents the income constraint on an individual's consumption and lifestyle opportunities and thus plays a key role in determining the individual's well being. Individuals then have choices to make about how they allocate their comprehensive income, and do so to maximise wellbeing according to their own preferences and the trade-offs[100] that are available to them in markets and in their household production functions.

4.3.2.2 The distribution of net fiscal benefits

Distributive outcomes of fiscal decisions

It is readily observed that governments deliberately choose to vary the net fiscal benefit amounts received by different classes of individuals. An obvious example is progressive income tax. There is as well a vast array of other policy choices with redistributive consequences, the pattern of those choices being conditioned by community perceptions of distributive justice. For instance:

- Gambling taxes vary according to how much one spends on gambling. Individuals who gamble more pay higher amounts of tax than individuals who gamble less, and there is no reason to believe that they receive commensurately higher benefits in the form of government expenditures; accordingly the net fiscal benefit amounts of gamblers are potentially lower than the net fiscal benefit amounts of non-gamblers.
- Governments provide schooling services to households with children, but spread the costs across the community: households with children gain a net fiscal benefit while households without children have a negative net fiscal benefit.

The aggregate distributive impact of the fiscal system is thus the cumulative result of a large number of separate revenue and spending policies. Each of these policies has a net fiscal benefit associated with it (which will be zero in the case of the non-affected individual), and in concept these can be summed to produce an aggregate net fiscal benefit for the individual.

100 The terms of the trade-off (the 'relative prices') may – and frequently will – be changed by government policies. For services provided from general revenue, there may be no capacity for an individual to vary consumption. The alteration to the trade-off in this case is of an extreme form, with the price asymmetric around the actual consumption level (zero in one direction, positive or even infinite in the other).

Distributive outcomes in a federation

In an important but often neglected 1952 paper – 'Federalism and Fiscal Equity' – James Buchanan[101] explored the distribution of net fiscal benefits in a federation. Buchanan noted that in a federation there are at least two levels of government, so that the net fiscal benefit[102] to a mobile resource owner comprises a net fiscal benefit from the national government and a net fiscal benefit from the state government of the region that the resource locates in. Where state governments pursue essentially similar distributive policies but have different population structures, then net fiscal benefits will differ from state to state.

A range of other papers produced since then examine the causes and consequences of interstate differences in net fiscal benefits. Flatters, Henderson and Mieszkowski (1974) consider the issue in a Ricardian diminishing marginal returns framework, and a prominent paper by Boadway and Flatters (1982) applies a similar model to a broader range of fiscal effects in a federation. More recent extensions are in Petchey (1995 and 2000) and Bucovetsky (1997). The issue is also summarised in an accessible way in Courchene (1984) and Petchey and Walsh (1993).

A consequence of interstate differences in net fiscal benefits is that even if the national government applies the same national-level net fiscal benefit to a resource owner regardless of where the resource locates, differences in the state-level net fiscal benefit from one jurisdiction to another will have the effect of making net fiscal benefits vary from state to state. (Because jurisdictions tend to have a geographic basis, the net fiscal benefit variations will have a locational basis too.) Although some of these differences might reflect different policy choices at the state level, it also turns out that differences will almost certainly arise even when states pursue essentially the same distributive policies. These accidental differences in net fiscal benefits from state to state may arise for a variety of reasons. The commonly acknowledged possibilities in the literature are:

- differences in demographic structure coupled with state redistributive policies;
- differences in sub-national governments' claims on rents from natural resources and endowments; and
- differences in the cost of public good[103] provision.

Box 4.1 provides an example of each.

A potential conflict arises in a federal system because national and sub-national governments might pursue different distributive policies, and might even expend efforts in counteracting each other's policies. Such a situation, should it arise, would appear to be highly undesirable – especially to the extent that there are costs of operating the distributive systems. However, when different levels of government operate their own redistributive policies in a mutually compatible or even reinforcing way, this conflict need not arise.

101 Buchanan was awarded the Nobel Prize in Economics in 1986 for his pioneering work in the field of public choice.

102 Buchanan emphasised the deficiencies of an analysis which considered only tax impacts without addressing benefits via government expenditure. He used the term 'fiscal residua' but I shall stick with the contemporary usage which is 'net fiscal benefit'.

103 A public good is a good or service which provides to a group of individuals benefits that are non-rival (i.e. consumption of the public good by one individual does not decrease the amount available for another individual to consume) and non-excludable (i.e. once the public good is in existence it is not possible to prevent an individual enjoying the benefits of it).

Box 4.1
Causes of interjurisdictional variations in net fiscal benefits

Differences in demographic structure under redistributive policies
Suppose there are two States, A and B. State A has 1 retiree and 2 workers. State B has 2 retirees and 1 worker. Each worker earns $10, which equals the marginal product of labour — marginal products are equalised across the States. Each State provides residents with $2 in transfer payments. Transfer payments are financed from taxes on workers.

That being so, State A must raise $6 in taxes from 2 workers, implying a tax of $3 per capita, a net fiscal benefit of -$1 and comprehensive income of $9 each. State B must raise $6 in tax from 1 worker, implying a tax of $6 per worker, a net fiscal benefit of -$4 and comprehensive income of $6.

In this scenario there clearly is an incentive for the worker to migrate from State B to State A. However, this arises not because of higher productivity in State A, but from an attempt to avoid the higher fiscal burden in State B. Indeed the worker from State B would accept lower wages and a less productive use in State A. Note that this result does not require that State B pursue more generous social policies than State A.

Differences in State government claims on natural resources and endowments
Consider again a simple model with two States A and B. Assume as well that each State has mineral resources yielding $6 per annum in government revenues which is distributed to citizens on a per capita basis; there is no redistribution between citizens. State A has 2 workers earning $10. So, too, does State B. The per capita net fiscal benefit in each State is $3 and per capita comprehensive income is $13. The fiscal system is neutral on location decisions.

Now there is a major oil discovery in State A worth $6 per annum in resource rent payments to the government of A, which is developed on a fly-in fly-out basis so that there is no change in the locations of residence of workers. Workers in State A now have a net fiscal benefit of $6, which is $3 higher than the net fiscal benefit in State B.

Consequently there is an incentive to migrate from State B to State A even if, in doing so, the productivity of the migrating worker falls.

Differences in the cost of public good provision
Continue again with a two State world. At the outset State A has 4 workers and State B has just 2. Workers earn $10 each so that marginal products of labour are equalised.

Now, due to a technological innovation, it becomes justifiable for government to produce a public good in both States. Suppose that governments in A and B each provide a pure local public good — a weather forecasting service, for instance — which costs $2 to provide. To finance this, taxes are set at $0.50 in State A and at $1 in State B, while benefits are the same per capita at $2 in each State. Then workers in State A enjoy a net fiscal benefit of $1.50, while workers in State B enjoy a net fiscal benefit of $1.

Again, there is an incentive to migrate from State B to State A. But even if a worker leaves State B for State A to accept a lower productivity deployment, there is no offsetting saving in the costs of public good provision. The migration decision is inefficient.

The role of fiscal equalisation

Buchanan went on to consider the possibility of action to offset these accidental variations in net fiscal benefits. The most direct approach would be to conduct interpersonal equalisation, via a system of per capita national-level taxes and transfer payments operated at the personal level on a discriminatory basis from state to state. However, there often will be practical, political, legal and constitutional issues which render impracticable this approach.

An alternative is to have equalising payments to state governments, which receive or pay funds on behalf of their residents. In terms of its distributive impact, this alternative can produce an identical result to interpersonal equalisation, so long as the state governments distribute receipts and the burdens of payment accordingly. If they do not distribute receipts and imposts accordingly, the interpersonal equalisation objective will not be achieved.

Where a national level government makes grants to states, the national level government might actually embed the equalisation payments in its grants to state governments, avoiding the need for explicit transfers from one state to another.

As a practical matter, it should be noted that inter-governmental equalisation by itself might require payments to or by states. There would be payments to those states with below average fiscal capacity and payments from those states with above average fiscal capacity. However, if the national government provides operating grants to all governments quite apart from any equalisation adjustments, then any required payments from states can be netted off those grant amounts and payments to states added on to grants. So long as the intended grant amount for a state is at least as large as the equalisation payment required from it, there is no requirement for actual payments from one state to another; the equalisation scheme is embedded in the grants from the national government.

In addition, it is quite feasible that a set of equalisation transfers would include transfers to a jurisdiction with high private incomes — for instance if it had low levels of natural resources or had a relatively small population base across which to spread the costs of public goods. It is also quite feasible that equalisation payments would be required to a state with a strong growth rate. In fact the direction of necessary equalising payments cannot reliably be inferred from broad indicators such as average private income or growth rates, as other factors matter too.

Equalisation of this type is of a neutralising character. It makes it possible for like individuals to enjoy like fiscal treatment in the different states of a federation.

4.3.2.3 Equity

Horizontal and vertical equity

Before considering the equity implications of a federal structure it is worth reviewing a useful analytical framework. Economists tend to think of two types of equity — horizontal equity and vertical equity. 'Horizontal equity' pertains to the equal treatment of like individuals. 'Vertical equity' pertains to differential treatment of identifiably different individuals.

There is a major and long established body of work in the economics and philosophy literatures based on the comparison of and aggregation of individual utilities – the so-called 'utilitarian' view. This work is the product of a search for, inter alia, empirical foundations to guide distributive questions. If it could be implemented, the utilitarian calculus would allow an empirical determination of distributive equity. However, the utilitarian approach is in fact impossible to implement in any rigorous way because of the impossibility of objectively measuring and comparing individual utilities.

A more tractable approach is to regard matters of distributive equity as subject to individuals' preferences, rather than amenable to scientific measurement. It is then a matter for individual judgement just what constitutes an equitable fiscal system, and it is certainly the case that different individuals will have different views. There is, therefore, no fiscal system which can meet every citizen's view of equity. However, by means of the political process, some or other system of equity principles – horizontal and vertical – will be embodied in the fiscal system.

In practical operation, the application of equity concepts in fiscal systems relies largely on the use of observable information regarding people's circumstances, and equity adjustments are typically applied in a layer by layer process. Liability for income tax is determined according to a measure of income, and horizontal equity is achieved by even application of the tax to individuals with like income circumstances. Liability for consumption taxes depends upon consumption patterns, and people with like consumption patterns are subject to the same tax burdens. Eligibility for social security transfers is determined according to factors such as income and numbers of dependents. Treatment in the public health system is provided on a non-charged basis, and this implies that the fair value insurance premia for those services are met from the fiscal system; as a consequence, the notional fiscal contribution to payments varies according to people's risk characteristics. All of these elements of the fiscal system combine to implement a complex set of equity criteria.

If the fiscal system is constrained to balance, in the sense that the sum of net fiscal benefits across all individuals and fiscal instruments is constrained to be zero (or something else) then it follows that one net fiscal benefit amount cannot be set independently, in that it needs to perform the balancing role. If there is a requirement of horizontal equity, which requires that fiscal instruments treat like individuals equally, then one fiscal instrument is constrained, in the sense that it needs to be set in such a way as to meet the fiscal balance requirement.

As was illustrated previously (see Box 4.1), there is no reason to believe that like individuals who reside in different jurisdictions in a federation will, in the absence of equalisation, receive like distributive outcomes from the fiscal system. Consequently, there is no reason to believe that horizontal equity will prevail across jurisdictions in a federation.

Narrow-based and broad-based horizontal equity

Application of the concept of fiscal equity in a federation requires that individuals who are alike in every relevant respect should be treated equally by the tax/transfer system — i.e., that they should receive the same quanta of net fiscal benefits (positive or negative). To do this, it is necessary to identify the set of factors to be used to determine who are or are not 'equals'. To the extent that there is a debate about which factors are admissible, then there will be a divergence of views as to what constitutes horizontal equity.

In the fiscal federalism context, a potentially contentious question arises with respect to jurisdiction of residence: Is it valid to dismiss jurisdiction of residence as a factor in the comparison of individuals? Some would argue not — that in essence individuals who are identical in every respect but resident in different jurisdictions are in fact different. Others would argue that jurisdiction of residence is really no more than an administrative matter, and that equal treatment is an essential federal principle.

If one accepts that jurisdiction of residence is an intrinsic personal attribute that cannot be dismissed — that otherwise identical individuals **are different** because of their jurisdiction — then one might allow individuals to bear the consequences of variations in states' fiscal capacities. The national government would still need to take into account differences in net fiscal benefits for the even application of its own distributive policies. It might, for instance, want to incorporate the state to state variations in net fiscal benefits into income tax assessments, as they are a form of income. Petchey and Walsh (1993) describe an equity objective of this type as 'narrow-based horizontal equity', following a nomenclature that was introduced by Boadway and Flatters.

It is worth clarifying the narrow-based view further. What it would mean, for example, is that if there were a gas discovery in Queensland which increased Queensland Government royalties, then residents of Coolangatta could enjoy a cut in taxes while residents of Tweed Heads could not, in spite of the fact that they form one urban agglomerate. It would also mean that (say) formation of a new State in the New England area by secession from New South Wales would change tax levels in Albury and Tweed Heads but not Wodonga or Coolangatta. Effectively, the redrawing of jurisdictional boundaries far distant would create incentives for people and businesses to change sides of the Coolangatta/Tweed Heads main street.

If, on the other hand, one rejects the idea that jurisdiction of residence ought affect the net fiscal benefits of residents in a federation, then the appropriate national level policy response is to equalise any differences in State level net fiscal benefits. This objective of 'broad-based horizontal equity', as discussed previously, could be achieved via a system of interpersonal transfers or via a system of equalisation payments to States.

An important qualification is that inter-governmental transfers will be effective only so long as States have similar distributive policies. If States pursued different distributive policies, full fiscal equalisation could only ensure that the average horizontal inequity from State to State was zero, and at the individual level, some horizontal inequities would remain. The national level government would need to override those State distributive policies to achieve strict interpersonal equalisation (but it might not be able to do so).

Capitalisation

It is possible that some types of variations in fiscal capacities will have been capitalised into asset values for sufficiently long that they will have been reflected in the purchase prices paid by the current generation of asset owners. Where capitalisation of that type exists, horizontal equity precepts might be interpreted as supporting a maintenance of the status quo. Feldstein (1976) puts this view:

> In practice, tax **changes** are a source of horizontal inequity because individuals make commitments based on the existing tax law. Commitments involving human capital may be irreversible (e.g. education level) or reversible either very slowly or at a substantial loss (e.g. occupation or location). Commitments involving property may be easily reversed but the sale of assets will involve a capital loss. In both cases, individuals who were equally well off before the tax change are not equally well off after the change. (pp.95-96, emphasis added)

The Feldstein view is open to the criticism that it takes as a given that having differential impacts of tax reforms on like individuals is horizontally inequitable. It is a matter of fact that tax reforms may have unequal impacts, but the existence or otherwise of inequity requires an ethical judgement. There is a very wide array of governmental policy positions which are not guaranteed in perpetuity, and individuals can (and do) make their investment decisions (human capital or transferable property) according to their assessments of the prospects of policy changes. When the eventual policy outcomes differentially impact on individuals by virtue of their different portfolio choices, it is not clear that the result is inequitable. It could be argued that they are simply a result of voluntary positions taken in respect to an uncertain future environment. But fundamentally the Feldstein argument seems to rely on the presumption that individuals are entitled to assume that the tax system will remain unchanged in perpetuity. It also raises a question as to whether, if this is true for tax reform, it applies to all other government policy changes with unequal impacts. In fact it is hard to mount the case that there is even an implicit guarantee of no changes to the tax system.

However, leaving aside these concerns, the practical implication of an equity concept along these lines would be that a federation without fiscal equalisation should continue without it. The implication for a federation with fiscal equalisation would be that it should be continued.

Is there a unique set of equalising transfers?

One of the potential causes of interstate horizontal inequity is the operation of within-state redistributive schemes by state governments, and equalising transfers can redress these horizontal inequities. It follows that the set of required equalising transfers depends upon the shape of the within-state redistributive schemes (along with population structures). In the extreme, and ignoring any transfers required on other grounds, if the state governments abandoned any redistribution, the need for equalising grants would fall to zero.

Mieszkowski and Musgrave (1996) present a worked example in which two different sets of equalising payments are implemented. Each set of payments achieves fiscal equalisation, but they have different consequences for within-state redistributive outcomes.

However, it is unsatisfactory to regard the nature of within-state redistributive schemes as a matter of indifference for state governments and simply an accidental outcome – in reality they are politically sensitive. The Mieszkowski and Musgrave result, which achieves equalisation at alternative levels of within-state redistribution, is arithmetically valid but analytically inadequate in that it fails to take into account any subsequent response from state governments to reach an optimal redistributive scheme. It is more satisfactory to conceive of state governments as active in the setting of redistributive outcomes and, to the extent that the structure of equalisation payments interferes with the operation of state redistributive schemes, willing to respond to restore optimal redistributive outcomes.

Inter-government grants and equity

These distributive equity concepts are grounded in comparisons of the circumstances of individuals. The idea of the State in its own right being a candidate for equity is not the focus of argument. And indeed Buchanan (1950) explicitly rejects that approach:

> Equality in terms of States is difficult to comprehend, and it carries with it little ethical force for its policy implementation …

Instead he develops a concept of fiscal equity in a federal system, formulating the concept in the following terms:

> Any discussion of the operations of a fiscal system or systems upon different individuals or families must be centred around some concept of fiscal justice. And although fiscal justice in its all-inclusive sense is illusory and almost purely relevant to the particular social environment considered, there has been contained in all formulations the central tenet of equity in the sense of 'equal treatment for equals' or equal treatment for persons different in no relevant respect. This principle has been so widely recognised that it has not been expressly stated at all times, but rather implicitly assumed. Whether or not this principle is consistent with maximising 'social utility', it is essential as a guide to the operations of a liberal democratic state, stemming from the same base as the principle of the equality of individuals before the law.

4.3.2.4 Efficiency and the allocation of resources between states

Fiscal distortions and the case for equalisation

Fiscal equalisation is the practice of allocating financial resources to sub-national jurisdictions in such a way as to equalise their fiscal capacities. Several contemporary criticisms of fiscal equalisation characterise it as introducing an arbitrary distortion to location decisions, albeit possibly justified on equity grounds. However, this is a gross, and in fact quite mistaken, depiction of the effects of equalisation. A richer, more realistic model is required.

In the absence of fiscal equalisation, there will be differences from state to state in the net fiscal benefits to be received by a mobile resource owner, with these differences being quite separate from the private returns that the resource owner would receive from locating in one state or another. Yet a market based system relies on resource allocation decisions being guided by these market based 'signals'. Unless the invalid signal in the net fiscal benefits is neutralised, choices about which jurisdiction to locate in will be distorted. Fiscal equalisation performs this neutralising role.

Therefore for a federal government seeking to promote efficiency, the appropriate policy will be to offset inter-jurisdiction differences in net fiscal benefits. This will bring about a situation where any particular resource owner faces the same net fiscal benefit regardless of the jurisdiction that they choose to locate in (although different individuals may still receive different net fiscal benefits according to the redistributive objectives of state governments).

There is a line of argument — rather unconvincing — that fiscal distortions from one jurisdiction to another do not matter because they are capitalised into land values. Of course, if one accepted this view it would not rule out an allocation of grants determined by fiscal equalisation principles, but rather would lead to the conclusion that every interstate pattern of grants produced the same efficiency outcome and that it did not matter what allocation was implemented. But this is peripheral; the fundamental question in the current context is not whether there is **any** capitalisation of fiscal distortions, but whether the capitalisation process is such as to completely neutralise any impacts on mobile resources' choices of jurisdiction.[104] If the answer to this question is 'no' — as seems likely in most real world contexts — fiscal distortions do have efficiency consequences (see Appendix 4A for further discussion of distortions to location decisions and capitalisation.)

A solution to distortions induced by redistributive decisions?

It is sometimes argued that equalisation supports jurisdictions with relatively dependent population structures, and therefore (by assumption) encourages individuals to choose dependent status.[105] Fiscal equalisation, so the argument goes, is efficiency enhancing in terms of spreading the burden of dependent groups in a horizontally equitable and efficiency maximising way, but it may be inefficient in terms of creating a climate in which that dependency can grow.

Buchanan (1999) acknowledges this possibility in the Canadian context:

> It seems to me that there is an argument, and there might be an argument in Europe that will be forthcoming that you may want to have a set of equalizing grants in order to accomplish roughly some sort of equalization in fiscal capacities as among regions. Of course, many of my libertarian friends would object very strongly to that, but I think there is an argument against it and an argument for it. One argument against it can be illustrated with the example with Canada. Canada has had a set of these kind of equalizing grants for quite a long time, but the main beneficiaries of those grants have been the maritime provinces. The maritime provinces in Canada have come to be in a dependency status with vis-a-vis the rest of Canada. In a sense, over time that is a major objection to any sort of equalizing grant. Whether or not you want to put the full burden of adjustment on the mobility of your factors in this fiscal arrangement or federal arrangements is, I think, the critical question. (p. 179)[106]

So should governments eschew fiscal equalisation because, by so doing, they attack fiscal dependency? For one to answer in the affirmative, it would seem necessary to be satisfied that:

- states' distributive policies are in fact inefficient, which may be the case to the extent that they cause incidental changes in behaviour; and
- that the trade-off between inefficiency and equity objectives that the states make is inappropriate; but
- for some reason the problem cannot be remedied at source — i.e. by causing the states to abstain from excessive redistributive behaviour (e.g. by conditional grants); and
- that abolishing fiscal equalisation will act as an effective surrogate for direct action to diminish the extent of state government redistributive activity.

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104 Where mobile populations are highly responsive to fiscal signals, then changes in fiscal signals may indeed have a large impact on land rents — i.e., capitalisation may occur to a substantial degree — while still causing significant distortions to jurisdiction choices.

105 This is a persistent theme of submissions from New South Wales and Victoria to various inquiries into fiscal equalisation in Australia.

106 The quote is from a transcript.

On the first count, it clearly is the case that at least some state policies are potentially efficiency reducing, but certainly not all. For instance, subsidies to remote area living may increase the extent of remote area living above the efficient level, and are to that extent efficiency reducing. On the other hand, subsidies to the elderly under long established pay as you go arrangements cannot affect the number of people who are elderly (although interstate policy differences may cause them to migrate from one state to another).

If the existence of some inefficiency is established, one needs to turn to the second matter — whether the policy mix chosen by the states is inappropriate. If it is deemed to be broadly appropriate, then the distributive scheme and its inefficiencies are to be accepted, and fiscal equalisation is simply an adjunct that removes cross-jurisdiction distortions.

On the other hand, if the vertical distribution is regarded as creating excessive inefficiencies, then a mechanism to attenuate the redistributive activity and thus the inefficiencies is desirable. The first-best response will be to override the states' distributions. Abolition of fiscal equalisation is a second-order response, and is inferior at the least because it introduces interstate distortions and at worst because it simply will not work at all. It is an untargeted policy, and introduces across the board migration from fiscally needy to non-needy jurisdictions. The efficiency gains associated with this are dubious. The issue is explored further in Appendix 4B.

Fiscal equalisation and human settlement patterns

Fiscal equalisation is not fundamentally a centralist or a decentralist policy with respect to settlement patterns. Its role is to neutralise accidental fiscal signals which vary according to jurisdiction.

This is not to deny that governments — state or national — may implement other policies to favour or oppose decentralised regional development. If a government felt that there were negative externalities associated with remote area settlement (for instance because the costs of servicing remote area populations are higher than the costs of servicing urban settlements), it could use the tax/transfer system to create incentives for urban settlement and against remote settlement (a centralist policy). Or a government might feel that urban areas suffer significant congestion costs, and choose to implement a decentralist policy.

However, in neither case can the policy be conceived of as a product of equalisation. A policy of population decentralisation can be implemented by governments with or without equalisation between states. Nor is equalisation a vehicle to deliver any particular outcome in terms of centralisation/decentralisation of settlement patterns. In fact, the implications of fiscal equalisation from an efficiency perspective are no more than to neutralise any distortions to decisions about location across jurisdictions. Although fiscal equalisation payments depend upon the structure of the different states, they do not determine the redistributive policies chosen by states.[107]

To illustrate, one can compare the towns of Albury and Wodonga, which form a virtually unified urban centre and certainly are part of a common labour market, but straddle the border between New South Wales and Victoria. New South Wales has more remote communities than does Victoria and a product of this, other things equal and absent fiscal equalisation,

[107] A national government could use a specific purpose payment if it wanted to do this.

would be to force New South Wales to set higher average tax levels or lower average service levels. Residents of Albury would receive lower net fiscal benefits than residents of Wodonga. Fiscal equalisation seeks to prevent differences of this type arising. Although the required equalisation transfers are a product of the average of the States' distributive policies, fiscal equalisation does not determine what those policies are.

Therefore the national interest in fiscal equalisation, in terms of efficiency, arises from the benefits that it brings in terms of allocation of resources across jurisdictions, not from any interest that the national government may have in centralisation or decentralisation of settlement patterns. It is possible that national government has a view about intrastate settlement patterns — either for or against decentralisation — but fiscal equalisation cannot implement it.

Interstate fiscal competition

Tiebout (1956) considered the interaction of sub-national governments and free migration between jurisdictions. He developed a model in which people choose between jurisdictions according to their view of the 'value' that they get from governments in each jurisdiction. To the extent that people's preferences for public goods differ, there would be a tendency for individuals with like preferences to co-locate.

One can extend Tiebout's model to allow for feedbacks on governmental decisions; the threat of migration may act as a discipline on governments pursuing policies that electors do not want.

Fiscal equalisation is not inimical to this form of fiscal discipline; fiscal discipline is maintained so long as States are not compensated for inefficiency in their public spending decisions (inefficiency could include excessive or insufficient production of tax funded goods and services). The implication is that it is quite consistent with fiscal competition to equalise for capacity differences to the extent that they are not a product of policy choices.

Feedbacks on state policies — 'grant design efficiency'

The analysis of efficiency so far has essentially taken State policies as a given. However, it is possible to imagine a system in which a State is able to influence its grants by changing its policies. This would be the case if, for instance, the national level government simply compensated States for any expenditures that they made and for any revenues that they chose not to raise. It could also occur in a system based on assessments of revenue capacity and expenditure needs if a State could influence the assessments by varying its own policies. This might be the case if assessments were based on an average of states' spending policies, and a state had a large weight in the average.

To the extent that states engage in grant seeking behaviour by adjusting policies to maximise grants, 'grant design inefficiency' is said to exist. The scope for behaviour of this type is likely to be greatest for large states (they have more influence on the population weighted benchmarks) and for states whose populations are indifferent to tax and spending decisions by their state government, leaving it free to implement a fiscal structure which is grant maximising.

4.3.2.5 An 'organic' view

Courchene (1984) and Petchey and Walsh (1993) advance a 'federal rationale' for equalisation. Their argument is that, to the extent that discontinuance of equalisation would threaten the smooth operation of the Federation and the benefits arising from it, then the benefits of federation need to be attributed to the equalisation process. Those threats to the operation of the Federation could be of an extreme form — disintegration of the Federation and autarky. Or they could be in the form of some less fundamental threat to the gains from federation, such as inferior policy responses by States under severe fiscal stress (e.g., recourse to inefficient tax bases and beggar thy neighbour policy choices, or a recourse to excessive centralisation of governmental power when it becomes apparent that stressed member States are unable to deliver some minimum services to their populations).[108]

A 'federal' rationale can be contrasted to a 'nationhood' rationale which relates to a concept of some uniform minimum rights across a federation. Courchene (1984) describes it as the idea that:

> [citizens], wherever they live, ought to have access to certain basic economic and social rights — rights that ought to attend ... citizenship. (p.89)

He goes on to make the point that the nationhood rationale lends support to a system of tied grants (as the fiscal transfers are meant to ensure provision of some fundamental services which are regarded as rights of citizens in the federation), whereas the federal rationale leads to provision of untied resources. He notes the presence of this idea in Canada's federalist thought at least as far back as the 1930s, when the Rowell Sirois Commission observed that:

> ... no logical relationship exists between the local income of any province and the constitutional powers and responsibilities of the government of that province. (quoted in Courchene 1984 p. 87)

There are parallels between notions of minimum citizen rights and objectives of interpersonal equity. However, the proponents of federal solidarity argue for something more. Musgrave (1999) says that:

> Proponents of this approach [i.e. an interpersonal foundation as the only legitimate basis for equalisation] also overstate their case by claiming that it offers the only acceptable rationale for grants. Fiscal capacity equalization is rejected as based on an organic view of the state and therefore unacceptable on 'first principle.' Only individuals can have needs, as they argue, and not jurisdictions. This misinterprets fiscal capacity equalization. Needs, to be sure, are experienced by individuals, but — and this is the essence of the federalism problem — they are experienced by individuals in groups, that is, as citizens of particular member jurisdictions. As such, they represent the interests of their group, while as members of the federation they may seek to balance these interests in a federally equitable fashion. Failure to recognize this and the dual role of individuals misses what federalism is about. (Buchanan and Musgrave 1999 p. 169)

108 Such an outcome is tantamount to fiscal equalisation with centralised control over spending decisions — in effect equalisation transfers still take place, but without the advantages of decentralised choices about the types of goods and services to provide and associated Tiebout-type competition.

Petchey and Walsh (1993) put emphasis on the existence of a 'federal compact'. They observe that the literature has traditionally treated a federation as analytically equivalent to a unitary system, modified (by central government) to allow some devolution of decision making. They themselves argue that in fact the character of a federation differs from this, and that the difference is a neglected but relevant factor. The formation of a federation, it is argued, involves a compact conferring certain rights on the sub-national jurisdictions. For instance, there might be an implied right to exist for member states.

Arguments about the existence of a federal compact are probably stronger the more they are grounded in the rights of the individual citizenry. The reality is that citizens of States often do have a sense of local identity and would, without any prior knowledge of future events, support an arrangement which offers some right to continued existence for their jurisdiction under a large range of circumstances.[109] Of course, the participants in the contemporary debate do not start from a position of ignorance about what they will receive under alternative institutional arrangements. It is relatively clear (at least in the medium term) whether a particular State will be a net contributor or recipient from a system of fiscal transfers intended to preserve state viability. This must be an important consideration in any attempt to understand their views on equalisation.

The federal compact has a possible further implication for the choice between 'narrow based' and 'broad based' horizontal equity. If the terms of the federal compact provided for a well-off jurisdiction to reserve some net fiscal benefits for its constituents, then a 'narrow based' equity concept might be accepted. Certainly it is possible to conceive of states agreeing to federate on this basis.

4.3.3 Implications for Australia

4.3.3.1 Description of Australia's fiscal equalisation arrangements

Australia's interstate fiscal equalisation arrangements are conducted on principles of state government capacity equalisation for non-policy differences. The Commonwealth Grants Commission, which recommends equalisation relativities, produces equalisation factors on the basis of detailed assessments of expenditure needs and revenue capacity.[110] For instance, in its *2001 Update* report the Commission describes 'the principle of fiscal 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. (p.3)

And the assessments reject any equalisation of differences that arise from State Government choices — so-called 'policy' factors:

109 The case of local government gives an interesting counter example. Most individuals probably have little sense of tribal loyalty along local government boundaries. Indeed a central issue in many amalgamation debates has been the relative fiscal positions of amalgamating councils — i.e., an argument about the distribution of net fiscal benefits.

110 There is debate at a detailed level about how the assessments are calculated, but the discussion here is confined to the broad design principles of grant arrangements.

> To the extent possible, the assessments are policy neutral — a State's policy decisions do not influence its grant. A common or average State policy on each function is derived from States' actual practices. Policies of an individual State are within the control of its government and are therefore not taken into account in determining its grant. (ibid. pp. 4-5)

Furthermore, the holistic approach to assessments of needs and resources ensures that the equalisation payments encompass virtually the whole range of each State's fiscal needs and resources. When a specific purpose payment diminishes the need for a particular State expenditure, the Grants Commission processes can accommodate this by allowing for the specific purpose payment, and in fact the overwhelming majority of specific purpose payments are treated by 'inclusion'. Thus, although equalisation is delivered by means of general purpose funding, it equalises across the State budget more broadly.

4.3.3.2 Do the Grants Commission's assessments correspond with the type of equalisation supported in the literature?

An important question is whether or not the type of equalisation practised by the Grants Commission is the same as the type of equalisation described in the literature. The answer to this question is 'yes', with one important qualification.

But before turning to that qualification, some clarification is desirable. The two types of equalisation sound rather different. The Grants Commission equalises State governments' fiscal capacities based on assessments of actual State Government revenue and spending policies. The Buchanan-type arguments in the literature, on the other hand, are concerned with equalisation, via State Governments, of net fiscal benefits for like individuals from one jurisdiction to another — a process that would seem to require assessments of individuals. In fact, this distinction is misleading, as the two assessments are different paths to the same end point. Arithmetically they are equivalent. The interested reader is referred to Appendix 4C for further consideration of this.

One important feature of the Australian arrangements is that the comprehensive nature of the budget assessments captures a net fiscal benefit concept in a way that partial equalisation — e.g. revenue only, or limited spending categories — never could. Shah (1994) argues strongly that fiscal equalisation needs to encompass the expenditure side of the budget as well as the revenue side. He says that '*... economic theory suggests that an equalization program should attempt to equalize net fiscal benefits across provinces. A pure revenue equalization system alone is not likely to accomplish such an objective ...*' (p.7). In this sense the Australian system is closer to the theoretic ideal for horizontal funding allocations than any other federation, although presumably no closer than many unitary states which conduct equalisation automatically through the operation of common spending and revenue policies by national government.

The really important distinction between the Grants Commission's equalisation principle and that in the literature is that the Grants Commission effectively excludes net fiscal benefit variations which arise from 'policy' choices by State Governments. This is most important in respect of major past policy choices, whether deliberate or not, with accumulated consequences (e.g. losses made by State financial institutions); to the extent that these vary between States there will be differences in average net fiscal benefits from State to State even after equalisation.

Variations in net fiscal benefits arising from past mistakes and successes are an unavoidable product of the requirement that States live with the consequences of their policy choices. Yet these accumulated fiscal impacts, which are potentially large, are just as distorting to jurisdiction choices as variations from any other source. Allowing historical mistakes to accumulate ad infinitum, as is implied under the policy neutral focus of assessments, can ultimately influence patterns of activity in inefficient ways. Possible solutions to this are:

- to establish financial penalties and rewards for interstate migrants so that their location decisions remain independent of past bad and good policy decisions;
- to set common net wealth benchmarks for each State fisc, and to return to the benchmark immediately any deviation becomes apparent — i.e. immediate privatisation of any unintended outcomes — again so that migration decisions remain independent of those outcomes; or
- ad hoc payments of a 'special assistance' nature from the Commonwealth.

The first of these is probably barred under the Constitution, and is certainly politically and administratively difficult. The second also has political and administrative obstacles, although on a lesser scale.[111] The third has the advantage of being feasible, but is to a significant degree undesirable because of the risks that it poses to sound administration by the States. The practice of the Commonwealth seems to be to give a limited degree of assistance in respect of large 'policy' mistakes. However, the approach certainly is not systematic.

The end result of the 'non-policy' equalisation payments is a system in which State Governments do have varying fiscal capacities, stemming from past policy mistakes and successes, but with variations stemming from non-controllable factors equalised away. There are corresponding variations in net fiscal benefits at the personal level from State to State, with consequences for the efficiency of jurisdiction choices and interpersonal equity.

4.3.3.3 Variations in State distributive policies

Buchanan's arguments support a system of equalisation payments at the governmental level, but with an ultimate objective of interpersonal equalisation. However, if distributive policies vary from State to State, then inter-governmental equalisation fails to achieve that objective.

Casual observation suggests that the Australian States' distributive policies are broadly similar: all the States to a greater or lesser extent support the aged via health spending and community services, families with children via education services, residents in rural areas via provision of high cost services, small businesses via payroll tax exemptions, etc. Although some States tend to be lower taxing and lower spending than others, the broad trends in terms of distribution probably still stand.

111 The introduction of a State Deficit Levy in Victoria in the first half of the 1990s has some similarities with the second measure.

There are also instances of Commonwealth overrides of State policies in cases where States have indicated an intention to pursue markedly different distributive policies — e.g. in respect of funding of Aboriginal communities and private schools.

4.3.3.4 Is grant design inefficiency present?

It has been argued that the Australian system does create incentives for States to redesign policies so as to maximise grants. Those incentives would lead States to increase taxes on bases where they were deemed to be weak, and to increase service standards above average for those population groups which were over-represented. The argument is an 'in principle' one, and appears to have little practical relevance. It requires that State Governments act as grant maximisers, and be willing to inflict potentially controversial distributive outcomes on their electors to maximise the aggregate grant. Furthermore, a brief empirical analysis of major revenue and expenditure categories does not unearth any significant relationship between revenue capacity and effort, or expenditure needs and level of service. So perhaps it is not surprising that in this regard the Heads of Treasuries Working Party (1994) said that:

> ... the potential of the fiscal equalisation process to create an incentive for a State or Territory to alter its revenue raising and expenditure decisions (grant design efficiency) is difficult to assess and is probably minor ... (Executive Summary)

4.3.3.5 Is fiscal equalisation strictly observed?

The Grants Commission's assessments are of course not the final word on grant allocations, and at times the Commonwealth makes moderate adjustments to the recommended outcomes — for instance at present, with the use of Guaranteed Minimum Amounts in the transition to the *ANTS* reforms.

Other Commonwealth adjustments to the Grants Commission's recommendations could be characterised as deliberate 'forgiveness' to particular States for policy mistakes — for instance a relief payment of about $600 million to South Australia in the early 1990s to assist with sinking the State Bank losses of over $3 billion, and more recently payments of nearly $1 billion per annum to the Victorian public sector in respect of a tax hedge arrangement with Bass Strait energy producers which (in the absence of these compensating transfers) would have proved detrimental to the Victorian energy consumer. Forgiveness of mistakes such as this is quite consistent with fiscal equalisation, although it may be bad for the policy discipline of State governments and electorates.

Other adjustments might reflect a genuine view on the part of the Commonwealth Government that the Grants Commission's assessments are in some detail wrong, but one suspects that this is rarely the case and that a more likely cause is a willingness on the part of the Commonwealth to favour one State or other for reasons that are outside the Terms of Reference of the Grants Commission.

The exclusion of local government budgets from interstate fiscal equalisation arrangements is a clear anomaly in the application of the fiscal equalisation principle. However, the local government budget is small relative to the States' budgets.[112]

4.3.3.6 Are the Grants Commission's recommendations aimed purely at horizontal equity?

In the main, the Grants Commission's equalisation recommendations do not have a vertically redistributive intent. They involve the Commission inferring an average of the States' vertical distributive policies by observation of those policies, and then implementing a horizontally equitable allocation of funds given that average redistributive policy.

The main qualification — in the scheme of things a minor qualification — to this characterisation arises in the context of the Northern Territory. It is difficult to find sub-populations which are 'like' those in the Northern Territory in the other States. Hence the Commission implicitly has to make assumptions about what the States' policies would be if they did have such sub-populations — for instance in the hypothetical case that the Territory were merged with another State. The option of asking the States directly is not feasible, as their answers would be strategically tainted. In effect the Commission is left guessing at a distributive policy to encompass this outlier. It is only in this sense that the Commission enters into the field of judgements about what fiscal treatment particular sub-groups of the community should receive.

It follows that intervention in what the Commission does can only in a very narrow sense affect the degree of distributive activity that the States engage in. The Commonwealth could direct the Commission to change its approach to assessing the Northern Territory, and lower grants to the Territory might induce some movement from the universally high cost Territory locations to lower cost interstate locations. However, for some communities — e.g. remote area Aboriginal communities — the notion that changes to fiscal equalisation would induce people to change from a fiscally dependent remote area lifestyle to a high private income, fiscally self-sufficient, urban lifestyle is clearly far-fetched.

None of the other States is an outlier in the way that the Territory is, and consequently the Grants Commission is able to infer distributive policies by observation of revenue and spending policies; it does not determine the States' own choices about what distributive policies to implement. If the Commonwealth is concerned that the States' redistributive policies entail excessive sacrifices of efficiency, the well-targeted policy response is to override those State distributive decisions — not to curtail fiscal equalisation. To attack the alleged problem by removing or constraining the equalisation arrangements involves the introduction of new inefficiencies which need to be set against any reduction in existing inefficiencies. Similarly, if the States' own redistributive decisions are deemed in some respect to be inadequate — for instance in terms of providing support to rural and regional Australia — intervention in the Commission's capacity/needs assessments is not an effective corrective mechanism. Those vertical distributive decisions are a matter for governments — whether Commonwealth, State or local — and are implemented by tax/transfer decisions within their own jurisdictions, not by fiddling with the interstate allocation of grants.

112 In 1999-2000 net expenses (excluding grants) of the combined State total public sectors totalled $109.2 billion, compared with $14.8 billion for local government (see Australian Bureau of Statistics 2000).

4.3.3.7 Is fiscal equalisation equitable?

Although the Grants Commission's equalisation process is horizontally equalising, this is only so to the extent that there are not entrenched disadvantages or advantages arising from past policy choices. Whether or not it is equitable that State residents bear the consequences of past decisions is not clear cut; the lower the degree of interstate mobility, the more equity there may be in making State residents carry the burden of mistakes.

Furthermore, the question of whether or not inter-jurisdictional horizontal equity matters much in the equity calculus is not one to which there is a scientific answer. Buchanan said that it *'is essential as a guide to the operations of a liberal democratic state, stemming from the same base as the principle of equality of individuals before the law'.* In addition, it is interesting to observe the States' own 'answers' to the question as was revealed in their own policies toward local government before the Commonwealth required them to implement fiscal equalisation. The most vociferous opponents of equalisation in the current climate — New South Wales and Victoria — both opted to have a significant degree of equalisation applied to funds that they passed on from Commonwealth to local governments in their jurisdiction even when they were not compelled to do so.

One set of reforms proposed in recent years involves a move away from the assessment of revenue base capacity to an 'ability to pay' measure such as income tax. For instance Collins (2000) says:

> [The Commission's] concept of fiscal equalisation is more concerned with the revenue-raising capacities of State governments than with the ability of State taxpayers to pay tax. This raises fundamental questions about what should be an objective of fiscal equalisation — inter-state equity among taxpayers or the revenue raising convenience of State governments.
>
> It can surely be strongly argued that inter-State equity between individuals (or at least provision of the ability to achieve such equity) is the fundamental purpose of equalisation. (p.49)

And it is suggested that, instead, global measures may be more appropriate.

Collins's final sentiments actually emphasise the goal of interstate equity between individuals. However, the reform that he proposes — adoption of a 'global measure' is at odds with the equity goal.

To illustrate, consider the hypothetical case of two states with identical 'global' measures of tax capacity (e.g. gross state product or household income). Assume they are also identical in their expenditure needs and set taxes accordingly. Then assume that one state has extensive mineral endowments, and hence access to mining royalties, while the other has small mineral endowments and access to royalties, and both states set royalties at the same rate. If national grants to the two states were made according to global measures then each would receive the same grants, but the mineral rich state could reduce other taxes to lower levels than the mineral poor state. Any given individual would face a lower tax rate in the mineral rich state than in the mineral poor state. This would contradict the principle of interstate equity between individuals, although the global measure would be employed.

In similar vein, and again assuming two states with identical 'global' measures of tax capacity (e.g. gross state product or household income)and expenditure needs, assume that one state has a higher proportion of smokers, and both states set tobacco taxes at the same rate. If national grants to the two states were made according to global measures then each would receive the same grants, but the state with the higher proportion of smokers could reduce other taxes (levied on both smokers and non-smokers) to lower levels than the state with a low proportion of smokers. Any given individual would face a lower tax rate in the 'high smoking' state than in the 'low smoking' state. Again, this would contradict the principle of interstate equity between individuals, although the global measure would be employed.

To the extent that smoking or not smoking is uncorrelated with capacity to pay, then it is the state tax systems which deviate from the capacity to pay principle – not the fiscal equalisation process.

And in fact the examples highlight a more fundamental issue. If one argues that a global measure — such as gross product or household income — is an appropriate measure of capacity to pay at the whole of State level, then should it also not be appropriate at the individual level? Yet State legislatures, by their actions, appear to reject such a simplistic assessment of capacity to pay and choose other benchmarks. A true measure of capacity to pay would need to take into account the implied capacities to pay that lie behind the States' actual revenue policies. Yet this is exactly what the Commission prepares — by considering all the States' revenue policies and underlying bases, it comes up with a measure of capacity to pay which relates to the tax policies actually used by the States. Use of this approach actually improves the degree of, or at least the potential for, interpersonal equity over what could be achieved with a less realistic indicator such as a global measure.

4.3.3.8 The organic rationale in Australian political debate

Organic arguments for equalisation are commonly heard in the Australian debate. The Heads of Treasuries' Working Party (1994) was unable to reach agreement on the efficiency consequences of fiscal equalisation, with the division occurring along State interests lines. In considering the hypothetical case in which fiscal equalisation was *presumed* to be inefficient, it still found organic arguments supportive of equalisation:

> if it is thought that there are efficiency costs associated with fiscal equalisation, there is nevertheless a case for above per capita payments to be continued for South Australia, Tasmania and the Northern Territory, but not for Queensland and Western Australia. This is because the budgetary positions and longer term economic growth prospects of South Australia, Tasmania and the Northern Territory would make it difficult for them to maintain an adequate level of services in the absence of grants of the magnitude currently provided. In addition, the protection of the fiscal interests of the less populous States has always been a feature of the Australian federal system. In contrast, Western Australia and in particular Queensland have been growing strongly in recent years and, given reasonably strong fiscal positions, have reached a level of maturity that does not require assistance beyond an equal per capita distribution of general revenue grants. (p. 33)[113]

113 It is worth noting in this context that, as Table 1.1 shows, the passage of time has now brought this about for Western Australia and has brought Queensland very close to a per capita share. This reflects a narrowing of the differences between them, on the one hand, and New South Wales and Victoria, on the other, over recent years.

The comment is interesting for two messages that it contains — that equalisation is desirable to maintain viability of the States in the Federation, but might be dispensed with once viability is established. This is quite different from the conclusions which arise from considerations of efficiency and equity. However, as was seen in earlier chapters, the goal of viability for all the States has been a fundamental objective of Commonwealth State financial arrangements over the last century.

It is difficult to know what weight to attach to the federation and nationhood principles. They are very much a feature of Australia's federal arrangements, but they are also vague concepts which, it can be argued, are met across a range of grant arrangements. At the end of the day the States matter because of the people that live in them, and if policy keeps them in mind as the ultimate objective, then the federal rights issue resolves to a matter of providing suitable policy instruments to enable States to meet individuals' needs.

It should be noted as well that the federal rationale — financial viability of a State Government — might be achieved under quite adverse circumstances by means of expenditure restraint and revenue effort, with the burden falling on the populace, leading to migration of people and activity from the State.[114] In fact the history of Australia's grant arrangements suggests that there is a common view that outcomes like this should be avoided.

For instance, the Victorian Treasurer, John Brumby, a critic of Australia's current equalisation arrangements, has noted that:

> The Bracks Government is not fundamentally opposed to the principle of the bigger States with deeper economies helping out the smaller States ... it is reasonable to help out jurisdictions such as Tasmania and the Northern Territory with subsidies.[115]

Critics of equalisation have also at times focussed on growth rates from State to State, and have interpreted strong growth as ruling out a need for equalisation. This view appears to reflect, at least partly, the view that each State's role is to try to win a competition with other States to have strongest growth rates. In this view, it matters not how the competition for growth is won.

Yet some differences in regional population growth rates are probably a reflection of population relocations that are driven by patterns of relative advantage in economic and lifestyle opportunities, and shifts like this are generally desirable. Fiscal equalisation removes fiscal distortions from the economic signals that indicate these relative economic and lifestyle opportunities. To argue that fiscal equalisation should be abandoned because it will advantage one State over another in the race for growth is to elevate the growth objective above an objective of population decisions based on underlying economic and lifestyle merits of locations. Growth is important as an indicator of the success of jurisdictions in creating those opportunities, but it is not the ultimate objective itself.

So to take funds away from fast growing States, with negative efficiency and equity consequences, has little to commend it. There is nothing intrinsically desirable about the equalisation of growth rates per se, or about reining back fast growing States. A longer term policy view, which recognises the mobility of most resources in the Australian federation will

114 Arguably this is the approach taken in the United States for instance.
115 Brumby (2001)

give significant weight to efficiency and equity objectives. Equalisation has a continuing place in the set of instruments to achieve those objectives.

4.3.4 Conclusions

There is a strong case for a type of fiscal equalisation on grounds of efficiency and on a broad based view of horizontal equity. This finding is strongly supported in the peer reviewed public finance literature. For instance Boadway and Flatters (1982) conclude their technical analysis of grant distribution in the following terms:

> First, one cannot expect in general that migration decisions taken by individuals in a decentralised federal economy will lead to an efficient allocation of labour over provinces. Not only can the migration process be locally inefficient … it may also be globally inefficient. Second, self-interested provincial governments acting on behalf of their residents have an incentive to take budgetary actions that, from a national point of view, lead to inefficiencies and inequities. Finally, the federal government faced with the inefficiencies and inequities arising out of individual and provincial government behaviour will be justified in using a system of equalisation payments as a policy instrument in the pursuit of nationwide equity and efficiency. (p. 630)

This case has nothing to do with the 'disadvantages of federation' arguments which were around until World War Two; they are now essentially irrelevant to the Australian debate. Although one sometimes sees the suggestion that, because tariff protection has been reduced, the case for transfers to non-manufacturing States is also reduced, the reality is that the Grants Commission set aside that rationale for equalisation at its inception sixty-five years ago; since that time the purpose of equalisation payments has been to equalise fiscal capacities.

And in any case a convincing argument can be put that no State suffers a net disadvantage from federation. While a State might gain some advantages from secession, it is unlikely that those advantages would be sufficient to compensate for the surrender of rights and benefits which are central to the Federation. Clearly, the Commonwealth would act to discourage a secession, but that is not in prospect at present. Instead, some rationale for the determination of funding arrangements other than 'disadvantages of federation' is needed.

The need to distribute funds between the States with a degree of objectivity, and at the same time to maintain the viability of the States, was the impetus for the establishment of the Commonwealth Grants Commission. Although other guiding principles in efficiency and equity have since emerged, concerns about the viability of State governments in their own right are likely to remain important in grant decisions. All the States are here to stay, and the challenge is to make the Federation work as well as possible.

Nowadays, the weight given to efficiency and equity in grant decisions is probably at an all time high. Equalisation can be seen to have an important and positive role on both counts. This is not to say that equalisation can necessarily be applied with a high degree of precision. There will continue to be debate about how the Commonwealth Grants Commission assesses equalisation payments, and the Commission from time to time will modify its methods when convinced that better alternatives exist.

Furthermore, the Commission's relativities are not the last word. The Commonwealth may decide that the burden of past policy mistakes should from time to time be lifted from States, so as to gain the most from Australia's resources. But there needs to be caution about forgiveness such as this because it risks removing discipline from current State decision making processes.

The case for continued equalisation is reinforced when one considers the historical experience, which suggests that the absence of a strong commitment to fiscal equalisation tends to put grant decisions more into the political domain. For instance, Mathews and Grewal (1997) report that in the mid 1970s the three smaller States were all being over-equalised as a result of special deals with politically aligned Commonwealth Governments (p.271), and in 1981 and 1982 the Fraser Government found it difficult to implement changes in relativities which had adverse effects on State Governments of similar political persuasion. More recently, an econometric study by Worthington and Dollery (1998) has found that the allocation of specific purpose payments between the States over the period 1981-82 to 1991-92 was influenced by political considerations.

If these ideas are persuasive, then fiscal equalisation will remain a central feature of Australia's Commonwealth-State financial relations into the future. The Commonwealth Grants Commission's assessments will vary as new data and methodologies become available, but an equalisation principle will remain in place. The alternatives — 'contributions', 'equal per capita', various forms of 'partial equalisation', etc. — are unattractive, as they are unlikely to be either efficient or equitable. The physical manifestation of uncorrected fiscal distortions would be a congealing of population in jurisdictions with high fiscal capacities, and at the margin there would be an excessive tendency to situate in those jurisdictions. The outcome would not be efficient in an underlying sense — efficiency, and the benefits that it brings, would have been sacrificed to a misguided view of what the welfare maximising policy is and/or narrow interests which were able to assert themselves through the political process.

Such a result would be particularly anomalous in light of the increasing weight given to efficiency considerations in the development of economic and social policy over recent years. Efficiency arguments have been motivators of at times painful policy reforms in the areas of tariffs, taxation, the labour market, the public sector and competition policy, to name a few, and it seems likely that this emphasis will continue. Fiscal equalisation is a part of the suite of policies in place to promote efficiency.

Equity considerations also remain important, even though there is often a divergence of opinion as to what constitutes equity. Some type of shared equity goals arguably are intrinsic to people's perceptions of the Federation and indeed are one reason for federation. Furthermore, Petchey and Walsh (1993) argue that:

> Clearly, a case can be argued convincingly that, put behind a 'veil of ignorance' which denies them knowledge of whether they will be a 'rich or 'poor' State in ensuing periods, representatives of all States at a constitution-forming assembly would support a comprehensive equalisation procedure. (p. 5)

For the Commonwealth to move away from fiscal equalisation, it would be necessary to accept that equity no longer required like treatment of like individuals in different States. While this is not guaranteed at present it seems to be approximately observed. Although

States could make different choices about how to distribute net fiscal benefits within their own jurisdictions, there is in fact a broad concordance of State distributive policies. While an appropriate equalisation system is a necessary but not a sufficient condition for attainment of broad-based horizontal equity, it appears that the current system makes an important contribution to horizontal equity objectives.

References

Australian Bureau of Statistics (2000), *Government Finance Statistics, 1999-2000.*

Boadway, R. (1996), 'Review of 'The Uneasy Case for Equalisation Payments' by Dan Usher.' *National Tax Journal* 49 no. 4, pp. 677-686.

Boadway, R. and F. Flatters (1982), 'Efficiency and equalisation payments in a federal system of government: a synthesis and extension of recent results.' *Canadian Journal of Economics* XV no. 4, pp. 613-633.

Brennan, G. and J.J. Pincus (1996), 'A minimalist model of federal grants and flypaper effects.' *Journal of Public Economics* 61, pp. 229–246.

Brennan, G. and J.J. Pincus (1998), 'Is vertical fiscal imbalance so inefficient? Or: The Flypaper Effect is not an anomaly.' Department of Economics Working Paper 98-6, University of Adelaide.

Brumby, John (2001), 'Victorian Taxpayers' $1.2 Billion Subsidy to Other States'. *Press Release.* 2 February 2001. http://www.dpc.vic.gov.au/pressrel.

Buchanan, J. (1950), 'Federalism and fiscal equity.' *American Economic Review* 40, pp. 583—99.

Buchanan, James M. (1999), 'Response' in James M. Buchanan and Richard A. Musgrave, *Public Finance and Public Choice: Two Contrasting Visions of the State.* The MIT Press. Cambridge, Mass. pp. 177-183.

Bucovetsky, Sam (1998), 'Federalism, equalisation and risk aversion', *Journal of Public Economics* 67, pp. 301-328.

Collins, D. J. (2000), *The impact of the GST package on Commonwealth-State financial relations.* Research Study No. 34. Australian Tax Research Foundation, Sydney.

Commonwealth Grants Commission (2001), *Report on State Revenue Sharing Relativities 2001 Update.* Canberra.

Courchene, Thomas J. (1984), *Equalisation Payments: Past, Present and Future.* Ontario Economic Council Special Series Report.

Covick, Owen (2000), 'The Commonwealth Budget', *Economic Briefing Report* v. 18 no. 2 (July 2000). South Australian Centre for Economic Studies, Adelaide. pp. 96-105.

Feldstein, Martin (1976), 'On the Theory of Tax Reform', *Journal of Public Economics* 6, pp. 77-104.

Flatters, F., V. Henderson and P. Mieszkowski (1974), 'Public Goods, Efficiency and Equalisation.' *Journal of Public Economics* 3 pp. 99-112.

Hines, James R., Jr., and Richard H. Thaler (1995), 'Anomalies: the Flypaper Effect.' *Journal of Economic Perspectives* 9, No. 4 (Fall) pp. 217-226.

Hochman, Harold M. and James D. Rodgers (1969), 'Pareto Optimal Redistribution.' *American Economic Review* 59 pp.542-557.

James, Denis W. (2000), 'Federal-State Financial Relations: The Deakin Prophecy', *Research Paper 17, 1999-2000* Parliamentary Library, Canberra. www.aph.gov.au/library/

Mieszkowski, Peter and Richard A. Musgrave (1996), 'Federalism, Grants and Fiscal Equalization' *National Tax Journal* 52 no. 2, pp. 239-260.

Musgrave, Richard A. and Peggy B. Musgrave (1989), *Public Finance in Theory and Practice 5th ed.* McGraw-Hill, New York.

Musgrave, Richard A. (1999), 'Fiscal Federalism' in James M. Buchanan and Richard A. Musgrave, *Public Finance and Public Choice: Two Contrasting Visions of the State.* The MIT Press. Cambridge, Mass. pp. 155-175.

New South Wales Treasury (1997), 'NSW Tobacco Fees Challenged in the High Court', *Treasury Focus.* Issue 1. www.treasury.nsw.gov.au/pubs/newslett/

Pauly, Mark V. (1973), 'Income redistribution as a local public good', *Journal of Public Economics* 2 pp. 35-58.

Petchey, Jeffrey (1995), 'Resource Rents, Cost Differences and Fiscal Equalisation', *Economic Record* 71 No. 215 pp. 343-355.

Petchey, Jeffrey (2000), 'The Efficiency of State Taxes on Mobile Labour Income', *Economic Record* 76 No. 234, pp.285-296.

Petchey, Jeffrey and Cliff Walsh (1993), 'Conceptual Foundations of Fiscal Equalisation: A Survey', in Cliff Walsh (ed.) *Horizontal Fiscal Equalisation in Australia: Economic Historical and Political Perspectives.* South Australian Centre for Economic Studies, Adelaide.

Rosen, Harvey S. (1999), *Public Finance 5th ed.* Irwin/McGraw Hill, Singapore.

Shah, Anwar (1994), 'A Fiscal Needs Approach to Equalization Transfers in a Decentralized Federation.' Policy Research Working Paper No. 1289. Policy Research Department, Public Economics Division, World Bank. Washington D.C.

Taxation Review Committee (1975), *Final Report* AGPS, Canberra.

Tiebout, C. (1956), 'A pure theory of local expenditures.' *Journal of Political Economy* 64 pp. 416-424.

Worthington, Andrew C. and Brian E. Dollery (1998), 'The political determination of inter-governmental grants in Australia', *Public Choice* 94, pp. 299-315.

Appendix 4A

Does capitalisation overcome the need for equalisation?

The relationship between location and capitalisation can be considered by means of a model of a market for residence in a particular location represented in terms of simple demand and supply analysis.[116] The price variable in this market is the dollar cost of living for a person. Because people are heterogeneous in terms of the pecuniary and non-pecuniary benefits of being in Location A vis-à-vis their next best alternatives, the demand schedule for residence in Location A will be downward sloping.[117] And the supply curve for residence is likely to be upward sloping (or at least not vertical), reflecting that a location can accommodate more people, for instance by introducing higher density living. Representing these demand and supply schedules with D_0 and S_0 in Figure 4.1, the equilibrium number of residents in Location A is Pop_0.

If the government now introduces a subsidy of $x to residents of Location A, then the demand curve shifts up by $x from D_0 to D_1. Under the assumption of an upward sloping supply curve, the equilibrium population increases from Pop_0 to Pop_1, and part of the subsidy flows into a higher cost of living (cost of living rises from CoL_0 to CoL_1).

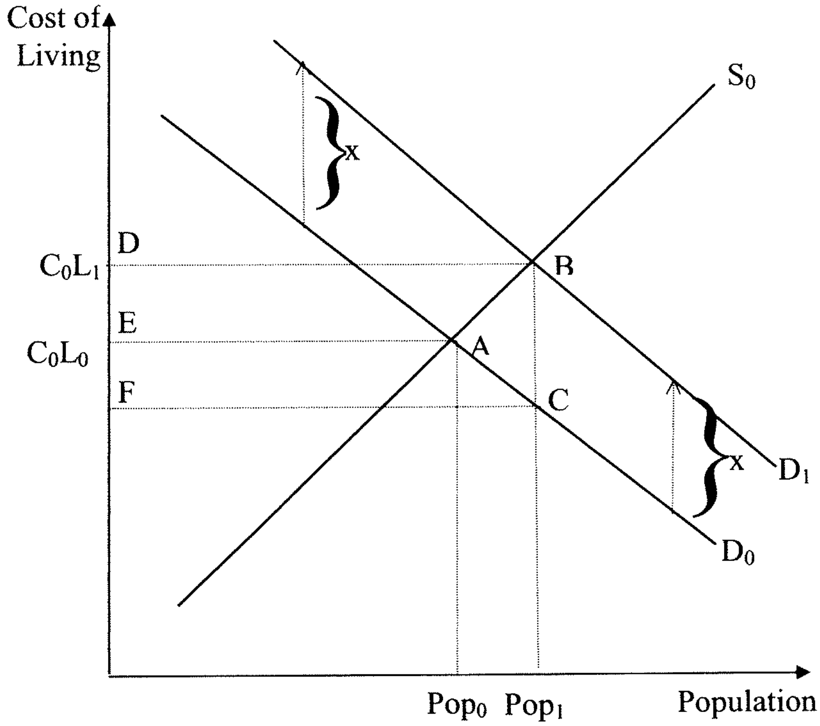
For the present purposes the key result from the diagram is that the fiscal subsidy increases the population in Location A. The capitalisation argument in its strong form holds that this does not occur. How would the diagram need to be revised to produce such a result? There are two possibilities: that the demand schedule is actually a vertical line (implying that a set number of people intend to remain in Location A, and that nobody is interested in moving into location A, regardless of cost of living) or that the supply of residence is vertical (implying that it is impossible for an extra person to live in Location A). Clearly neither of these is plausible. This is so notwithstanding that resources such as land are in fixed supply. Although land is in fixed supply, population densities can increase to accommodate more people. Hence the supply of residence is elastic.

This analytical framework also enables one to illustrate the distributive consequences of locationally differentiated fiscal signals, and to speculate about the welfare consequences of them. Rents to suppliers in Location A are represented by the triangular area between the supply curve, the horizontal cost of living line, and the vertical axis. Introduction of the fiscal transfer x has the effect of increasing supplier rents by an amount illustrated by the trapezium ABDE. Rents to people who locate in Location A are represented by the triangular area between the demand curves, the horizontal cost of living line, and the vertical axis. It can be shown that the introduction of the fiscal transfer increases rents of residents (leaving aside any land ownership benefits) by an amount equal to ACFE. The aggregate amount of the fiscal transfer is given by the rectangle BCFD.

116 I am grateful to Kym Anderson for comments on a suitable presentation framework for this point.

117 The downward sloping nature of the demand curve is reinforced if one allows for a diminishing marginal product of labour.

Figure 4.1
The market for residence in Location A



The triangle ABC represents a dispersion of part of the aggregate transfer BCFD. The meaning to attach to this depends on the relationship between private and social costs and benefits. If the D_0 and S_0 are both reflective of social benefits and costs of residence in Location A, then triangle ABC represents a deadweight loss associated with the fiscal transfer. On the other hand if D_1 and S_0 represent the social benefits and costs, then triangle ABC represents a deadweight gain.

The key theme of this section is that if government provides locationally differentiated payments to people according to the regions that they live in, and if migration is free, then those differentiated payments will change the pattern of settlement from what would occur with payments equal across locations. Higher payments to residents of a particular location will boost population, and lower payments will deplete population. Some capitalisation effects may exist, but for capitalisation effects to offset differentiated payments from government, quite implausible assumptions would need to be satisfied

An essential feature of this analysis is that receipt of the fiscal transfer for a particular location is contingent on the person residing in that location. This should be contrasted with a fiscal transfer to an immobile resource such as land. If government introduced differential land tax rates by location, there would be no impact upon the location decisions of mobile resources. The incidence of the land tax would be on the owners of land, and would be the same regardless of where they live. Consequently there would be no impact on location of residence.

Appendix 4B

Fiscal equalisation and feedbacks on state policies

There is a well established case in the literature for equalisation transfers to offset distortions to jurisdiction choices. The need for equalisation arises because of, inter alia, state redistributive policies. It is sometimes suggested that these state policies are undesirable – in the sense of striking an inappropriate balance between efficiency objectives and redistributive objectives – and that fiscal equalisation supports their continuation.

Such an argument starts with the (possibly implicit) presumption that the redistributions carried out by states are undesirable and involve an acceptance of excessive levels of inefficiency — e.g. in intra-state location decisions. This is an important presumption that should not be glossed over. A key issue at the outset is to consider whether the balance which states strike between distributive objectives and efficiency losses is unacceptable to the national government.

It is of course entirely possible that the states' redistributive choices are acceptable to the national government, either because it agrees with the trade-off between efficiency and redistributive goals, or because it regards the matter as being appropriately determined by the states under the federal arrangements. If the national government does accept the states' behaviour, then it would not make sense to rationalise any particular national policy on the grounds that it overrides the states. In such a case fiscal equalisation would be supported on grounds that it maximises inter-jurisdictional efficiency.

If a national government decided that state policies were inappropriate, and that it wished to alter them, the question would then arise as to what was the best policy instrument to do so. The 'first best' response would be to change the offending policies. If, for instance, the national government believed the states engaged in excessive redistribution to residents of remote areas, it could override the states' policy by reducing the degree of remote area concessions in the national tax/transfer system or indeed by introducing concessions for urban settlements. Or it could convince the states themselves to modify their policies.

There is, however, no reason to believe that abolishing or attenuating the extent of fiscal equalisation would modify the states' distributive policies in the desired direction.

If one did believe that cuts to unconditional grants would cause a state to engage in less redistribution (and as discussed subsequently it is difficult to find a foundation for such a belief) it still would not follow that stopping fiscal equalisation would reduce the extent of redistribution. In a two state model, the ending of fiscal equalisation would reduce grants to one state and increase them in the other. By assumption, the state with lower grants reduces its redistributive activity. But does the state with higher grants not increase its redistributive activity? (Any argument to the contrary must rely on a quite asymmetric linkage between grants and redistributive activity – one in which states reduce redistributive activity when grants go down but leave redistributive activity unchanged when grants go up.) Yet if the state with higher grants increases its redistributive activity, this result is at odds with the original intention of the national policymaker.

In fact a more plausible response is that, in response to the abolition of fiscal equalisation, states would spread the changes in per capita grants approximately evenly across their populations (which, by virtue of the construction of the 'net fiscal benefit', would amount to a dollar for dollar change in each individual's net fiscal benefit). In this case all individuals in the fiscally disadvantaged state would be worse off and all individuals in the fiscally advantaged state would be better off, and at the margin individuals would migrate from the fiscally disadvantaged state to the fiscally advantaged state. But those migrations would not be confined to 'dependent' individuals in the fiscally disadvantaged state migrating to 'contributing' status in the fiscally advantaged state. They would also involve 'contributing' individuals in the needy state moving to 'contributing' status in the fiscally advantaged state, and possibly even moves by 'contributing' individuals in the fiscally advantaged state to 'dependent' status in the fiscally advantaged state. In fact the net impact on the degree to which individuals are in 'contributing' rather than 'dependent' status is an empirical question.

If one assumed that the pattern of departures from the disadvantaged state followed the (higher than national average) propensity to be in a 'dependent' status, and that the arrivals in the advantaged state followed the (lower than national average) propensity to be 'dependent' in that state, there would be some reduction in the propensity to be 'dependent'. Only if the population of the fiscally disadvantaged state were entirely 'dependent' and the population of the fiscally advantaged state were entirely 'contributing' would the direction of movement be exclusively out of 'dependent' status into 'contributing' status. Otherwise, the abolition of fiscal equalisation would reduce the degree of dependency, but introduce efficiency losses in the form of distorted jurisdiction choices. The degree of dependency could of course be reduced by direct action to change states' distributive policies, and without distortions to jurisdiction choices, by directly modifying the states policies. The abolition of fiscal equalisation would be an inferior mechanism to achieve the policy objective.

Appendix 4C

The equivalence of Grants Commission equalisation and equalisation in the literature

The equivalence of the two approaches can be seen by considering the nature of the individual's net fiscal benefit and then aggregating across individuals in a state. The NFB for an individual is composed of a State expenditure component delivered to them in cash or in kind less a State revenue component levied from them. A State's expenditure will depend on the amount of expenditure made on each type of individual (which is standard across States for each type of individual) multiplied by the number of individuals of each type in the State (this amount varying across States). Consequently the aggregate cost to States of providing the expenditure component of the standard NFB policy will vary. The amount required by each State will be equal to the cost to it of providing the standard expenditure policy — which in concept is what the Grants Commission assesses. A corresponding argument on the revenue side shows that the revenue obtained by States as a result of common revenue burdens imposed on like individuals is also conceptually equivalent to the Grants Commission's revenue capacity assessment. However, there is no guarantee that the expenditure need and the revenue capacity will be the same — in which case States will be unable to implement like policies. An equalisation payment from States with revenue capacity in excess of expenditure needs to States with expenditure needs in excess of revenue capacity is required to make standard policies feasible. In concept, this is what the Grants Commission's method does.

Data Appendix

Shares of the Equalisation Pool

Figures are from Commonwealth Treasurer (2001) and refer to sum of GST revenue and Health Care Grants.

GDP estimates

The GDP measure is an expenditure based estimate throughout. For the period 1962-63 to 1999-2000, ABS data from the September quarter 2000 *Australian National Accounts* is used. The projection for 2000-01 is calculated as the ABS 1999-2000 estimate factored up by 7.12 per cent — based on the Commonwealth Treasurer's (2000) projected 4 per cent real increase in GDP and 3 per cent increase in the non-farm GDP deflator. Data for the period 1900-01 to 1961-62 is a spliced series based on the series ANA 129 appearing in Butlin (1987). The splicing factor is based on the ratio between the two series for the five years 1959-60 to 1963-64, and leads to an across the board increase in the ANA 129 series of about 9 per cent. The divergence between the two series is believed to arise from increases in estimates of historic GDP levels since Butlin's work was published. These increases have been driven by conceptual changes in the coverage of GDP — for instance modifications arising from the introduction of SNA 93 — and also by changes in ABS measurement methods. Our splicing method embodies the assumption (for want of better) that the revisions would have boosted Butlin's estimates by the same amount.

Public finance series

Data on gross revenue, gross expenditures and total Commonwealth payments to the States from Federation to 1961-62 are from Barnard (1987). Data on untied grants is from various Commonwealth Budget papers and a South Australian Treasury database.

There is a major series break in the 1962-63 financial year, when the public finance collections were placed on a National Accounts basis with coverage of a broader range of public entities and an increased degree of consolidation and netting out. Consolidated revenue and expenditure estimates in the period leading up to 1962-63 are distorted by imperfect removal of intergovernment payments. In addition, according to Barnard, the old estimates relate only to transactions authorised by parliaments or local governing bodies. The sharp fall in the ratio of gross revenues to GDP from 29.2 per cent as measured on the old basis in 1961-62 to 22.6 per cent on the new basis in 1962-63 clearly is largely if not entirely due to these conceptual changes.

Barnard also notes quality problems in the pre 1962-63 estimates with local government data (in some years it is non-existent) and provides some alternative estimates without local government — Barnard (1986). However, the estimates used are those which, at least in concept, include local government.

A second series break occurs in 1998-99, resulting from the replacement of the cash accounting framework with an accrual accounting framework in ABS collections.

Payments to States data from 1956-57 to 2000-01 are from Commonwealth Budget Papers and unpublished data from South Australian Treasury.

References

Australian Bureau of Statistics (2000), *Australian National Accounts: National Income, Expenditure and Product, September Quarter 2000,* Canberra.

Australian Bureau of Statistics (2000), special data request, Public Finance data, Canberra.

Barnard, A. (1986), *Some Government Financial Data, 1850 to 1982,* Source Papers in Economic History No. 13, Australian National University.

Barnard, A. (1987), 'Government Finance', in W. Vamplew (ed.) *Australians: historical statistics,* Fairfax, Syme & Weldon Associates, Broadway, N.S.W.

Butlin, N.G. (1987), 'Australian National Accounts', in W. Vamplew (ed.) *Australians: historical statistics,* Fairfax, Syme & Weldon Associates, Broadway, N.S.W.

Commonwealth Treasurer (various), *Payments to or for the States* (and variants on this title).

Commonwealth Treasurer and Minister for Finance and Administration (2000), *Mid Year Economic and Fiscal Outlook 2000-01.*

Commonwealth Treasurer (2001), *Meeting of the Ministerial Council for Commonwealth-State Financial Relations and Outcome of Loan Council Meeting,* Press Release 30 March 2001.