

Assigning State Taxes in a Federal Country: The Case of Australia

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Abstract

Assigning taxes to regional governments is a major issue in all federations. Although neither the literature nor international experience provides clear guidelines on precisely what taxes should be assigned to states, we suggest that Australia should nonetheless reconsider the advisability of continuing down its current path towards total state dependency on federal finance. One efficient way to make states more openly responsible for financing the services they provide would be to permit them to tax personal income (on the same base as the existing federal tax), while continuing to have completely centralized collection. If this were done, the present state payroll taxes could be abolished. Alternatively, the GST – all the revenues of which now flow to the states through the federal transfer system – could be made a more transparent state revenue source, for which state governments were transparently politically responsible, by requiring states explicitly to impose their own rates (on the existing base). Again, collection should remain in federal hands. If either of these approaches were to be adopted, for reasons we discuss in some detail in the paper appropriate changes would also be required in the present federal-state transfer system. Even if neither of these ways of increasing state tax accountability is considered possible, the present system of state taxation needs revision. In particular, (1) the inefficient and undesirable taxes on property transfers should be abolished, (2) the system of vehicle taxation should be thoroughly re-examined and revised, and (3) the possibility of converting the payroll tax into a more general tax on factor costs should be explored.

Key words: Australia; state taxes; intergovernmental transfers; fiscal federalism

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1. Introduction

In theory many different arguments may be made both for and against different degrees and varieties of decentralization. In the real world the type and nature of decentralized fiscal structure found in most countries reflects choices made long ago. Nonetheless, it is a useful exercise from time to time to, as it were, go back to the beginning, to think the issues through from first principles, to compare the situation in one country to that in others, and to consider whether it may not be time to look again at the current structure of expenditures, taxes and transfers. In this paper, we set out some elements of such an approach for Australia, focusing in particular on the issue of state taxation. To begin with, however, we first review briefly the case for decentralization and the nature of the fiscal “imbalance” found in all federal countries.

1.1. Decentralization in changing times

In principle, the most important benefit from decentralization is the increased efficiency (and consequent welfare gain) that may be achieved by moving governance closer to the people (Oates 1972). The argument is straightforward. Assume that people’s preferences for government services vary for any reason -- religion, language, history, ethnic mix, climate, demographic structure, economic base or just because of differences in tastes (preferences). Assume further that people living in the same region tend to have broadly similar preferences, either because they started that way, moved to the state because they had such preferences, or have become acculturated to local ‘tastes.’ If governments respond to these differing preferences in structuring their budgets, then different packages of public services will be delivered in different regions. In a decentralized governmental structure, in which state governments are accountable to their constituents, in general people will get something closer to what they want than they would in a unitary country; their welfare will therefore be enhanced.² If the funding for state activities is provided entirely by those who receive the benefits of the services funded, then those who pay, those who benefit, and those who decide are all the same people – local residents – and we are in the best of all public sector worlds.

¹ Respectively, Rotman School of Management and Department of Economics, University of Toronto. We are grateful for helpful comments from our discussants at the conference as well as from other conference participants and the AFTS secretariat, although of course we are solely responsible for the contents of this paper.

² For brevity, throughout this paper we usually refer only to ‘state’ governments. Many (not all) of the arguments can be applied to any level of sub-central government in any country, federal or unitary. However, in reality in most countries local governments are so clearly subordinate to state governments that ‘state’ can usually be read as meaning ‘state and local’.

Under a more centralized governmental structure in which most revenues are raised at the central level and then channeled to states, state governments are inevitably to some extent less accountable to residents and more to the central government for what they do with the funds. People in different regions are thus less likely to get the service mix that they want. The greater the homogeneity within states and the greater the heterogeneity between states, the greater the welfare costs of uniformity.

Matters are never quite this neat in the real world. There may be more heterogeneity within than between states. The democratic accountability of state governments to state residents is seldom direct, and never perfect; of course, the same might be said with respect to central governments. State expenditures may provide benefits (or create costs in the form of negative externalities) that spill over to other states. Owing in part to the greater administrative efficiency of central revenue administration and the national economic benefits of more uniform tax policy, most revenues quite properly may be collected centrally, with some being channeled to the states through transfers. If such transfers carry with them varying degrees of conditionality, they override local preferences. Even if such transfers are completely unconditional, they still create a disconnect between taxation and spending. Since state governments are spending ‘other people’s money’ to some extent, their budgetary outlays are likely less responsive to the desires of local residents than would be true if all expenditures were being paid for by those residents.

In federal countries like Australia important public sector services are often provided by state governments. How revenues are raised and distributed among and between governments at different levels is thus an important political and economic issue, not least when the national fiscal system is subject to increasing challenges both nationally and internationally, as is certainly the case at present. The expanded importance of trade and international capital flows in recent decades has increased the sensitivity to fiscal differentials of important tax bases, including those at the state level.³ Climate changes pose new challenges, both regionally and nationally, that may require new fiscal initiatives. Demographic shifts may also have important implications for the appropriate balance between federal and state finances. Such broad national and international factors may sometimes interact with domestic political and economic changes to create or exacerbate regional stresses within countries -- stresses that may in turn both impact on and be influenced by intergovernmental fiscal arrangements (Bird and Ebel 2007). For such reasons, as times change, so should fiscal arrangements. The appointment of the Henry Commission is one indication that the time for such a change in Australia may be now.

1.2. Vertical fiscal imbalance

In all federal countries some degree of fiscal imbalance is inevitable. Usually, central governments collect most taxes while state (and local) governments are

³ For example, a recent survey (Kessing, Konrad and Kotsogiannis 2009) concludes that both theory and empirical evidence suggest that the more levels of government in a country, the stronger the negative effects on inflows of foreign direct investment.

responsible for more expenditures than can be financed from sources of revenue directly under their control. The resulting difference between expenditures and own-source revenues at different levels of government is often called *vertical fiscal imbalance (VFI)*. In a way this terminology is unfortunate: after all, if “imbalance” is the problem, the implication would seem to be that “balance” is the solution. It is thus not surprising that the gap between expenditures and own-source revenues at the state level is often discussed as though ideally every tub should stand on its own bottom in the sense that the revenues from sources under the control of each level of government should be sufficient to finance expenditures.⁴ In Canada, for example, this interpretation of fiscal balance has been used frequently by the province of Québec as an argument for more revenue authority.⁵

As we discuss further in Section 2.2, increasing the extent of such “tax separation” has some potential advantages. For example, not only local autonomy but more importantly local accountability should be strengthened if the fiscal system is more transparent and citizens less confused as to what exactly they are paying for in taxes and who should be held accountable for both taxes and expenditures. On the other hand, any government that really wished to do so could probably overcome taxpayer confusion and the inadequate attribution of political responsibility without recourse to tax separation. Unfortunately, even in democracies governments have little incentive to act in this way. Unless the underlying political incentive structure alters, there is no guarantee that even strict tax separation would result in greatly increased accountability. Fortunately, however, as we discuss in Section 4.5, there are reasons to think that an appropriate transfer system may help to reduce certain problems -- such as the so-called “race to the bottom” -- often associated with decentralization.

Even if expenditures and own-source revenues were balanced for the richest local government -- measured in terms of its capacity to raise resources on its own -- fiscal gaps (VFI) will remain for all poorer local governments. Such gaps are commonly referred to in terms of *horizontal fiscal imbalance (HFI)*, that is, as a problem of achieving horizontal fiscal balance within the regional or local government sector rather than vertical balance between levels of government. It is difficult to discuss ways to reduce VFI without explicitly discussing how the remaining HFI will be dealt with. Although the extent to which HFI (VFI for poorer jurisdictions under another name) is considered to be a problem is a highly political issue in any country, we argue in Section 4.6 that it is essential to offset HFI to a considerable extent in order to ensure that state taxation of mobile factors – if there is any such taxation -- is both efficient and effective.

⁴This perspective is implicit in Wheare’s (1963, 93) classic statement that “both general and regional governments must each have under its independent control financial resources sufficient to perform its exclusive functions.” It is explicit in Hunter’s (1977) pioneering work on VFI.

⁵For two examples a half century apart, see the Tremblay report of 1954 (Kwavnick, 1973, 215) and Commission on Fiscal Imbalance (2001, 4).

Although we recognize explicitly the defects of the VFI approach, both conceptually and empirically, we shall not discuss this question further here.⁶ In a sense the details do not matter because it is clear that real accountability problems arise from VFI in every federal country. It is thus always useful to consider the ways in which VFI might be reduced. There are four possibilities:

1. The assignment of expenditures may be taken as fixed, and more revenue-raising powers devolved to states.
2. Revenue powers may be taken as fixed, and some expenditure powers reassigned to the federal level.
3. Vertical fiscal gaps may in principle be closed also by reducing state expenditures, perhaps with the federal government similarly rectifying its inverse imbalance by increasing expenditures.
4. Finally, state governments can take steps to raise their own revenues (and the federal government can give them room to do so by reducing its taxes).

Since Australia is clearly at the high-VFI end of the world spectrum (see Section 3), it seems reasonable to consider how and to what extent it might be appropriate to devolve more taxing authority to the states. As we stress in Section 4 below, however, the real choice is not between centralized and decentralized taxation. Rather, the choice is between centralized taxes – combined with some revenue sharing and intergovernmental grants and the related tactical and strategic gaming and political blame-shifting -- and more state access to major federal tax bases such as income and consumption (which we call “co-occupancy”).

We argue in this paper that co-occupancy – perhaps to some extent on Canadian lines although likely not to the same degree – appears to deserve more attention than it has received in recent Australian discussion. Understandably, federal governments seldom like to vacate any significant tax base completely. The reason for this reluctance need not be simply because they like control. It may be because at some future date they legitimately expect to need access to that base for their own purposes. Or it may be important to retain a federal presence (as Canadian experience with both income and sales taxes amply demonstrates) to constrain costly and inefficient competition in defining the tax base. As we argue in Section 2.4 all that is needed to satisfy the accountability objectives that we discuss there is for states to be able to set tax rates *at the margin*. Another reason for co-occupancy is simply because even if vacating a given tax base – as the Commonwealth government in effect did in Australia when it turned over the payroll tax to the states in 1971 and again in effect did when it introduced the GST in

⁶ For further discussion, see Bird and Tarasov (2004). A recent Canadian study by Matier, Wu, and Jackson (2001) attempted to introduce more rigor into the discussion by projecting expenditures and revenues at each level of government under various demographic and economic assumptions and then considering the extent to which the fiscal positions of each level are sustainable in the framework of an intertemporal budget constraint. Under this approach, VFI exists if one level has “room” to reduce taxes or increase (program) spending while satisfying its intertemporal constraint while another level would have to increase taxes or reduce spending to do so. As with all such measures the results of this approach are very sensitive to both model specification and (often-weakly supported) empirical assumptions and are unlikely to prove acceptable to all parties involved in what is, at bottom, a political discussion.

2000 – may temporarily alleviate the pressure for grants to reduce VFI, over time that pressure will again be felt so long as states continue to be responsible to a significant extent for such income-elastic expenditures as education and health (see section 4.3).

Of course, co-occupancy of tax bases creates its own problems in the form of a new set of externalities. One result might be an uncorrected Nash equilibrium and excessive taxation. Another, more subtle, result may be that when both levels of government can tax, there may be little structure left to guide the unending debate between governments in most federal systems as to who does what. If this is the outcome, the final result is unlikely to be improved accountability. Indeed, the outcome may be as little accountability as now, but at a higher cost in terms of administrative, compliance and economic costs. While we argue in this paper that there appear to be good arguments for giving Australian states some additional taxing power, doing so is unlikely in itself to resolve the accountability problems endemic to modern federal democracies.⁷ On the other hand, continuing with the present highly imperfect set of state taxes seems even less likely to produce satisfactory or sustainable results over time.

1.3. Outline of paper

In Section 2, we set out several possible benchmarks that the literature on fiscal federalism and current international experience suggests may provide guidelines with respect to the appropriate assignment of taxes to state governments. Section 3 briefly reviews the current state tax system in Australia. Section 4 discusses some recent theoretical and empirical analysis that emphasizes the critical interdependence between tax and transfer systems. Against this background, in Section 5 we consider possible options for reform. Broadly, three models seem conceivable: even more centralization, a continuation of the status quo, or a move towards establishing clearer accountability through tax decentralization. Our argument in this paper is that either the first or the third of these models is likely to prove more sustainable over time than the second (status quo) approach. Further, we suggest that both theory and experience suggest there is a strong case for further considering the tax decentralization approach – provided, of course, that the transfer system is simultaneously adjusted as necessary. We conclude in Section 6 that the case for devolving more explicit and transparent responsibility on state governments to raise state taxes appears to be economically persuasive – if perhaps unlikely to be very politically popular with either the federal or the state levels of government.

2. Guidance from the Literature and International Experience

A natural starting point for any discussion of the appropriate level and structure of

⁷ For a discussion of some of these endemic problems in the Canadian context, see Bird (2004). We suspect similar problems arise in all large modern democracies, although it is unclear if they are greater or smaller in federal than in unitary countries. (A considerable body of empirical literature drawing on Swiss experience suggests accountability problems are definitely greater in representative than in direct democracies, but that is, to say the least, a very different issue and one well beyond the scope of this paper.)

state taxation is to seek a “benchmark” against which to appraise Commonwealth-State fiscal relations.

2.1 Benchmark 1 - Centralized taxation with decentralized service provision

The theoretical public finance literature emanating from Musgrave (1959) and Oates (1972) focuses on a system in which states for reasons of economic efficiency levy few taxes themselves although they may have substantial control over expenditures. Under this benchmark, states impose only user charges and benefit taxes on mobile factors, with any other needed revenues coming from immobile factors such as real property and natural resources. State governments are little more than decentralized service providers.

Two key assumptions underlie this benchmark. First, the role of states is strictly allocative – to provide sub-central public goods. Second, since in the absence of tax differentials, individuals and firms will presumably make sensible consumption and investment decisions, state taxation of such potentially mobile tax bases as trade, labor and capital will be distorting and hence reduce national well-being.⁸ When one state imposes a differentially higher (or lower) tax than another, private decision-makers will respond by directing more (or less) of their consumption activities to that state than they would have done in the absence of the tax differential. Since their decisions would (by assumption) have been welfare-maximizing in the absence of the differential, the effect of the 'fiscal externality' created by different state taxes is to make the country as a whole worse off. This prescription is often reinforced by the argument that administering central taxes is more equitable, more efficient, and less costly than a decentralized tax system.

As Table 1 shows, under the revenue centralization benchmark, state governments (as distinct from the property tax/user charge package indicated for local governments) may be perhaps be permitted to impose retail (final-stage) sales taxes and perhaps a few excises as well as to “piggy-back” (impose surcharges) on centrally-imposed personal income taxes.⁹ Although states might also impose non-distorting taxes on natural resources, in practice most countries limit state access to such taxes. Similarly, in most countries land and property taxes are primarily and often exclusively allocated to local rather than to state governments. Indeed, in most English-speaking countries taxes on real property are the only taxes imposed by local governments (Bird and Slack 2004).

⁸ We ignore some possible exceptions as when direct expenditure benefits are offset by well-designed user charges) or when (as with well-designed environmental taxes) negative externalities are reduced.

⁹This table is a synthesis of the literature summarized in such sources as McLure (1983), Shah (1994), Martinez-Vazquez, Rider and Wallace (2008), and Bird (2009).

Table 1
Tax Assignment in a Federal State under Benchmark 1

Revenues	Central	State	Local
Personal income tax	Yes	Possible piggyback	No
Payroll tax	Yes	Possible piggyback	No
Enterprise profit tax	Yes	No	No
Natural resource taxes	Yes	Limited	No
Value-added tax	Yes	No	No
Retail sales tax	Yes	Yes	No
Customs duties	Yes	No	No
Excise taxes	Yes	Possible piggyback	No
Property tax	No	No	Yes
User charges	Yes	Yes	Yes

When one moves from theory to reality, however, the whole story is not told by the restricted list of “desirable” state taxes shown in Table 1. In many countries the list is not even this long, for a number of reasons:

- First, one of the few revenue sources remaining for state governments – the personal income tax – is often simply taken off the table by those who think that the income tax should be retained entirely by the central government, for instance to help achieve its designated stabilization and redistributive goals.
- Second, in many countries – though not in Australia -- payroll taxes are largely the domain of social security finance and hence not really available for general tax finance by any level of government.
- Third, add to all this the virtually world-wide replacement of other forms of sales taxes by the value-added tax (GST in Australia) and no major taxes are left for state governments.
- Finally, in most countries restrictions are imposed on the extent to which states can tax natural resources in part because of concerns with interjurisdictional fiscal equity (natural resources are never equally distributed across the national territory), in part because of conflicting ‘entitlement’ arguments, and in part for stabilization reasons. Since who gets what from natural resource taxation is always and everywhere a highly controversial, political and context-dependent matter, we shall simply leave this particular hot topic out of the present discussion.

In any case the general implication of Benchmark 1 is clear: the more closely a country adheres to this framework, the more likely are state ‘own revenues’ to consist of a few limited taxes and user charges – and the greater the resulting VFI is likely to be.

In many federal countries, however, states are largely responsible for financing such important and costly activities as health and education. Since states cannot be expected to finance such functions with user charges and taxes on gambling, the result in most countries has been that states must depend largely upon federal transfers to finance

much of their expenditure. Vertical fiscal imbalance (VFI) is thus a situation in which those who tax – central governments – do not spend all they raise and those who spend – state governments – spend far more than they tax. This imbalance in revenue and expenditure assignments among levels of government is in some ways economically undesirable. On the other hand, as we discuss further in Section 4 below it is also not all bad. Each country needs to strike its own balance with respect to the optimal (or at least tolerable) level of VFI and how best to finance the resulting ‘fiscal gap’.

Usually, such gaps are financed by intergovernmental fiscal transfers. The role of transfers in a federation is not simply to fill the vertical gap, however. There are generally “spillovers” that in theory may justify some central transfers to states. Moreover, there are also inequalities in expenditure need among states that may warrant redress through grants of one kind or another, even if there are no state tax revenues to equalize. This equalization objective appears to underlie the Australian system of fiscal transfers even more than in most federal countries. As we discuss further in Section 4, however, equalization systems give rise to incentive problems at both levels of government. Even if one accepts this first (centralized) benchmark, one cannot resolve the VFI problem without carefully considering both transfer and tax systems.

2.2. Benchmark 2 - Decentralized taxation

A quite different benchmark can also be found in the canonical fiscal federalism literature: a system with a high degree of decentralization of tax powers to the states – for both mobile and immobile tax bases – and correspondingly only a small role for vertical grants. Under this benchmark, the role of the central government is confined to providing national public goods, with central tax revenues being correspondingly small. Indeed, in extreme cases (like Bosnia) the vertical gap might even be negative in such a system, with states paying contributions to finance national government expenditures.

As with the tax centralization benchmark, mobile tax bases are a key factor underlying the decentralization benchmark although the conclusions drawn about the effects of mobility are quite different. The Tiebout (1956) hypothesis asserts that in the presence of migration decentralization enhances public sector efficiency because competition for mobile taxpayers ensures that each subnational government offers local residents their preferred mix of tax levels and government services. While the Tiebout hypothesis offers a useful perspective, the assumptions that underlie it are very strong and unlikely to hold in the real world. In effect they assume away precisely the fiscal externalities caused by mobile taxpayers that drive the Oatesian-Musgravian view set out in Benchmark 1 above.

Moreover, even under the Tiebout benchmark horizontal transfers among state governments may still arise to deal with spillovers among regions. Such transfers may sometimes be determined through a kind of Coasian bargaining among state governments, perhaps with the guiding hand of the central government. Or they may even be made unilaterally: an intriguing theoretical literature due to Myers (1990) shows that it may sometimes be in the interests of economically powerful regions to make voluntary

transfers to their less fortunate neighbours in order to control the effects of regional migration. As we discuss further in Section 4 even these transfers may give rise to incentive problems and have implications for the design of state tax systems. On the whole, however, as the framers of the original U.S. constitution realized within a very few years, decentralization of all or most taxing powers to the states is unlikely to be conducive either to interstate harmony or to the maintenance of a sustainable national political entity.¹⁰ For a country to hold together, some central authority is needed; and for such an authority to have authority, it needs significant power over fiscal resources.

2.3. Benchmark 3 - International ‘best practice’

In the real world, the problems of regional spillovers (in taxes, regulations, and government expenditures) are generally considered to be too severe for the decentralized benchmark to operate successfully. At the same time, the economic and political problems associated with extreme vertical imbalance also usually appear too grave for the revenue centralization benchmark to be optimal. Unsurprisingly, therefore, the fiscal systems found in developed federations around the world show elements of both approaches. Some tax powers are decentralized while others are not, sometimes without particular regard for how mobile the bases are. Still other tax bases are co-occupied by both levels of government.

One good reason to conclude that neither of the two theoretical benchmarks discussed above – full centralization of revenues (Benchmark 1) and full ‘own-source’ tax financing (Benchmark 2) -- is of much use is simply because the evidence is clear that neither provides much help in explaining the reality of the tax structures currently existing in most federal countries. As Table 2 shows, for example, developed federal countries display a wide variety of tax structures, with state taxes being especially important in Canada and Germany. Significant shares of income tax are received by states in Switzerland, Canada and Germany, and the same is true of consumption taxes in the United States, Canada and Germany. Australia stands out in this table both in terms of the dominance of central taxes and as the only country in which all income taxes are collected by the central government. However, it makes little sense to treat the average of the other countries in this table – or for that matter the practice in any one country -- as establishing a ‘best practice’ benchmark for Australia.

¹⁰Under the original Articles of Confederation (agreed by the states in 1777 and finally ratified in 1781), the central government of the new United States was prohibited from either imposing tariffs or levying taxes directly. It was thus entirely dependent on contributions from the states. The resulting political and financial chaos was finally resolved by the adoption of a new Constitution in 1789 – the first explicitly ‘federal’ constitution. For an early but still useful discussion, see Studenski and Krooss (1963).

Table 2
Share of Central and State Governments in Tax Revenues, by Type of Tax,
in Developed Federal Countries (percent)

	<i>Total</i>	<i>Taxes</i>	<i>Income</i>	<i>Taxes</i>	<i>Property</i>	<i>Taxes</i>	<i>Consumption</i>	<i>Taxes</i>
	%Central	%State	%Central	%State	%Central	%State	%Central	%State
Australia2004	81.5	15.7	100.0	0.0	0.0	68.5	81.8	18.2
Austria 2003	73.6	10.2	73.6	12.5	20.1	4.2	78.2	9.9
Canada 2004	48.2	41.5	64.8	35.2	0.0	20.7	40.6	58.7
Germany 2004	49.5	38.0	41.3	38.7	0.0	50.5	62.2	36.1
Spain 2003	54.8	32.3	75.0	20.0	0.1	91.2	49.6	28.4
Switzerland2002	44.6	33.2	24.9	43.6	19.7	48.8	92.1	7.7
USA 2000	69.3	19.1	83.0	15.5	10.0	8.0	15.7	67.6

Notes: Figures do not total to 100% because local taxes are excluded. The figures for consumption taxes exclude customs duties.

Source: Calculated from International Monetary Fund (2005)

One reason Table 2 does not provide a meaningful benchmark for Australia is simply because, as Table 3 (drawn from a different data set) shows, Table 2 does not tell the full tale. When it comes to the degree of fiscal autonomy that state governments have when it comes to setting tax rates, as indicated by the right-hand column of Table 3, Australia is closer to the more decentralized countries like Canada and Switzerland than to the highly centrally-dominated cases of Germany and Austria. Although in comparative perspective the central government dominates the tax scene in Australia to an unusual degree, the states nonetheless have considerable freedom within their own (limited) taxing sphere.

Table 3
Taxing Power of States in Selected Federal Countries

	<i>State Taxes as %Total Taxes</i>	<i>Share of State Taxes for which States can set Rates</i>	<i>Share of State Revenues from Autonomous Taxes</i>
Australia	15.3	100.0	41.1
Austria	8.8	7.0	3.7
Belgium	22.8	63.8	57.1
Canada	35.5	98.4	76.0
Germany	21.8	2.4	1.9
Spain	18.1	58.3	32.7
Switzerland	27.0	90.4	57.4

Source: Blochliger and King (2006).

More importantly, neither standard fiscal federalism theory nor the differing economic circumstances of different countries explain the substantial differences observable in the level and structure of state finances. In the end, the taxes assigned to states in most countries (or over time within any one country) appear to be largely the result of history. For example, some federal countries that were created, as it were, from

“below” such as Switzerland and the United States still have important state-level taxes simply because the states entering into a union did not give up their original fiscal powers.

The explanation may also be more contemporaneously political. State governments may be perceived to be potentially politically dangerous from the perspective of the central government because they may more easily serve as a base for aspiring competitors at the national political level. From this perspective, the level of state taxation in any particular country may simply be what political “equilibrium” seems to require (Diaz-Cayeros 2006). Countries in which (at least some) regional governments have significant political power such as Canada, Belgium and Spain thus tend to be countries in which such governments have more access to major tax bases than is true in countries in which central governments essentially call the shots. If this line of reasoning is correct, then countries in transition from one political balance to another (such as Spain and Russia) might be expected to move in different directions from time to time, sometimes moving to more and sometimes less state fiscal autonomy.¹¹

As Winer (2000) shows, such reassignments of taxing power have certainly occurred in both Canada and Australia since their creation. In Canada, despite the unlimited taxing powers bestowed on the central government at Confederation in 1867 and the explicit limitation of provinces to ‘direct’ taxes, in reality provincial taxing power steadily increased until World War II, with provinces adopting both income and, later, sales taxes. During the war, the federal government took over the income tax completely and became by far the most important taxing authority. Federal dominance of the income tax lasted little more than a decade, however, before provincial taxes once again began to grow in relative importance. In sharp contrast, in Australia, the Constitution of 1901 gave both levels of government concurrent taxing powers (other than with respect to customs duties). Subsequently, however, not only did the Commonwealth government completely take over the income tax but judicial decisions have blocked state access to consumption taxes. As in Canada, although in the opposite direction, the current situation thus does not appear to jibe with the original intentions of those who founded the country. Of course, in both cases what has happened can no doubt be both explained and rationalized by the changing balance of political forces. An appropriate political economy perspective can always explain why a particular configuration of fiscal powers exists in any country. Such a perspective, however, provides no normative guidance as to what should be done.

All in all, it is hard to see any clear link between what theory prescribes and what countries do. It is equally hard to see why any country should pay much attention to what other countries do. Since intergovernmental fiscal relations in any country are inevitably both path-dependent and context-sensitive, about the only firm conclusion that emerges from cross-country comparisons is that countries can, it seems, do more or less what they want to do, given political and economic constraints. Each country has its own history and faces its own particular political, economic, and fiscal environment; each must therefore also answer the basic questions about intergovernmental finance in its own way

¹¹ Martinez-Vazquez, Rider and Wallace (2008) demonstrate this point clearly with respect to the post-USSR Russian Federation.

and change those answers over time as seems appropriate. It makes little sense to search for a meaningful 'benchmark' for Australia in the disparate experiences of other federal countries. The average of a mess is a mess.

2.4. Benchmark 4 -Tax autonomy at the margin

If neither canonical theory nor international comparisons provide relevant standards, perhaps the answer may lie in what has been called the 'second-generation' fiscal federalism model that has begun to emerge in recent years (Oates 2008; Weingast 2006). As Ambrosiano and Bordignon (2006) correctly note, this literature, like the standard fiscal federalism literature, does not point to any "optimal" tax assignment to different levels of government. However, one important point that does emerge strongly from the more recent literature is that there is a principled case for a significant degree of state tax autonomy.

Essentially, the argument is that state governments are more likely and able to allocate and control their expenditures efficiently and effectively if they also control their own revenues. The 'second-generation' fiscal federalism benchmark implies that the appropriate solution to the problem of tax assignment in any country depends on how spending responsibilities have been assigned. As Warren (2006, 49) says, one key rule is thus simply that "tax assignment should follow expenditure responsibilities." If state governments, like local governments, are responsible (to exaggerate a bit) only for sweeping the streets and picking up the garbage, then user fees and some sort of low-rate general local tax such as a uniform tax on real property will likely suffice. In these circumstances, the prescription for centralized taxation that emerges from the conventional fiscal federalism model of Benchmark 1 will yield more or less the right results. On the other hand, if – as in Australia -- state governments are responsible for at least some expensive (and usually expanding) social services as health or education, the conventional prescription is less likely to produce sustainable results. If states are to carry out big expenditure functions responsibly, they generally need access to big revenues for which they are clearly politically responsible.¹²

A second implication of Benchmark 4 is, as emphasized above, that regardless of the scope of state taxation, it is critical that state governments control the effective tax rate at the margin, preferably -- because most transparently -- through the power to determine the nominal (politically visible) rate. . As McLure (2000) emphasizes, what "control" in this sense requires is simply that states are able to affect the volume of revenues significantly *at the margin* through their own policy choices; in the interests of political transparency, the single best way for states to do this is probably by imposing their own tax rates. In short, if state governments are to be expected to act responsibly and in the interests of their residents they should face a so-called 'hard budget constraint': that is, they should be able to increase or decrease spending only by increasing or

¹²Note that this argument does not in any way preclude a significant national government role in both financing and guiding -- for example, through minimum or national standards -- policy in such areas of national interest as education, even when the service is delivered entirely by state governments. We do not, however, discuss this topic further here.

decreasing their revenues in such a way that they are publicly responsible for the consequences of their actions.¹³ This does not mean, of course, that state governments will in fact be held politically accountable: governments at all levels are generally past masters at shifting the blame for unpleasant action to external factors, not least the action (or inaction) of other governments. With more explicit state taxes that actually touch their pockets directly, however, there may be both more incentive and more opportunity for citizens to figure out what is going on – and, in a democracy, perhaps even hope to do something about it.

2.5. Conclusion

Although we explore the ‘accountability’ Benchmark 4 a little further in Section 4 below, on the whole our conclusion is that the ‘fiscal federalism’ literature has surprisingly little to offer when it comes to telling us how much or which taxes ‘should’ be assigned to regional governments in any country.¹⁴ Moreover, tempting and interesting as comparisons of different countries always seem to be, this path too offers no clear ‘benchmark’ against which Australia can or should measure its performance.¹⁵ What is most striking about Australia in international perspective is that, unlike most federal countries, it seems to have moved surprisingly steadily in one single direction – towards greater centralization of revenue powers – over the last century.¹⁶ It is perhaps unsurprising that much discussion in Australia seems to see further moves in the same direction as the logical path for the future also. Although of course it is entirely up to Australians to decide for themselves what should be done about state taxation, perhaps it is instead time to reconsider the advisability of continuing down the path towards total state dependency on federal finance. Before developing this argument in more detail, however, it may be useful first to set out in a bit more detail the present situation with respect to state taxes in Australia.

3. State Taxation in Australia¹⁷

Australian states are big spenders. As Warren (2006) shows, they are particularly important in providing public order and safety (85% of all such expenditure), housing (71%), and education (60%). Much the same is true in other federal countries, of course.

¹³ For extensive discussion, and country studies of, the hard budget constraint, see Rodden, Eskeland, and Litvack (2003). Although we do not develop this topic here, we should perhaps note that intergovernmental transfers should also be designed with this principle in mind: that is, unless it is explicitly intended to alter state spending decisions in the national interest (e.g. by taking externalities into account) such transfers should be fixed and unconditional. For further discussion, see Bird and Smart (2002).

¹⁴ For a more extensive discussion of this issue, see Bird (2009).

¹⁵ This point is discussed further in Section 3 with reference to the interesting “benchmarks” for tax assignment recently suggested by Warren (2006).

¹⁶ Contrast, for example, the many shifts in Canada’s balance between federal and provincial taxes over the last 50 years (Bird and Vaillancourt 2006) with the story told about Australia by Madden (2006) in the same volume.

¹⁷ As noted earlier, we do not discuss the real property tax here in part because its present position as the principal ‘own revenue’ source of local governments seems quite appropriate and in part because we do not otherwise discuss local governments in this paper.

As we noted in Section 2.3, what is most distinctive about the intergovernmental pattern in Australia is the small extent to which states finance their expenditures from their own revenues. The resulting gap, financed mainly by transfers, means that vertical fiscal imbalance (VFI) is larger in Australia than in most other developed federal countries. A recent OECD study, for example, estimates that VFI in Australia (measured simply as the total of federal payments to subnational revenue) is not only higher than in any developed federation except Belgium but was substantially increased by the introduction of the GST, all revenues from which are transferred to the states, in 2000 (Koutsogeorgopoulou 2007).¹⁸ Unsurprisingly, this high level of VFI has long been considered to be an important issue in Australia. Indeed, the first serious attempt to measure such ‘imbalance’ was the work of an Australian (Hunter 1977) and Warren (2006) provides a useful recent extensive discussion.

3.1 The Structure of State Taxes

According to the background material prepared for the Commission, in the fiscal year ending in 2007, state taxes – which accounted for only 15% of total taxes imposed – provided 32% (\$48.9 billion) of total state revenue, compared to 45% from the GST tax-transfer and specific purpose grants (Treasury 2008). Excluding rates, which accrue entirely to local governments, as Table 4 shows the two principal sources of state tax revenue are payroll taxes (29%) and stamp taxes on property transfers (26%).

The payroll tax was turned over to the states by the Commonwealth government in 1971 and was initially imposed at a uniform rate on a uniform base. Over time, however, state rates have come to range from 4.75% to 6.85% and numerous base concessions have been granted. In addition to the transfer tax (conveyance duty) which is levied at a variety of (progressive) rates, states impose an additional tax on property in the form of land taxes (9%), again at differing progressive rates. Other major tax sources include taxes on insurance (8%), motor vehicle registration and transfers (12%) and gambling (10%). In addition to some other minor taxes, states also receive revenue from a variety of resource royalties, notably on mining. Although resource revenue is unevenly spread around the country – most goes to Queensland and Western Australia – it amounted to only \$3.9 billion (equal to about 8% of state tax revenue) in 2006-07. States are effectively precluded by past judicial decisions from imposing income taxes or broad-based consumption taxes.¹⁹

¹⁸ For a more extensive comparison of alternative VFI measures, see Bird and Tarasov (2004).

¹⁹ Although they are not precluded from death taxes, after one state (Queensland) abolished its estate tax in 1977 the others soon followed. Interestingly, much the same pattern occurred with death taxes in Canada around the same time (Bird 1991)

Table 4
State Taxes in Australia, 2006-07

Tax	Revenue (\$million)	Range of (Top) Rates	As Percent of Total	Tax Base
<i>Payroll tax</i>	\$14,398	4.75-6.85% (a)	29.4	Employers' payrolls
<i>Stamp duty on conveyances</i>	\$13,054	4.00-6.75% (b)	26.7	Value of transferred properties
<i>Motor vehicle taxes</i>	\$5,915	(c)	12.1	Value of transferred vehicles and registration fees
<i>Gambling taxes</i>	\$4,772	(d)	9.8	Various levies on betting, casinos, and lotteries
<i>Land taxes</i>	\$4,358	1.25-3.70% (e)	8.9	Unimproved value of land
<i>Insurance taxes</i>	\$3,714	0.1-0.24%; 5-11% (f)	7.6	Insurance premiums and policies
<i>Other taxes</i>	\$2,700	(g)	5.5	Various

Source and Notes: Based on information in Treasury (2008).

(a) All states but Queensland impose a single rate. All states apply rates to payrolls above a threshold that varies from \$623,000 in NSW to \$1.5 million in ACT. Queensland in effect imposes a slightly progressive rate by reducing its \$1 million exemption to zero for payrolls in excess of \$5 million. Although tax bases are largely harmonized across states, some minor differences remain (e.g. an exemption for trainee wages in ACT).

(b) All states impose progressive rates with different brackets and schedules. Several states have different schedules for residential and non-residential property. All have now abolished duties on business property other than real property except for a special surtax on gaming business in SA. All provide some concessions, usually for first time home buyers but sometimes more broadly.

(c) Rate structures on vehicle transfers vary from a simple 3% of dutiable value (the greater of market value or the declared transfer price) in NT to 6.5% in WA on the value over \$50,000. Some impose lower taxes on used vehicles (VIC) or hybrids (QLD) or 'heavy vehicles' (WA, TAS). Only QLD bases the tax on anything other than value, with rates ranging from 2% for 4 or fewer cylinders to 4% for 7 or more cylinders. In addition, all states have transfer fees as well as drivers' license and other fees in addition to vehicle registration and/or annual fees, usually fairly low though often very detailed and differentiated, based on various factors such as vehicle weight, engine capacity and number of axles.

(d) Totalizator taxes, turnover taxes on bookmakers, gaming machine taxes, casino license fees and taxes, lottery taxes, and other charges on gambling imposed in different states at various rates on a variety of bases.

(e) Imposed at different progressive rates on land other than primary residence and (usually) primary production land, valued above (different) thresholds in all states except NT. Higher rates in some states (QLD, ACT) imposed on company or commercial property (in NSW at maximum rate). Additional metropolitan rate in metro region of WA and a special 'parks charge' in metro region in VIC. All states have various special exemptions.

(f) First rate shown is for life insurance, based on sum insured (except SA on premiums at 1.5%); second rate is for general insurance (on premiums). Term insurance in all states at 5% of first year premium. Some states have special rates for different types of insurance – e.g. QLD, 7.5% general, 5% for some types and NSW 9% general, 5% on some types, and 2.5% on crops and livestock. All have varied exemptions.

(g) Includes various levies and taxes in different states e.g. Save the River Murray Levy, a flat-rate charge in SA; parking levies (on parking places) in metropolitan areas of NSW, VIC and WA; health insurance levies (per contributor) in NSW and ACT; and emergency services levy based in some states on value (ACT, SA), in others on property type (QLD, WA, SA) and in others on certain insurance providers (NSW, VIC) or premiums (TAS).

Apart from a few anomalous cases – such as the absence of any land tax in the Northern Territory – and despite the many small differences between different systems (see notes to Table 4), the structure of state taxation is broadly similar across the states (Table 5). Nonetheless, the differences are interesting, particularly if major reforms along the lines we discuss later in Section 5 were to be considered seriously. For example, if the conveyance duty were abolished, Western Australia, Queensland and the Northern Territory would face the biggest adjustment. On the other hand, if, say, vehicle taxation was doubled, Tasmania would gain relatively more than the other states. Of course, as is also shown in Table 5, Tasmania’s taxes fund relatively little of its expenditures, perhaps in part as a result of its relatively low per capita potential tax base. On the other hand, although both the Northern Territory and the Australian Capital Territory have high potential bases (if per capita incomes are considered a proxy to raise tax revenue), in fact they cannot exploit that base fully because state payroll taxes cannot constitutionally be imposed on the federal government employees who constitute a high proportion of their potential payroll tax base.

Table 5
Tax Revenue Distribution, by State, 2006-07
(%)

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Total
Payroll tax	32.0	29.7	26.3	28.1	26.0	29.1	24.2	34.8	29.4
Conveyance duty	23.6	25.3	30.0	37.7	22.2	21.0	26.0	29.1	26.7
Vehicle taxes	11.2	10.9	13.9	14.4	12.2	16.4	10.3	10.9	12.1
Gambling taxes	9.3	12.9	9.7	2.9	13.0	11.5	5.2	17.7	9.8
Land tax	11.5	8.4	5.7	6.8	10.2	8.3	7.2	0.0	8.9
Insurance taxes	8.2	9.4	5.0	5.9	9.3	6.8	4.6	6.2	7.6
Other taxes	4.4	3.3	9.5	4.2	7.2	6.8	22.4	1.4	5.5
Total	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
As % Total State Taxes	36.2	23.9	17.4	11.7	6.6	1.5	1.9	0.8	100.0
Taxes as % State Revenue	37.6	33.5	26.5	32.8	27.6	20.2	32.0	11.2	32.0
Taxes as % State GP	5.5	4.8	4.5	4.5	5.0	3.9	4.4	2.8	4.9
State Tax Ratio as % Average	112	98	92	92	102	80	90	57	100
State Per Capita GP As % Average	98	98	95	128	87	82	130	131	100

Sources: Calculated from tax data in Treasury (2008); state revenues from Australian Bureau of Statistics (2008); state gross product from Australian Bureau of Statistics (2007); and population data from webpage of ABS (www.abs.gov.au). Totals may differ slightly owing to rounding.

3.2 Appraisal of State Taxes

All in all, state governments in Australia have relatively little ‘tax room’ to exploit. Moreover, many of the taxes they now impose are arguably both inefficient and inequitable. More importantly, the state tax system seems ill-designed to establish what Breton (1996) calls the essential “Wicksellian connection” required for good government -- that is, a direct and politically accountable linkage between taxing and spending decisions.

In an interesting recent examination of intergovernmental fiscal relations in Australia, Warren (2006) sets up three “benchmarks” for tax assignment, as follows:

1. Tax assignment should follow expenditure assignment
2. Tax revenues should be able to expand in line with expenditure results
3. Subnational governments should avoid taxes on mobile factors and tax less mobile factors.

The first two of these benchmarks amount essentially to the first conclusion we drew in Section 2.4 from the ‘second-generation’ fiscal federalism literature, namely, that the appropriate level of state taxes should depend on the expenditure functions assigned to states.

It is striking, however, that the second conclusion we drew from that literature – the need for explicit political accountability to local taxpayers – is not mentioned. Instead, the third benchmark listed by Warren (2006) is simply the principal conclusion emerging from the canonical fiscal federalism literature (see section 2.1 above). Combining these two disparate aims leads to a conundrum: how can states have a more elastic tax system (as their expenditure assignments require) while at the same time being assigned only inelastic taxes? Warren (2006) recognizes this problem but simply suggests that the matter requires further study. If Australia is to develop a sustainable long-term tax system for all levels of government, however, the time for such study has arrived.

Unsurprisingly, Warren (2006) draws the same conclusions as we do with respect to the first two benchmarks: Australia does not do very well, even compared to a number of other federal countries. We also agree with the largely failing grade he assigns with respect to the efficiency of the existing state tax systems. As Treasury (2008, Box 10.1) explicitly recognizes, for example, the important property transfer tax is not only decidedly economically inefficient but also inequitable. It is also, in all likelihood, relatively costly to administer.²⁰

While payroll taxes are in principle not a bad source of state revenue (Warren 2006), they may be considered by some to be inequitable to the extent they fall on labour income and by others to be inefficient to the extent they are borne by business (on one factor of production only). The fact that these taxes are imposed at the business level tends to emphasize the latter aspect and, as Treasury (2008) notes, may result in some

²⁰ For a more extended discussion of the defects of such taxes, see Bird and Slack (2004).

degree of interstate competition -- which may, or may not, be a bad thing.²¹ Given the ‘job-killing’ label that politicians so readily attach to payroll taxes, it seems unlikely that even relatively immobile labor will be unduly exploited by such taxes imposed by state governments in the relatively open Australian economy. However, although taxes borne by (or simply remitted by) enterprises may lead to complaints from business – and state governments have certainly been known to respond to such complaints – taxes perceived to fall on “business” are unlikely to stir the hearts or minds of politically aware citizens and hence may do little to improve the accountability of state governments.

The only current state tax source that seems likely to affect the public directly may be the relatively minor levies on motor vehicles: unfortunately, as we discuss further in Section 5.2.2 below, the present level and design of these charges appears to fall far short of the sort of ‘user charge’ that would produce more economically efficient outcomes.

In short, as Warren (2006) emphasizes and Treasury (2008) recognizes, the way in which Australian states are currently financed is far from transparent to citizens. It is equally far from satisfying such other goals of any reasonable tax system as efficiency, equity, and simplicity.²² Understandably, as the Commission’s Consultation paper (Treasury 2008a) notes, many Australians seem willing to abolish the entire complex and unsatisfactory state tax system and to replace it either by increasing transfers (perhaps in a more transparent way) or alternatively by revising the Constitution to assign more expenditure responsibilities to the Commonwealth government. Others, however, suggest instead that more important taxes should be assigned to the states. We consider these three approaches, with special attention to the last one, further in Section 5.

4. Taxes and Transfers

As we noted in Section 2, the canonical theory of fiscal federalism sees vertical transfers essentially in a “gap filling” role, with the size of the transfers set to balance the difference between the optimal level of state expenditure and the (presumably much lower) optimal level of state revenues. Exactly how this gap is closed, however, may affect incentives for state governments and hence policy outcomes. Given the structure of federal transfers, state governments may behave opportunistically in order to extract more resources from the centre, reflecting the inherent externalities when some portion of the additional federal taxes needed to finance transfers may be exported to taxpayers in other regions.

Such problems essentially arise from a core commitment failure in designing federal grants. Even block grants are not truly lump sum in nature if they are apt to be changed over time in response to the actions of recipient governments. Commitment

²¹ Most states seem to think it is detrimental to their revenue base, which presumably explains why most have agreed to constrain competition through tax concessions. It is a more open question if such constraints increase or reduce welfare (McLure 1986).

²² All this and more was of course said long ago in Australia e.g. in Mathews (1977).

failure in fiscal arrangements may in turn distort incentives of recipient governments in a number of ways, which collectively are known as the soft budget constraint problem. As we discuss in the next two sections, there are two versions of this problem.

4.1. The bailout problem

When the federal government does not or cannot commit to transfers, there is a natural tendency to adjust them to favour states facing difficult fiscal circumstances and to bail them out of their troubles. While such responsive transfers provide a form of insurance to residents of the affected region, they also create a moral hazard problem. Both specific deficit bailouts and general federal transfers soften the state government budget constraint and lead to inefficient resource allocation (Inman 2003). For example, Saiegh and Tommasi (1999) attribute Argentina's fiscal crisis of 1999 in large measure to an unstable system of revenue sharing between federal and provincial governments which created perverse incentives for provincial government spending and borrowing decisions. Similarly, Treisman (1998) argues that federal grants in Russia were heavily influenced by partisan political considerations and that the result was to block key tax policy reforms at the subnational level, thus in turn hindering economic development (Zhuravskaya 2000).

Others have noted the role of transfers in leading to excessive subnational debt finance in Germany, Italy, and other European countries (Bordignon 2006; Vigneault 2006). Most recently, Stehn and Fedelino (2009) argue that excessive reliance on transfers in some German states has been associated with weakened fiscal discipline. States that are net recipients of federal transfers do not reduce primary expenditure in response to rising deficits but instead rely on transfers to ensure debt sustainability. Further, spending in net recipient states tends to be pro-cyclical, particularly as expenditures are higher in periods when revenues are strong. States that are net contributors to fiscal arrangements, on the other hand, have ensured fiscal sustainability through spending adjustments and acted in a less pro-cyclical fashion.

Despite these examples, in most developed federations the existing fiscal rules are probably sufficient to control the issuance of state debt in most circumstances despite the potentially detrimental effect of soft budget constraints. This conclusion certainly seems valid in Australia, where the Loan Council coordinates State and Commonwealth borrowing. Even in Australia, however, states are responsible for providing health care and other services for which substantial implicit liabilities exist given the aging of the population and other cost pressures. Such programs are highly popular entitlements and hence politically difficult to alter. Whatever may be the best response in principle for state governments faced with such long-term cost pressures, their incentive to engage in politically painful fundamental reform of entitlements is clearly weaker in a federal system to the extent that spending restraint may weaken the case for future increases in federal transfers. Arguably, in some circumstances states may even be induced to manufacture "crises" in (say) health care to get federal attention to the issue and obtain a bailout. Similarly, when, as now, central governments in Australia (as elsewhere) are depending to a large extent on sub-national governments to carry out various 'stimulus'

programs, state budget constraints are likelier to soften as states that find themselves unable to do what the Commonwealth wants them to do are perhaps more likely than usual to find Canberra responsive to calls for additional funding.

4.2. The common pool problem and fiscal illusion

The bailout problem is inherently dynamic: the samaritan's dilemma for a federal constitution (Buchanan 1975). Even in the absence of explicit bailouts, however, similar pressures on the federal budget emerge through the normal course of negotiation over federal transfers and regional spending. Transfers may induce taxpayers in each state to perceive the costs of incremental federal transfers as largely external to their states. From this perspective, federal tax revenues are a “common pool” of resources available to the first to exploit them. As with any poorly managed common property resource, the inevitable result is overexploitation. As Dahlby, Rodden, and Wilson (2009) note, it is thus quite conceivable that a majority of voters in a federation may support a continued vertical fiscal gap precisely in order to induce greater redistribution between residents of different regions of the federation.

However, the common pool problem cannot explain all the pressures on vertical transfers observed in modern federations. For instance, governments of rich states sometimes support increasing federal transfers that are distributed uniformly to all regions, even though such transfers would be financed disproportionately by taxpayers in rich states. One possible explanation is that current transfer arrangements create a further problem of “fiscal illusion.” When state governments call for more federal transfers, they pretend this can be done without increasing the federal tax (or debt) burden on their own citizens. It is of course quite understandable that state premiers would like to spend more without having to raise taxes themselves. But it is surely mainly the current system of murky shared responsibility that makes this seem anything other than a pipe dream to most taxpayers.

Recently, an interesting perspective on this debate was offered by Boadway and Tremblay (2006) who examine an environment in which federal and provincial governments share a common tax base (as in Canada), and federal transfers are needed to equalize the costs of raising revenue among provinces. Because (as we discuss further in Section 4.5) a shared tax base tends to lead to tax rates that are too high from a national perspective, in their model the best fiscal arrangement would be to have very low federal taxes – to offset the high level of provincial taxes – and hence very low federal transfers most of the time. If the federal government cannot credibly commit to tax and transfer levels, however, the result is likely to be provincial taxes that are too low (because provinces compete for transfers), and federal taxes and transfers that are too high -- arguably, exactly what one finds in most federal countries (including Australia) today.

This outcome may of course be optimal in the sense that without a mechanism for fixing its transfer policies, the federal government may be able to do no better than to accept the resulting high level of taxation and “unnecessary” transfers. However,

whether this outcome is considered optimal depends crucially on what one believes about the power of the federal government to commit to tax policies for the future. In theory, if the federal government could find some way to make the promise of lower future transfers credible, then provinces would be induced to raise their own taxes (and to lower their spending), making residents in all states better off. Perhaps paradoxically, tying such transfers to a particular tax source, as Australia has done with the GST, might in the end serve this end better than general discretionary budget funding of transfers, as in Canada. Initially, and for some years, states may no doubt be relatively happy with ‘guaranteed’ funding from a major federal tax source; over time, however, if states continue to face increasing spending pressure, they may be less able to leverage more support from the federal government when there is a tight linkage between federal revenues and transfers, as we discuss further below.

4.3. Accountability and transfers: an illustration

The evolution of the Canada Health and Social Transfer (CHST) illustrates the forces at work. CHST is a lump-sum block grant to Canadian provinces for health and social insurance expenditures that is financed from general federal revenues. The total outlays under this program are determined unilaterally by the federal government. Originally, CHST was established in 1995 as a non-matching block grant in order to rein in federal spending commitments for provincial social programs – and, it was hoped, to sharpen incentives for the provinces to control spending increases. By 1997, however, the era of belt-tightening was over in Canada. Over the next decade, each federal budget announced a plan for stable or even declining transfers under CHST over the medium term, only to have those commitments overturned and replaced by higher spending in the next fiscal update or budget. As federal revenues soared (until the current crisis), federal officials faced continual pressure to increase transfers to the provinces, frequently as the result of ultimatums by the premiers or deals negotiated directly among federal and provincial First Ministers at their annual meetings.

The outcome was a very different transfer system than originally envisaged. Far from ensuring predictable federal spending commitments, CHST cash transfers increased by a factor of 2.5 between 1997 and 2004, to \$28.1 billion from \$11.1 billion. The original intention of sharpening incentives for provincial governments through “hard budget constraints” went by the board. Instead, federal transfers ended up financing the greater share of incremental provincial health care expenditures.²³ What was intended to be a block grant designed to offset the expansionary effects on the federal budget of the previous open-ended matching grant ended up being little different than its predecessor. In the past, federal matching transfers arguably increased provincial spending – as indeed they were intended to do. However, given the way CHST transfers were adjusted over

²³Since provincial government spending on health care rose by \$28.8 billion in nominal terms, 58.9% of the increase was financed by federal transfers and only 41.1% by provincial taxes.

the 1997-2004 period, it was now provincial spending that was increasing federal transfers rather than the reverse. The net effects on both the federal budget and on provincial incentives were thus arguably the same as if a formal matching grant were in place. Politics and economics, not the central government's stated intentions, determine the real effects of 'gap-closing' transfers.

4.4. Co-occupancy of tax bases

The canonical view of fiscal arrangements in which taxes are levied either by the federal government or by the states ignores the real world in which both levels of government often tax closely related bases. In the more decentralized federations in the developed world – Canada, the United States, and Switzerland – the major tax bases are largely co-occupied. Even in Germany local business taxes are levied on a base that is similar to the federal corporation income tax base. Note that by *co-occupancy of tax bases*, we mean a system in which real tax powers are shared, so that each level of government may make independent decisions about the tax, particularly with respect to rates. It is important to distinguish this case from revenue sharing systems, in which both levels of government may derive revenues from a single base but decision-making is not shared.

For example, in Germany VAT revenues are shared between federal and state governments on a formulary basis; however, rate and base decisions are entirely in the hands of the federal government. Such arrangements are best thought of as central government taxes that are distributed (in whole or part) through transfers that are unrelated to where the tax is collected. The overall level of payments may be determined by a portion of central tax revenues earmarked for this purpose, but the payment received by any state bears no relation to the extent that those revenues were derived from that state. Such systems are revenue sharing. Even when revenue sharing is on a derivation basis as in China (where the VAT is shared with the provinces on a derivation basis) it is still equivalent to a grant and not to own-source revenues in terms of how it affects the budget and the incentives of states (Wong and Bird 2008).

In contrast, the personal income tax in Canada, although collected by the federal government (outside Québec) and imposed on the same base as the federal income tax, is an example of co-occupancy. The provinces both set the tax rate and receive the revenues attributable to their jurisdiction. In effect, the provinces have simply contracted for the services of the central government as a collection agent, and there is no intergovernmental transfer at all except in the narrowest accounting sense.

Intermediate cases between these extremes exist. In Brazil, for example, states impose and collect their own VATs (ICMS), but the rate of the tax is essentially set centrally. In Québec, Canada, the federal VAT is collected by the provincial government along with its own VAT (imposed on more or less the same base) and the proceeds remitted to the federal government; each government independently sets its own tax rate. In contrast, in several other provinces, a provincial VAT is imposed on the same base as

the federal GST collected by the federal government and the proceeds remitted to the provinces in question. Both theory and experience suggest that in these examples, local accountability is likely stronger in Canada than in Brazil -- not simply in Québec but even in those provinces that do not collect their own VAT. The reason is because the most critical aspect of sub-national taxing power is who is politically responsible for setting the tax *rate*.²⁴ The accountability virtues of subnational taxation depend on local governments both having the authority to decide how much revenue they raise and being openly responsible to their own citizens for doing so.

Of course, as with many issues in federal countries, the issue is not that simple. It has long been recognized that overlapping tax bases of federal and subnational governments can give rise to externalities analogous to those resulting from horizontal tax competition. Such interactions are obviously strongest when tax bases are shared. Under co-occupancy, tax increases by one level of government induce private sector avoidance activities that will, if tax rates are unchanged, reduce revenues earned by the other level of government. Ignoring federal accountability problems a benevolent federal government could (and perhaps should) internalize this impact: after all, federal and state taxpayers are ultimately the same people.²⁵ For state governments, however, the case is not so clear: since federal revenues lost due to state tax increases will tend to be borne by residents of other states, the resulting negative fiscal externality is likely to result in excessive taxation.

While the argument is straightforward, its relevance to policy is less so. For one thing, as just mentioned a federal government that recognizes the problem should be able to design federal tax and transfer policies to achieve an efficient outcome -- although, as pointed out by Boadway and Keen (1996), this may involve reducing federal tax rates to such an extent that the vertical gap is reversed, with transfers running from the states to the federal government. For another (Keen and Kotsogiannis 2002), the tendency to excessive federal taxation due to co-occupancy must be balanced against the tendency to undertaxation arising from horizontal tax competition we discuss briefly in Section 4.6 below. The net impact of federalism on the overall level of taxation is thus an empirical matter. Since the empirical literature on the subject is only now emerging it is impossible to say whether the effects are important in practice. In one interesting recent contribution, however, Bruelhart and Jametti (2006) argue that in the case of local taxation in Switzerland, indirect evidence suggests that the vertical externality raises tax rates sufficiently to more than offset the horizontal externality pushing tax rate down.

²⁴ In the interests of full disclosure, we should note that both the Brazilian and the Canadian cases are less clear than we suggest in the text. In Brazil, although the federal government broadly sets some key rates (such as that on interstate trade), every state has its VAT law and to some extent imposes varying rates on different activities (Bird 2009a). In Canada, matters are also not quite as "pure" as the text suggests because at present the agreement under which the federal government collects provincial sales taxes requires that all the provinces for which it performs such collections must impose the same tax rate. However, there is no technical or constitutional reason for this requirement (Smart and Bird 2007).

²⁵ The "perhaps" in the text sentence is because the "should" in the sentence depends on the arguable prior assumption that the federal government has the overall responsibility for fiscal redistribution in the country as a whole and hence should override differing regional preferences.

Whatever the overall importance of vertical externalities, as Keen (1998) emphasized, the effects are likely to be largest when the relative shares of states and federal government in total government spending are nearly equal so that the bilateral externalities are largest. For example, with rising provincial social expenditures vertical externalities resulting from co-occupied tax bases are probably a much more important concern in Canada than in Australia, where states are substantially less important and where co-occupancy is unknown. However, even in Canada, while the potential for excessive taxation as a result of co-occupancy is clear, its importance has not been conclusively demonstrated. Moreover, as mentioned above, given enough instruments the federal government acting in the national interest can always offset any inefficiency in state taxation that might result from co-occupancy – either through negotiated arrangements under which tax room is shared between orders of government or through unilateral actions that take into account the likely fiscal reactions of the states. Indeed, as argued in Caplan, Cornes and Da Silva (2000) and Kotsogiannis (forthcoming), even federal transfer programs designed for entirely different purposes may serve to align the incentives of federal and state governments and hence reduce the problems of co-occupancy – or at least they may do so to the extent state governments look through the illusion and internalize to some extent the impact of increased transfer on federal taxes and hence on state tax room. Of course, as we already noted, the common-pool literature suggests that any such internalization is unlikely to be complete.

4.5. Co-occupancy and vertical fiscal imbalance

In the standard view of fiscal federalism, the central government may commit to an appropriate level of federal transfers simply by computing the appropriate level of vertical fiscal gap – the difference between the desired state expenditures and state revenues – and paying it to states as a block grant. This approach cannot work in a system in which major tax bases are shared between federal and state governments.

Indeed, when tax bases are shared, it is difficult to determine the appropriate level of intergovernmental transfers on any principled basis. Should federal personal income taxes rise to finance increased health care expenditures, or should states with access to the income tax base impose their own increased rates? In the absence of important inter-provincial spillovers in taxation or spending, the *economic* consequences of the two options are little different. When federal and state governments have access to essentially the same tax bases, there is no apparent reason why states should not raise their own tax rates to finance increased spending rather than relying on the federal government to do so.

Vertical fiscal imbalance when there is base co-occupancy is fundamentally a political concept, not an economic one. Each level of government has its own rhetoric on the issue – rhetoric that usually receives very little credence from the other level. Indeed, as we noted in section 4.3, the evidence on the evolution of federal transfers in Canada in recent years suggests that even the federal government does not even believe its own rhetoric since transfers have increased substantially for no obvious reason except in response to provincial demands. In Canada, the only major tax bases not shared by both

levels are the resource and property tax bases that are assigned exclusively to the provinces. Canadian reality is thus a very long way indeed from the canonical “paternalistic federalism” model of Section 2.1, in which revenue collection is centralized and transfers must finance the bulk of decentralized expenditures.

In Canada's system of shared tax bases, since the appropriate vertical gap is essentially indeterminate, it is perhaps not surprising that Canadian governments have had a difficult time in recent years determining the appropriate level of federal transfers, with resultant muddying effects on accountability.²⁶ Vertical overlap of taxes is of course also a source of potential waste, inefficiency, and citizen irritation. More importantly in the present context, rather than strengthening accountability such overlap may weaken it by sowing yet more doubt in voters' minds about who does what and exactly who is paying for it. To the extent it reinforces the idea that all responsibilities are ultimately federal, co-occupancy of tax bases may thus exacerbate the problems of soft budget constraints. On the other hand, as Breton (1996, 2006) has argued in general and Pincus (2008) has suggested in the Australian case, vertical fiscal competition between governments may equally well work in the opposite direction and end up improving both accountability and the efficiency of government spending and taxation at all levels.²⁷

Pincus (2008) notes, correctly, that “the Australian federal system must be judged as one of the most successful in modern history.” Much the same can be said, at least in our view, about the Canadian federal system. The two are of course very different (see Section 2.3). Nonetheless, perhaps each may have something to learn from the other. Canada could, we think, perhaps learn from Australia how to finance equalization grants in a less distorting way (Smart 2009), namely, by tying the total amount of the transfer explicitly to federal revenues in some fixed way. Equally, Australia may perhaps learn from Canada that one can not only live with some degree of base co-occupancy but even benefit from it.

4.6 The horizontal dimension

Horizontal fiscal balance (equalization) like all redistributive policies is inherently controversial both because different people have very different preferences and because it is a concept with many different interpretations. For example, if horizontal fiscal balance is interpreted in the same gap-filling sense as vertical fiscal balance, the implication is that sufficient transfers are needed to equalize revenues (including transfers) and the actual expenditures of each local government.

The horizontal balance perspective implies that transfer policies should be designed to achieve interregional redistribution, which is quite different from the conventional objective of interpersonal redistribution. The principal objective of equalization in this sense is to eliminate differences in net fiscal benefits accruing to residents of different regions of a federation rather than to reduce differences in

²⁶ For a review of the most recent developments in Canada, see Smart (2009).

²⁷ For a recent theoretical argument that, in certain circumstances, interregional redistribution can ‘cure’ the soft budget syndrome, see e.g. Akai and Silva (2009).

individual incomes within or across regions. Since the objective is one of horizontal rather than vertical equity, one can argue that it should be pursued regardless of society's attitude to vertical redistribution among people of different incomes. Indeed, the objective of eliminating net fiscal benefits is a matter not merely of horizontal equity but also of allocative efficiency, because regional differences in net fiscal benefits can lead to a misallocation of productive resources in the federation (Boadway and Flatters 1982).

However, if decentralization makes sense then equalizing the actual outlays of state governments in per capita terms (raising all to the level of the richest government) makes no sense. To do so ignores differences in preferences, one of the main rationales for decentralizing in the first place. It also ignores differences in needs, costs, and own revenue-raising capacity. Equalizing actual outlays discourages both state revenue-raising effort and expenditure restraint since under such a system those with the highest expenditures and the lowest taxes receive the largest transfers.

A problem with *any* transfer system is that it may create a disincentive for state governments to raise their own revenues. This effect is most obvious in a revenue-pooling system, such as that used in Germany, in which a given share of locally-collected taxes is distributed among all state governments. In such a system, state governments receive only a fraction of the revenue collected in their own jurisdictions, with the rest distributed to other states through an equalization formula of some sort. Since the cost of state taxation is higher than the benefit to the state treasury, the marginal cost of public funds appears artificially high to the state government. Indeed, problems can arise even when tax rates are set by the central government if the revenues are actually collected by state governments. Barette, Huber, and Lichtblau (2000), for example, argue that this incentive has led to observably lower rates of tax collection by state governments in Germany. Similar problems led to the centralization of value added tax (VAT) collection in Mexico, where the central VAT was originally supposed to be collected by state governments. Such disincentives have also been prominent in transition economies (such as China before 1994 and the Russian Federation) in which central revenues are collected by tax administrations that are significantly influenced by local governments (Bird, Ebel and Wallich 1995).

To avoid such problems, most countries with equalization transfers avoid revenue pooling and aim to equalize either the capacity of state governments to provide a certain level of public services or the actual performance of this level of service by those governments. *Performance equalization*, which adjusts the transfer received in accordance with the perceived need for the aided service (and which may also allow for cost differentials), is generally more attractive to central governments, because the level of service funded is then in effect determined centrally and transfers can be made conditional on the provision of that level of service. Unfortunately, unless adequate adjustment is made for differential fiscal capacity, as with simple 'budget-outlay equalization' that government which tries the least is likely to receive the most.

In contrast, under *capacity equalization* the aim is to provide each state government with sufficient funds (own-source revenues plus transfers) to deliver a

centrally predetermined level of services – in Australia, a level equal to the average level of services provided by the states.²⁸ An equalization grant is in effect a system of revenue sharing. In idealized form, such a system sets the (per capita) transfer to each government equal to the difference between its tax capacity and the average capacity of all states, multiplied by some standard tax rate, usually equal to the average of all state tax rates. Tax capacity is measured by the observed per capita tax base of each jurisdiction. Thus the program aims to equalize differences in tax revenue but implements transfers through an indirect formula, based on differences in observed tax bases – and, in the case of Australia, differences in expenditure needs as well.

Since capacity equalization pays states for the deficiency in tax bases, multiplied by national average rates, an increase in the tax base of a receiving state is taxed back through the formula. If the state levies the national average rate on its own base, the effective rate of tax-back as a percentage of revenues is exactly 100 per cent. If the state rate is below the national average, however, then tax-back may exceed 100 per cent. In this case, the equalization formula acts to deter governments in receiving states from attracting new investment or developing new revenue sources: instead, it may create a cycle of dependency' for receiving governments.

Smart (1998) argues that the adverse incentive effects of equalization can be even more extensive and potentially harmful than this because there is a financial incentive for receiving states to set local tax rates higher than desirable from a national point of view. This adverse incentive occurs even when a state is small and has a small share of national revenues for a base. The reason is that measured tax bases generally decrease as tax rates rise---for instance as higher taxes are capitalized in property values and as economic activity moves to other jurisdictions or to more lightly taxed transactions. Consequently, although governments that raise their tax rates will see their tax bases depressed, their transfers will, as a result, increase. This effect is clearest when considering a receiving state with a tax rate equal to the national average for the base: At this point, as Smart (1998) shows, further increases in the rate will generate increases in transfers that exactly compensate for the dollar value of deadweight' economic losses resulting from higher tax rates. In short, equalization transfers intended to offset horizontal inequities tend to drive tax rates in receiving states above the national average. In addition, when equalization is based on a 'representative tax system' approach (as in both Canada and Australia) it also creates incentives to change the tax mix because states can increase the transfers they receive by relying more on tax bases that are very elastic or have high national average tax rates, and less on other bases.

²⁸ Differentials in the cost of providing services may or may not be taken into account in such a system. Canada has, at times, set the level of services to be financed in the same way as Australia; in most recent years, however, the level has been set as the average of a subset of provinces, primarily in order to exclude the high expenditure levels in oil-rich Alberta. A more important difference between the Australian and Canadian systems is that the latter equalizes only revenue capacity while the former goes further and equalizes expenditure needs also: for further discussion of this approach see Bird and Vaillancourt (2007). Recently, the Canadian equalization system has been substantially changed in some ways, although it continues to be essentially a revenue capacity equalization system (Smart 2009).

Even if federal transfer policies induce higher levels of tax effort by states, the outcome need not always be welfare-decreasing for the nation as a whole. Kothenburger (2002) and Bucovetsky and Smart (2007) consider an environment in which competition among local governments for a mobile tax base tends to drive local tax rates lower than a unitary decision-maker would choose—the ‘race to the bottom’ scenario. A tax cut by a single region causes an inflow of the tax base to the region, which mitigates the revenue loss of the tax cut. However, this gain comes at the expense of government revenues in other regions, so the final outcome is an inefficient supply of public goods to the nation. In these circumstances a capacity equalization grant by changing the fiscal consequences of a tax cut may limit such harmful tax competition. The reason is that the increase in the local tax base caused by a tax cut also reduces the deviating government's entitlement under the grant formula. This offsets the impact of the tax cut on own-source revenue, and so tends to increase equilibrium tax rates of all regions.

An emerging empirical literature provides some evidence of the tax-raising effects of capacity equalization. Boadway and Hayashi (2004) report that Canadian provinces that receive equalization are more inclined than others to raise business tax rates when the national average rate goes up: this is consistent with the notion that equalization insulates receiving provinces from some of the pressures of tax competition and hence permits them to set higher rates. Smart (2007) finds related tax-raising effects for other tax bases in Canada. Similarly, Dahlby and Warren (2003) report that equalization grants induce higher levels of taxation by state governments in Australia, and Buettner (2005) and Eggert, Kothenberger and Smart (2009) report much the same for the municipal business taxes that are equalized in many German states.

The details of how federal-state equalization transfers work may thus affect both the level and the structure of state taxes and lead to more or less economically desirable outcomes. Decentralization with equalization is perhaps less likely to lead to the much discussed ‘race to the bottom’ than to a reduction in tax competition to the extent equalization transfers provide support for a state tax ‘cartel’ (Brennan and Buchanan 1980). All in all, however, although neither the theoretical nor the empirical literature is yet conclusive, one conclusion does emerge convincingly from the discussion to date: unless the equalization formula is carefully designed, state tax policy decisions are likely to be distorted. In the context of decentralized governance, both transfer policy and state tax assignment must be considered together if either is to achieve its intended objectives.

5. Options for Reform

Two distinct issues must be dealt with when it comes to determining state taxation. The first issue is how much state taxation should there be. The second is what kind of taxes states should impose. These two issues overlap to a certain extent because the size and structure of the tax bill are not unrelated: if expenditures are high, then taxes with larger bases are needed. Nonetheless, it is useful to treat these issues separately, dealing first with the question of how much states should impose in taxes and then, depending on the answer to that question, what taxes they should impose. We begin with

the question of vertical fiscal imbalance that seems to have motivated much of the past Australian discussion of state taxation and then turn to the questions of the economic and administrative efficiency of state taxes that seem to underlie the many submissions to the Commission that assume (implicitly or explicitly) that the present degree of VFI in Australia should be maintained or even increased.

5.1. Dealing with VFI

5.1.1. Reassigning expenditures.

Before considering which level of government should provide which service, a prior question that warrants more attention than it usually receives in the context of discussions of intergovernmental fiscal relations is the extent to which services can, should, or must be provided through the public sector in the first place. Over the last few decades, the scale and scope of government activity in Australia, as in most countries, has increased substantially (Laurie and McDonald 2008). In earlier years (until the mid-1970s) the growth in expenditure at the federal level was financed relatively painlessly by the increasing stream of tax revenues produced by economic expansion. After the mid-1980s, however, spending as a share of GDP hovered in the vicinity of 25% although the sharp turn in the terms of trade meant that this stability, even prior to the recent crisis, concealed a sharp growth in real spending in the last few years (especially if one includes tax expenditures). The primary drivers of federal spending, as in most developed countries, have been social security and health spending.²⁹ At the state level, although public safety and education are more important, health again has been one of the major drivers in expanding state spending in recent years even more quickly than at the federal level. On the whole, although we cannot explore this question in detail here, if any functions are to be moved up to the central level, health and education would appear to be at the top of the list in terms of their size and rate of growth as well as their national impact.

5.1.2. Reassigning taxes -- and adjusting transfers?

Since our focus in this paper is on taxation, we concentrate here on possible readjustments in tax assignment. Of course, as Henry (2009) recently suggested, at the state level – as at all levels of government – there is much to be said for more and better user charges. There are also many difficult questions to be decided when it comes to resource revenues. We do not discuss these interesting and important issues further here, however. Instead, we shall focus on two major possibilities for major revenue reassignment: state personal income taxes and state general consumption taxes. On the whole, we think that the usual economic, equity and administrative arguments against state personal income taxes can be dealt with adequately and that there is much to be said for this approach in terms of improving governmental accountability.

²⁹ For a detailed discussion (that is perhaps rather more optimistic than current circumstances warrant), see Treasury (2007).

On the other hand, in the current circumstances of Australia, altering the present structure of the GST might perhaps be the most promising way to go, not least because it may perhaps be more readily combined with any desired revision of the transfer system. Although we do not discuss possible revisions in transfers in detail here, to illustrate what we have in mind along these lines it may perhaps be worth mentioning three possibilities in passing:

- First, although (as we noted in Section 4.3) there are possible allocative gains from basing transfers on a predetermined federal revenue base, assigning all the revenues from one tax to this purpose may undesirably bias federal tax policy. For example, if for macroeconomic reasons federal taxes should go up (or down), earmarking the GST to state transfers imposes an undesirable constraint both on tax policy and also on how the impact is shared between the two levels of government. It might be more appropriate to earmark a fixed share of all federal revenues rather than all the revenues from one tax.
- Second, if – as we suggest below – state own-tax revenues are expanded either through GST or PIT surtaxes, then the overall level of transfers should presumably be adjusted downward. (Note that this assumes that the equalization formula is adjusted as needed to maintain the desired interstate distribution of the revised total transfer.)
- Third, if the distorting tax mix effects mentioned in Section 4.6 are a concern, as they might well be if state tax room were expanded, changing the equalization formula away from the current representative tax system (RTS) approach towards a more aggregative basis might be considered. Distorted incentives for state tax policy create a prima facie case for an equalization formula with a relatively small number of categories. While a more aggregative approach entails some loss in fairness in the interstate distribution of transfers, it also reduces the incentive to distort the state tax mix to exploit the equalization formula.

5.1.3 State taxes on personal income

If more state "own-source" revenue is desired -- either to expand the size of state activities or to make state governments more self-reliant -- OECD experience suggests there is much to be said for supplementary ("piggybacked") local income taxes. Such a tax would be visible and hence in principle satisfy the criteria of political responsibility and accountability. In the Nordic countries, for instance, in which local governments both have large expenditure roles and are largely fiscally autonomous, they are basically financed by a flat, locally-established rate imposed on the same tax base as the national income tax and collected by the central government. In Switzerland, the cantons -- the intermediate level of government -- similarly raise most of their funds from income taxes. However, as is also true with respect to most U.S. state income taxes, these taxes are not harmonized with the central income tax to any significant extent. Canada, where the income tax base is also shared between federal and provincial governments, falls between these two extremes, with most provinces imposing their tax rates on the federal income

tax base, modified slightly by various provincial credits.³⁰ Most of these taxes are now also administered by the federal government. In a number of other countries (such as Russia) subnational governments have (at times) been assigned significant shares of income tax revenues, but state (or local governments) seldom have any freedom in establishing tax rates.

Many countries around the world are reluctant to provide access to income taxes because of the dependence of central governments on this source of revenue. Moreover, in most developing countries even central governments often have trouble collecting much from the income tax. In Australia, however, it should certainly be feasible to permit states to impose a surcharge on the federal personal income tax base.³¹ Ideally, it would likely be best (as in the Scandinavian countries) to require that such surcharges, although they may vary from region to region, be levied at a single ("flat") rate to avoid both administrative and economic distortions. Such taxes can, and should, be administered with the federal income tax, but the separate state rates should be prominently reported and of course implemented explicitly by state legislation.

Since in many ways the parallels between the Australian and Canadian federations are strong, it is perhaps worthwhile to conclude with a general assessment of how well co-occupancy has worked in Canada. By and large, it has worked well. While vertical fiscal externalities are often part of policy discussions of tax reforms, the federal government has been largely successful in using federal transfers in an ad hoc way to compensate provinces, to internalize externalities – and even to bribe where necessary. For example, recent actions by the federal government to reduce its statutory rates of corporation income tax (CIT) could have resulted in the provinces simply raising their own rates – or delaying scheduled reductions – thus resulting in an unintended transfer of tax room to the provinces with no impact on overall tax rates. Through a combination of moral suasion and one-off transfer arrangements, however, the federal government was largely successful in moving the provinces towards lower, not higher, provincial CIT rates.

Vertical overlap in Canada appears to mitigate horizontal tax competition to some extent as well. The federal presence in the income tax field establishes taxing principles that have largely guided the provincial income taxes, and the role of the federal government in collecting most provincial income taxes creates administrative and political obstacles to at least some of the “boutique” tax arrangements that provinces might otherwise be attempted to adopt. Even with respect to the CIT, to mention only one important example, all Canadian provinces have adopted the same, stable formula for allocating income of corporations across provinces, in stark contrast to the chaos in this

³⁰ In the past, provinces levied rates not on the federal tax base but on federal taxes. Since a flat rate levied on the base of a progressive tax has a more progressive structure than the tax on which it is imposed such state income taxes were perhaps more progressive than some provinces wanted.

³¹ Note that we definitely would not favour permitting states access to the corporate income tax (CIT). For the reasons set out by Bird and McKenzie (2001) with respect to Canada, a low rate ‘business’ tax on the lines we sketch in section 5.2.3 is much preferable to a state CIT.

regard prevailing in the United States. Deviations from the model set by the federal personal income tax are even rarer and appear to amount to little.

Our point is not that vertical and horizontal tax externalities have not been problematic in Canada – they have. By and large, however, the most serious such problems seem to have been adequately addressed through regular meetings between federal and provincial governments -- whatever Coasian (and Machiavellian) political bargains may lie behind the outcomes of such (behind closed doors) meetings. A much more difficult issue for Canadian governments has been the debate over transfers and VFI we discussed in Section 4.5.

5.1.4. An HST for Australia?

In many countries, the search for a regional revenue source that is both economically respectable and administratively viable, particularly one with a broad base and a reasonable elasticity, comes down to a general sales tax. The general sales tax now found in most countries is of course a VAT. The retail sales tax once favoured as a regional tax (Musgrave 1983), though still in place in most U.S. states and a few Canadian provinces, is now an aberration in world perspective. Of course, Australia has never had a retail sales tax. Like most countries, however, it now has a centrally-administered value-added tax (VAT), the GST. Unusually, all of the revenues from the GST actually flow to the states – although only after transmutation into a federal transfer ensures that the states whose expenditures are thus financed are totally disconnected from any responsibility for levying the tax. Given that the states already receive all the GST revenue, it makes sense to think about whether it would be worth ‘reconnecting’ the taxing and spending decisions in some way. We discussed the transfer side of this equation briefly in Section 5.1.2. Here we turn to the state tax side.

For many years, most tax experts thought that the only good VAT was a central VAT. Subnational VATs were considered to be either infeasible or undesirable for a variety of reasons: high administrative and compliance costs, the possible loss of macroeconomic control, the general reluctance of central governments to share VAT room, and the problems arising from cross-border (interstate) trade. Broadly, the argument with respect to such trade was that subnational VATs were, if levied on an origin basis, distortionary, and if levied on a destination basis, unworkable. Early experience in Brazil with subnational VATs was generally taken to support this negative appraisal. Over the last two decades, however, Canadian experience has conclusively demonstrated that subnational VATs are perfectly feasible (Bird, Mintz and Wilson 2006).

In fact, two quite different versions of provincial VATs are in operation in Canada. From the inception of the federal VAT (as in Australia, called the GST) in Canada in 1991, Quebec has imposed its own provincial VAT, the Québec Sales Tax (QST). The QST and the federal GST constitute an operational “dual VAT” system (Bird and Gendron 1998). The rates of the two taxes are set quite independently by the respective governments. The tax bases are also determined independently, although they are now essentially the same. From the beginning, both taxes have been collected by a

single administration -- that of the province. Taxes on interprovincial sales from one business to another are basically handled by a deferred-payment system similar to that now applied in the European Union. Almost twenty years of experience have revealed no serious economic, policy, or administrative problems with this system (Bird and Gendron forthcoming).

Since 1997, a quite different form of provincial VAT (or PVAT) has been applied in three small provinces (New Brunswick, Nova Scotia and Newfoundland and Labrador). These provinces impose their PVATs as part of the so-called Harmonized Sales Tax (HST) on the same base as the federal GST, subject to some provincial variations in full or partial zero-rating. These provincial taxes are administered by the federal government and the revenues distributed to the provinces on the basis of estimated taxable consumption in each province. Interprovincial sales are dealt with in the same way as under the QST. Recently, the largest province in Canada, Ontario, decided to join the HST agreement, that is, to impose its provincial retail sales tax – currently an 8% retail tax – as an 8% provincial value-added tax (PVAT) on the same base as the GST, albeit with some additional zero-rating and (as in Quebec) some input credit restrictions. Although all HST provinces currently impose the same rate as part of the agreement, as we have argued elsewhere (Smart and Bird 2007) such rate uniformity is not a necessary condition for this system to operate.

Canadian experience with subnational sales taxes may suggest three lessons of possible relevance for Australia, as follows:

- First, with good tax administration it is perfectly feasible to operate a VAT at the subnational level on a destination basis. Australia, like Canada, has a good tax administration and could certainly run such a system if it chose to do so.³²
- Second, in principle it is immaterial whether there are two separate administrations or one or, if there is one, which level of government operates it. Of course, central administration and a common base is likely more efficient and less costly, certainly from the perspective of taxpayers. There seems no reason in the Australian context to consider anything like the QST approach.
- Third, not only is it not essential for all states participating in an ‘integrated’ federal-state VAT to impose the same rate, it is not desirable that they do so. This last point is important because from the perspective of improving accountability, each taxing government should be able independently to determine its own tax rate. If all set the same rate, one might perhaps infer that there was no real reason for any state fiscal autonomy in the first place. Even if all did impose the same

³² We are obviously not qualified to comment on the constitutional and judicial history (e.g. see Mathews and Grewal 1997) that explains why Australian states are precluded from levying consumption taxes. All we say here is that there is no technical or administrative reason for this prohibition.

rate, of course, as in Canada's present HST system,³³ the rate would still be determined by the province, and since any changes in that rate must also be made by the province in question, the accountability objective might still be served – provided, of course, that the transfer system did not undercut it by rewarding those who do least by encouraging recipient provinces to overtax certain bases along the lines discussed in Section 4.

Setting the important issue of constitutionality aside, in Australian terms a “Canadian-type” GST/HST system would thus seem to require only two (important) changes. First, the tax would no longer be solely a federal tax with the rate set by the federal level which administers the tax and allocates the revenues (less administrative costs) to the states. Instead, although the tax base would remain uniform, the state share of the combined tax would become (in effect, if not in law) a federally-administered state tax with the rate for each state being explicitly set by the state government.³⁴ Second, the revenue received by any state would be determined not by formula but by allocating collections among the states by a process like that used in Canada, that is, essentially by allocating the tax base to the state in which final consumption takes place and then multiplying that base by the appropriate state tax rate to determine the revenues accruing to the state.³⁵ In other words, in effect the tax imposed by any state would be imposed only by final consumption by residents of the state.

5.2. Improving State Taxes

Whether or not Australia chooses to make major reassignments of either expenditures or revenues in order to reduce the ‘accountability gap’ arising from the high VFI created by its present intergovernmental fiscal arrangements, there are clearly some problems with the present state tax system sketched earlier in Section 3. We discuss only three elements of that system here. First, the tax on property transfers is definitely a bad idea. Second, some useful things might potentially be done to make the present state vehicle taxes more useful fiscal and economic instruments. Third, the payroll tax may in principle be developed in one or both of two directions – towards a more general personal income tax or towards a form of state business taxation. Since we discussed the potential role and structure of state personal income taxes in Section 5.1.3, we focus in Section 5.2.3 only on the second of these possibilities.

5.2.1. Down with transfer taxes

As David Ricardo pointed out two centuries ago, taxes on the transfer of property are the ultimate “anti-market” tax. Such taxes, he said, “...prevent the national capital

³³ At present, the HST system requires that all three of the HST provinces agree to any rate increase and that at least two agree to a rate decrease. Although this constraint seems unnecessary, of course in its own interest each province should pay close attention to the rates prevailing in its neighborhood.

³⁴ This is not quite a big a change as it might seem since to alter either the base or the rate of Australia's present GST already requires the agreement of both state and federal governments. State government officials are also included in a number of Australian Tax Office (ATO) operations related to the GST.

³⁵ A number of assumptions and rules are of course required to implement such a system. For a detailed discussion of exactly how the revenue allocation process works in Canada, see Bird and Gendron (forthcoming).

from being distributed in the way most beneficial to the community. For the general prosperity, there cannot be too much facility given to the conveyance and exchange of all kinds of property....” (Ricardo, 1955, 97) Although Australia’s state conveyance taxes are not particularly high, they undoubtedly do in some instances discourage transfers that would otherwise take place and hence distort allocative efficiency. The present State conveyance duty (like any tax on the gross value of property transfers or leases) is in effect a cumulative turnover tax whose burden increases the more often property is sold. As a result it interferes with the efficient functioning of the property market.³⁶

Of course, Australian states are by no means the only governments to levy such inefficient taxes. But many wrongs do not make a right. Such taxes may be administratively convenient to the authorities since the taxable event – the recorded exchange of title – is known to them. However, the relative complexity of the tax and the differences between states suggest that they almost certainly raise the cost of property transfers significantly and hence reduce efficiency. If a country is at all concerned with efficient land use, the usual economic advice is to abolish special taxes on the transfer of property. If states wish to raise more revenue from property they would be better advised to make more use of land taxes or, alternatively, if their interest is primarily in taxing non-residential property, to adopt some form of low-rate business tax like that we discuss in section 5.2.3.³⁷

5.2.2. Up with motor vehicle taxes

Undoubtedly, the strongest economic and administrative case for regional excises is with respect to vehicle-related taxes. For a variety of reasons, such taxes should be exploited more fully than is commonly the case in most countries.³⁸ The most important tax on automobiles from a revenue perspective is the fuel tax, which is also the simplest and cheapest form of automotive taxation from an administrative perspective. Much as central governments no doubt appreciate the revenue they receive from this source, fuel taxes can equally well be levied at the state level, as is currently the case in both the United States and Canada. Different states could impose different taxes, if they chose to do so, subject to the constraint that they would not likely be able to differ much from the

³⁶ State transfer taxes may, for example, be as much or more than the real estate commissions that were considered a sufficiently serious concern to warrant a full-fledged recent discussion at the OECD (2007). On the other hand, GST imposed on transfers of commercial property is neutral with respect to production and consumption choices and hence non-distorting. Similarly, GST on sales of new residential construction in effect represents a capitalization of the tax that should be imposed on subsequent consumption of housing services and is also non-distorting. However, since increases in the value of residential property are not captured by the GST when sold by non-registrants, a case might be made for maintaining some form of transfer tax on such value increments, although we do not discuss this point further here: see Cnossen and Badenhorst (2008).

³⁷ As mentioned at the beginning of the paper, we do not discuss land and property taxes in detail here in large part because these taxes are, as they should be, the mainstay of local government finance. Given the dependence of local governments on revenue from this source, however, in the absence of closer study we hesitate to argue that states should tax real property much more heavily (and generally) than they do now,

³⁸ See the appropriately named report – “Paying Our Way” – of the (U.S.) National Surface Transportation Infrastructure Financing Commission (2009).

rates imposed by their neighbors given the mobility of the tax base. Administratively, differential state fuel taxes can usually be imposed at the refinery or wholesale level, with the refiner or wholesaler acting a collection agent for the states, remitting taxes in accordance with fuel shipments.

To the extent automotive taxation is intended to price either the utilization of publicly-provided services or externalities, the fuel tax is best a very crude instrument. Such taxes are related both to road usage and to such external effects of vehicles as accidents, pollution and congestion but not in any precise way. Toll roads and an appropriate set of annual automobile (and driver) license fees can in principle serve the benefit tax function much better, as can congestion fees in dense urban areas. For example, license fees might be based on such features as the age and engine size of vehicle (older and larger cars generally contribute more to pollution), location of vehicle (cars in cities add more to pollution and to congestion), driver records (20 percent of drivers are responsible for 80 percent of accidents), and especially the axle-weight of the vehicle (heavier vehicles do exponentially more damage to roads and require roads that are more costly to build).³⁹ Although for the most part the present state motor vehicle tax regimes appear to focus on the least of all relevant aspects of vehicles from an economic perspective-- their value -- to a limited extent some states have already incorporated a few such features – notably engine size and, for heavy vehicles, axle-weight – into their vehicle tax systems. Much more can be done along these lines to make vehicle taxation into, in effect, an appropriate ‘user charge’ for road use.

Given the different characteristics of different regions in a large and diverse country like Australia, state taxation of motor vehicles is fundamentally a good idea. Viewed from afar, the absence of any significant state taxation of this area is somewhat puzzling. However, much more attention to the appropriate design of the overall system of automobile taxation (national, state, and local) is required if both more revenue and better economic effects are to be achieved (Newbery 2005). State revenues could be further boosted by giving states access to the fuel tax through surcharges, as mentioned above. Increased state taxation of vehicles and vehicle use would appear to be feasible, desirable and an income-elastic revenue source. Moreover, given the high visibility of such taxes, shifting (or expanding) the state tax base in this direction would seem to be a highly desirable move.

5.2.3. Build on the payroll tax

Payroll taxes are already the most important source of state tax revenue in Australia. Taxing jobs is not something that most governments like to emphasize but such taxes are relatively easy to administer and can yield a lot of revenue even at relatively low rates. Payroll taxes are seldom found as regional taxes in other countries, but this is probably because in most countries, unlike Australia, the payroll tax base is already heavily exploited to finance social security systems. As Australian state taxes go, the payroll tax is not bad.

³⁹ We do not discuss here the many ways of appropriately pricing road use that are now technologically feasible: see, for example, Newbery (2005) and the report cited in the previous note.

Nonetheless, two possible directions in which this tax might be altered deserve consideration. As discussed earlier, one would be to replace the payroll tax (levied on employers) by a flat-rate personal income taxes collected through employers on essentially the same base but levied directly on employees. Such a change would of course involve some (minor) administrative changes but it would certainly increase political accountability. Although in principle a state surcharge on a nationally uniform personal income tax base would be both more politically justifiable and also less economically distorting, moving to a visibly ‘personal’ state payroll tax would be a smaller and perhaps more acceptable change in existing practice. Of course, whether the benefit of establishing a clearer, politically more accountable link between the taxing and spending decisions of state governments would outweigh the obvious disadvantages from the perspective of state politicians of a more politically transparent tax system is far from clear.

A second possible change in payroll taxation that might be considered focuses on a different aspect of the payroll tax, considering it not – as most economists do – as essentially a tax on labour income but rather as a tax on a business that is imposed on the basis of the extent to which the firm makes use of one factor of production, labour. Such a tax clearly imposes an efficiency loss since it distorts business decisions by introducing an extra cost on labour, thus encouraging changes in production processes that make less use of the taxed factor. If this bias is considered a problem, there are two possible solutions. One, of course, is simply to remove the tax. The second, however, is to generalize the tax to all factor costs, thus preserving the revenue while removing the factor bias.

Several countries (Italy, Japan) already have such a ‘factor cost’ tax in place as a source of regional and local revenue, as do several U.S. states (Michigan, New Hampshire); other countries (France, South Africa) have recently considered implementing it for the same purpose. Technically, the tax base is the same as the ‘value added’ by a firm. Unlike the GST, however, which is levied on a destination basis on final consumption by households (and unregistered businesses), such a ‘business value tax’ (BVT) is more equivalent to an annual ‘gross income’ tax since it is levied on an origin basis on payments to factors of production (wages, rent, interest, profits) by businesses (Bird and Mintz 2000).

At the level of any individual business, the two tax bases are equivalent: both are imposed on the ‘value added’ by the firm. The GST is (to simplify) levied on the base of sales less purchases from other (taxed) enterprises; the BVT is imposed, as already mentioned, on the basis of payments made by the firm other than to purchase inputs from other enterprises. For a particular enterprise in any accounting period, these two tax bases are the same. However, for the economy as a whole they are not because firms can offset the GST on their purchases (including purchases of capital goods) against GST on their sales so neither investment nor export is taxed. The GST is administered in principle on the basis of invoiced transactions, although in practice it is actually based on monthly or quarterly accounts of such transactions. On the other hand, a BVT, although perhaps paid

in monthly instalments, is administered on the basis of annual accounts like a (net) income tax. In short, a BVT is like a value-added tax imposed on an origin basis (like an income tax) on the basis of gross (or net) income rather than on consumption. Another way of saying the same thing is that, since the BVT is a combination of a payroll tax imposed on payments to labour and an equivalent tax on payments to capital (interest, rent, profits), it is a tax on factor cost, or a firm's use of factors of production.

Such a tax does not bias production decisions in the same way the payroll tax does. Economically it is clearly inferior to the GST simply because it is a tax not on consumption but on income. Moreover, some might also consider it to be inferior in equity terms to a tax on net (of depreciation) income. It would also be quite a new tax in the Australian context. To be taken seriously, a BVT along the lines just sketched would presumably have to be justified by more than the simple fact that it creates less economic distortion than a payroll tax.

States levy payroll taxes essentially because they have little choice. The first payroll tax in Australia was introduced by the Commonwealth in 1941 at a rate of 2.5% to finance the National Welfare Fund. Although much changed over the next 30 years little changed in payroll taxation. In 1971, however, under pressure from the States to allow them some access to income taxation, the Commonwealth decided, in the words of a well-known historian of Australian tax policy, to give them "its least favorite tax" – the payroll tax (Smith, 2004, 93). The states promptly increased the tax rate (to 3.5%) and have since continued to push up the rate of this, their broadest-based and most elastic tax.

Although incidence is always a tricky issue, it might be argued that, given the openness of the state economies, both the payroll tax and, in large part, the property transfer tax, are probably paid largely by business owners though some may be passed on to workers, some to customers. Even the state tax on business property taxes is, like the payroll tax, a partial factor tax, and hence distorting; so is the property transfer tax, which also has the added unwelcome bonus of a 'lock-in' effect. Replacing such taxes by a more neutral state tax on business would certainly reduce the distortions arising from the present system. Such a substitution would also probably reduce compliance costs. If there is any case for state taxation of business, then one 'good' tax – provided, of course, it can get past the judicial barriers that have been largely prohibited effective state tax instruments in the past in Australia – would surely be better than the two present bad ones. As Bird (2003) argues at some length, there is both an theoretical and to a limited extent an empirical case for at least a low rate tax on business essentially as a form of generalized benefit tax.⁴⁰ When it is not feasible to recoup the marginal cost of cost-reducing public sector outlays through user charges, some form of broad-based general levy on business activity may constitute an essential element of an efficient regional tax system. A broad-based levy like the BVT clearly serves this aim better than taxes on any one input, whether labor (payroll tax) or capital (corporate income tax or differential taxes on business real property).

⁴⁰ For consideration of how such a tax might advantageously replace the present provincial CITs in Canada, see Bird and McKenzie (2001).

6. Conclusion

The taxes assigned to states in a federal country depend on the weights that relevant decision-makers place on the achievement of particular policy objectives as well as on beliefs about the effects of different tax choice on different objectives . If a country's primary national policy concern is to give a coherent and transparent signal to prospective foreign investors, there may be much to be said for a completely centralized tax system. Administrative and compliance simplicity point in the same direction. On the other hand, if economic efficiency and political accountability are more important, and if regional diversity is significant, there is more to be said for a more decentralized tax structure, provided it is properly designed and implemented. We suggest that there is perhaps more to be said for the latter approach than the present Australian tax system recognizes. If so, more taxing authority should be given to the states.

Although a more decentralized approach is inevitably somewhat less transparent and simple than pure centralization, it can be accomplished more simply and transparently than is currently evident in most countries, including Australia. As we have discussed in Section 5, Australia can, if it wishes, choose to reduce VFI and improve accountability either by shifting some expenditure functions up to the Commonwealth level or by shifting some taxing functions to the state level. In either case the result would be that the same level of government would be responsible to a much greater extent for both financing and executing a broader range of functions. Our preference, for what it is worth, would on the whole be to shift some tax power to the state level, and we have discussed earlier how this might be done through altering the present distribution of the income and consumption tax bases in appropriate ways.

Whether more taxing power is given to the states or not, however, the taxes currently imposed by the states can be significantly improved. Such improvements may be secured either through improving the efficiency, equity, and administration of the existing state taxes or by changing the present state tax mix to one that will better achieve policy goals. We have suggested 'some of both' in the sense that the current payroll tax might be extended in one of two ways (or possibly even both?) – either towards a 'piggy-backed' state personal income tax surcharge on the federal income tax base or towards a more comprehensive (and economically efficient) tax on factor costs such as the 'business value tax' sketched in Section 5.2.3. The latter approach appears particularly attractive since it could easily make up for the abolition of the present state taxes on property transfers, about which there is nothing good to be said except that they yield revenue.

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