# International Conference on Federalism Mont-Tremblant, October 1999

#### **BACKGROUND PAPER**

#### **TAXING CHOICES**

#### **Bev Dahlby**

Director, Institute for Public Economics and Professor, Department of Economics University of Alberta

#### INTRODUCTION

This paper examines the tax assignment question? Which level of government should levy taxes and which tax bases should they utilize? The general principles and specific recommendations of the "consensus" position on tax assignment are reviewed. Some of the problems with the consensus view are discussed, including its top-down benevolent government perspective, its lack of emphasis on accountability, and its failure to acknowledge the problems that are created by the joint occupancy of tax fields. Data are presented which indicate that there is wide variation in the levels of taxation and the tax bases utilized by sub-national governments in eight federations. Finally, it is argued that globalization may strengthen the relative tax powers of state and local governments, while at the same time increasing the public's willingness to pay for education and infrastructure, public services which are provided by sub-national governments in many federations.

#### **PRELIMINARIES**

#### "No representation without taxation"

A federal system of government presupposes that "one size does not fit all", that people in different regions want flexibility in making fiscal choices and will choose different public services, usually resulting in different per capita expenditures. State and local governments should be required to raise at least part of their revenues through taxes or user charges so that their residents are aware of the cost of public services and make appropriate decisions regarding the size of the public sector. In other words, sub-national governments should be accountable for their fiscal decisions, and this implies, at a minimum, that sub-national governments should set their own tax rates.

#### **Vertical Fiscal Balance**

The assignment of taxation powers is intimately connected with two other aspects of a federation's fiscal system?the assignment of expenditure responsibilities and the intergovernmental transfer system. Generally speaking, the greater the expenditure responsibilities assigned to sub-national governments the more tax revenue the sub-

national governments should collect. However, fiscal accountability does not mean that "each boat has to float on its bottom" and that sub-national governments have to collect tax revenues that are exactly equal to their expenditures. What is required is that the residents of a sub-national government bear the full cost of raising the marginal dollar of tax revenue used to finance its public expenditures. This will force the sub-national government to make appropriate fiscal decisions because it will have to compare the extra benefit from spending an additional dollar on a public service with the additional cost of financing it through the tax system. (Vertical fiscal balance means that the marginal cost of raising revenue is the same at all levels of the federation, not that expenditures exactly balance own tax revenues for each Although this way of defining vertical fiscal balance government in the federation. has not been widely adopted, it has the advantage of being consistent with the definition of an optimal fiscal system.) For reasons that are discussed below, most federations have found it advantageous to have a relatively centralized tax system and a relatively decentralized expenditure system. This implies the transfer of funds between different levels of government?usually from central to state and local governments. It may also require additional transfer to jurisdictions with low fiscal capacities or high fiscal needs. Our discussion of the tax assignment presupposes that an intergovernmental transfer system operates and at least partially fulfills this role.

#### Top-Down versus Bottom-Up.

There are two basic approaches to the tax assignment problem. The Top-Down approach takes the boundaries of the nation state as a given, adopts the perspective of the central government, and asks the question? What expenditure and tax powers should be decentralized to sub-national governments? The Bottom-Up approach starts from the perspective of a state or regional government and asks the question? What expenditure and tax powers should be transferred to the central government? With both approaches, the decision to centralize or decentralize fiscal functions is based on the desire to achieve efficient provision and funding of publicly-provided goods and services. However, the distribution of benefits and costs across states or regions may be quite different under alternative tax and expenditure regimes. The TD approach assesses the distributional implications from a national perspective whereas under the BU approach they are assessed in terms of their impact on the residents of a state.

Most of the academic literature and policy advice concerning tax assignment is implicitly based on the TD approach. However, the actual expenditure and tax assignments of many federations throughout the world reflects the BU approach because many federations, such as Australia, Canada, and the United States, were formed from the union of independent colonies. At the time these federations were formed, the independent governments had to decide how much power and which functions to cede to the newly-formed central government. Even in federations that were formed under the TD approach, the BU perspective is still highly relevant if regional or state governments have, implicitly or explicitly, the right to secede from the federation. Later, some of the differences between the TD and BU approaches to tax assignment will be noted, especially with regard to the allocation of natural resources revenues.

#### Governments: Benevolent Institutions or Exploitative Leviathans?

One's view of the appropriate tax assignment also depends on whether one thinks that governments provide fiscal policies which broadly promote the interests of the population as a whole, or whether governments are self-serving and exploitative

Leviathans. If one thinks that democratic institutions force governments to adopt fiscal policies that reflect the economic interests of most of the population most of the time, then one would want a tax assignment which allows governments to raise revenues in least the costly manner. However, if one thinks that governments always try to raise as much tax revenue as possible and then spend it largely on projects which promote the interests of politicians and bureaucrats, then one would want a tax assignment which makes it as difficult or as costly as possible for governments to raise revenues. The contrast between these different approaches is clearly delineated in their attitudes toward tax competition between sub-national governments. Under the benevolent government view, tax competition puts downward pressure on tax rates, leading to the under-provision of public services by sub-national governments. Under the Leviathan view, tax competition helps to constrain governments' rapacious appetites for tax revenues and improves citizens' well-being. Most policy advice regarding tax assignment is based on the benevolent view of government, and it is the one that I will adopt as a "working hypothesis" in this discussion. However, this optimistic view of government may not be valid in all countries and at all times.

#### **PRINCIPLES OF TAX ASSIGNMENT**

The assignment of tax revenue sources to the various levels of government in a federation has received relatively little treatment by economists. Although economists are not unanimous in their recommendations on this (or any other) issue, there is a "consensus" that support Richard Musgrave's list of general principles regarding tax assignment:

- 1. middle and especially lower-level jurisdictions should tax those bases which have low inter-jurisdictional mobility;
- 2. personal taxes with progressive rates should be used by those jurisdictions within which a global base can be implemented most efficiently;
- 3. progressive taxation, designed to secure redistributional objectives, should be primarily central;
- 4. taxes suitable for purposes of stabilization policy should be central, while lower-level taxes should be cyclically stable;
- 5. tax bases which are distributed highly unequally among sub-jurisdictions should be used centrally;
- 6. benefit taxes and user charges are appropriate at all levels.

These principles reflect a Top-Down, benevolent government approach to the tax assignment problem. <u>Table 1</u> shows the application of these principles in assigning the major tax bases imposed by governments.

There are a number of problems with the consensus view of tax assignment.

- The need to link expenditure decisions and taxation decisions to ensure an appropriate balance between the public and private sectors' claims on the economy is not stressed.
- The assignment of tax powers is not considered within the context of the central, state, or local governments' expenditure responsibilities or the system of intergovernmental grants that is to be used to bridge the gap between expenditure needs and own tax revenues.
- The distributional impact of state and local government fiscal policies is neglected. While the central government may have the primary responsibility for income redistribution programs, all levels of government will be concerned with the distributional effects of their tax policies. A tax assignment that only provides state and local governments with access to highly regressive taxes.

- will not be successful or enduring. Indeed, a case can be made for assigning some role to sub-national governments in redistributing income because taxpayers' concern for the poor may be largely focussed on those who reside in the same community or region.
- The problems created by the joint occupancy of tax fields are overlooked. Under the consensus view, some tax bases (individual income, payroll, sales, and excises) would be taxed by both the central and the state governments. When two levels of government co-occupy the same tax field, an increase the tax rate by one level of government will reduce the tax revenues received by the other level of government if the tax base shrinks because of tax avoidance, tax evasion, or disincentive effects. If each level of government ignores the effects of its tax policy on the tax revenues collected by the other level of government, then excessive levels of taxation may be imposed on the shared tax base. The general interdependence of tax bases, such as the payroll and consumption tax bases, means that the tax policies of one level of government can have positive or negative effects on the revenues of the other level of government even if each level of government has a separate tax base. That said, it would be advisable to have only one level of government impose excise taxes on tobacco products, alcohol and motive fuels. Deductibility of state and local payroll and property taxes from the central government's income tax base creates another form of revenue interdependence.
- The argument that central governments need access to individual and corporate income taxes, which act as built-in stabilizers for the economy, overlooks the fact that economic shocks are sometimes region-specific. In such cases, having the built-in stabilizers at state level may be a more effective means of smoothing economic cycles. Giving state governments access to substantial tax sources allows them to run deficits during regional recessions because their ability to borrow is often tied to their revenue generation capacity. Similarly, having a substantial revenue generation capacity enhances a state or local government's ability to borrow to finance public infrastructure.
- The consensus view places little emphasis on the administration and compliance costs of alternative tax assignment regimes. Such cost can be minimized if all levels of government adopt the same definitions for shared tax bases, apply the same formula in allocating income from interstate business among state governments, and use the same institution or procedures to administer tax collections.

The issues concerning three specific taxes (corporate income tax, value-added tax and natural resource revenues) merit more detailed examination.

#### Corporate Income Tax (CIT)

The main rationale for levying a corporate income tax is that it serves as a backstop for the individual income tax. In the absence of a corporate income tax, individuals could avoid individual income taxes by receiving income through a closely-held corporation. If the state governments are given the power to levy individual income tax, then they should be able to levy a corporate income tax to backstop their individual income tax or their system for collecting natural resource revenues.

As noted in <u>Table 1</u>, there are a number of problems with state corporate income taxes. The administration and compliance costs of such taxes are high if states use different definitions of taxable income or use different formulas for determining state tax liabilities on interstate transactions. (However, the Canadian experience indicates

that administration and compliance costs of the provincial CITs can be significantly reduced with tax base harmonization and a common tax administration.) Tax rate differentials distort the allocation of investment within the country. The allocation formulas, which use sales or payrolls to allocate business profits among states, convert the CIT into tax on sales and employment in high tax states and a subsidy for sales and employment in low tax states. Tax competition will keep state CIT rates low when investment is very mobile between states and when corporations can shift profits from high tax states to low tax states through transfer pricing and debt placement strategies. There are arguments for and against allowing states to levy corporate income tax; on balance, the arguments against seem more compelling.

#### Value-added Tax (VAT)

Most economists think that the value-added tax should only be levied by central governments. If state governments levy different VAT rates, input tax credits would be calculated at different rates on inputs are purchased in other states, leading to high administration and compliance costs. However, recent Canadian experience indicates that central and state-level governments can levy a dual VAT. In Newfoundland, Nova Scotia, and New Brunswick, a harmonized federal and provincial VAT, known as the HST, is levied on a uniform VAT base. The tax is administered by the federal government and imposed at a uniform rate of 15 percent. This reduces the fiscal autonomy and accountability of these provinces. An alternative dual VAT system operates in Quebec where the federal government levies the GST and the Quebec government levies the QST on a similar, but not identical, base. The tax rates are set independently, but both taxes are administered by the provincial government. In the view of Bird and Gendron (1998, p.8), "The GST-QST system has proved to be administratively feasible and capable of dealing satisfactorily with cross-border trade between registered firms while still providing all jurisdictions with considerable fiscal autonomy and avoiding arguments about who gets how much revenue."

#### **Natural Resource Revenues**

The assignment of natural resource revenues to the central government is based on the Top-Down perspective implicitly adopted under the consensus approach. If, on the other hand, one adopts the Bottom-Up perspective, then it makes sense for states to retain control of the natural resource revenue. The fact that state-level governments in Australia, Canada, and the United States have the power to levy resource royalties and severance taxes reflects the Bottom-Up perspective that undoubtedly influenced the constitutional assignment of tax powers when these federations were formed. The fact that most natural resources are geographically immobile makes them good candidates for taxation at the state level. Disparities in natural resource revenues can be handled through intergovernmental transfers. Resource rich states should recognize that it is in their interest to share some of their bounty with other regions to avoid unwelcome fiscally-induced migration and to foster national unity.

Assigning resource revenues to state-level governments is also consistent with the principle that "you should let people have what they can otherwise take". Control over natural resources has been an important factor in the outbreak of civil wars, especially in Africa. Allowing state governments to retain control over natural resources may help to reduce the potential for regional armed conflicts.

#### TAX ASSIGNMENT IN FEDERAL COUNTRIES

Figure 1 shows the wide variation in the percentage of total tax revenues collected by sub-national governments in the eight countries that the OECD classifies as federations. The state and local governments play no role in levying taxes in Mexico, and in Australia and Austria, sub-national governments levy only 20 to 30 percent of taxes. In Belgium, Germany, and the United States, the sub-national governments' shares of tax revenues are in the 40 to 50 percent range. More than half of total general government tax revenues are levied by the sub-national governments in Canada and Switzerland.

Given the wide variation in the shares of tax revenue collected by central and subnational governments, it is not surprising that there are major differences in central governments' shares of the major tax bases. Figure 2 shows that in the countries where the central government levies over 70 percent of taxes? Australia, Austria, and Mexico? the central government also collects over two-thirds of the individual income, corporate income and sales and excise tax revenues. In the countries where the subnational governments have a major share of taxes, the central governments' shares of these tax sources are correspondingly reduced. The allocation of tax revenues in Germany and Switzerland completely contradicts the consensus position, with more than half of the individual and corporate income taxes levied by sub-national governments and more than half of sales tax revenue levied by the central governments. One common feature in all of these countries is that property taxes are levied by local governments.

Table 2 shows that there is also considerable variation in the degree to which state and local governments are dependent on grants from other levels of government. State governments in Australia are the most dependent on grants from the central government, and they are the least dependent in Canada. On the other hand, grants are a relatively small share of local government revenues in Australia, but are significant source of revenue for local governments in Canada. Almost 60 percent of local government revenues in Belgium are grants.

#### THE IMPACT OF GLOBALIZATION ON FEDERATIONS

Globalization may lead to an increase in the fiscal powers of sub-national governments. On the expenditure side, globalization means that greater emphasis will be placed on the public services provided by sub-national governments, especially education and infrastructure, in order to attract investment high tech industries and skilled workers. On the tax side, globalization may increase the relatively tax capacity of sub-national governments. Of course, national boundaries matter, and capital, goods, services, and skilled labour are not as mobile between countries as they are within countries. However, these tax bases are becoming increasing mobile internationally, making the central government's tax revenues more sensitive to international tax rate differentials and reducing the force of the argument that taxes powers have to be vested with the central government.

Increased globalization will put downward pressure on corporate income tax rates as it becomes increasingly easy for corporations to shift profits from high to low tax countries through transfer pricing and debt placement. Increasingly, the investment income of residents will be earned off-shore, making enforcement of income tax collection on a residence basis more difficult. Countering this trend to lower income tax rates is the increased opportunities for "exporting" tax burdens because an increasing proportion of the property and capital employed in the economy will be foreign-owned. On balance, revenues from the less mobile tax bases?property, payrolls, and sales?will become increasingly important components of the tax mix, and these are the taxes that are levied by state governments in many federations.

Thus, globalization may strengthen, at least in relative terms, the tax powers of state and local governments, while at the same time increasing the public's willingness to pay these taxes in exchange for the public goods that sub-national governments provide, principally education and infrastructure.

#### **REFERENCES**

Bird, Richard M. and Pierre-Pascal Gendron (1998) "Dual VATs and Cross-Border Trade: Two Problems, One Solution?" International Tax and Public Finance Vol. 5 No. 3: 429-442.

McLure, Charles E. Jr. (1983) Tax Assignment in Federal Countries Centre for Research on Federal Financial Relations, Australian National University, Canberra, Australia.

McLure, Charles E. Jr. (1994) "The Tax Assignment Problem: Ends, Means, and Constraints" Australian Tax Forum Vol. 11 No.2: 153-183.

Musgrave, Richard A., (1983) "Who Should Tax, Where, and What?" in Charles E. Jr. McLure, (editor) Tax Assignment in Federal Countries, Centre for Research on Federal Financial Relations, Australian National University, Canberra, Australia.

Figure 1

### Percentage of General Government Tax Revenues Collected by Sub-national Governments in 1996

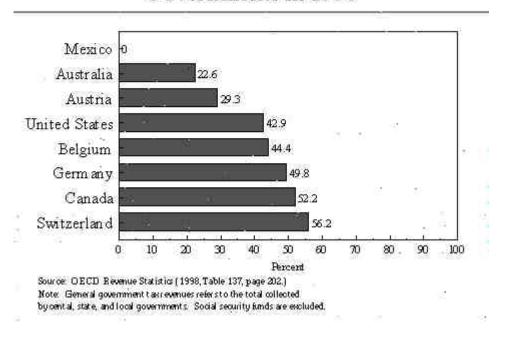
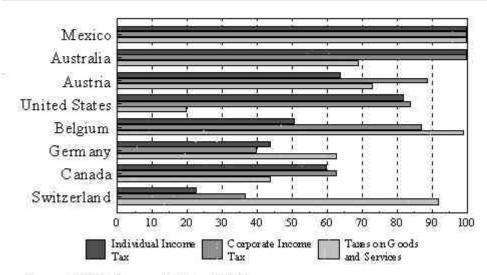


Figure 2

## The Central Government's Share of Major Tax Bases



Source: OECD Revenue Statistics (1998).

<u>Table 1</u>
The Consensus View of Tax Assignment in Federations

Tax	Assignment	Justification/Comments
Individual income tax	Central and state governments	The central government should play the dominant role in the income tax field because the central government should be primarily concerned with income redistribution, and capital and some high income earners are highly mobile. State income tax should be levied on a residence basis.
Corporate income tax	Central government	There are significant administrative problems and high compliance costs with state corporate income taxes. The corporate tax base is highly mobile because transfer pricing and debt placement can be used to shift profits across state boundaries. Differences in state corporate tax rates distort the location of investment projects.
Payroll taxes	Central and state governments	Can be imposed by both central and state governments, especially if linked to benefit programmes.

Wealth, inheritance and estate taxes	Central government	Assigned to the central government because of its primary role in income redistribution. The high mobility of these bases leads to excessive tax competition at the state level.	
Property taxes	Central, state and local governments	Can be imposed by all levels of government, but it is the only major tax that local governments can levy because land is immobile. (Investment in capital is, however, mobile.) A case can be made for reserving this tax base for local governments.	
Consumption taxes	0		
Retail sales taxes (RST)	Central and state governments	RSTs have relatively low administration costs, but consumer services are often not taxed while business inputs and exports are taxed, leading to competitiveness issues. Differential RST rates can lead to cross-border shopping especially if levied by local governments.	
Value added tax (VAT)	Central government	A destination-based VAT with credits for tax paid on inputs is very difficult to administer if state governments impose different tax rates.	
Excise taxes	Central and state governments	Taxes on commodities such as alcohol beverages, tobacco products, and motive fuels. Can be linked or earmarked to associated expenditures on streets, highways, and health care.	
Tariffs	Central government	State governments should not impose import duties in order to avoid the distorting inter-state trade.	
Natural resource revenues (e.g. resource royalties and severance taxes)	Central government	For equity reason, assigned to the central government because these revenues are usually unequally distributed among sub-national governments. The fiscal disparities created by sub-national governments receiving natural resource revenues can lead to fiscally-induced migration of labour and capital, causing the misallocation of these resources.	
Users charges (including environmental levies)	Central, state and local governments	These are appropriate fiscal instruments for all levels of government.	

<u>Table 2</u>

Grants as a Percentage of Total Revenues of State and Local Governments

State Governments	Local Governments
45%	20%
43%	15%
23%	38%
na	59%
24%	35%
20%	46%
30%	18%
	45% 43% 23% na 24% 20%

Source: Government Finance Statistics Yearbook, International Monetary Fund, Washington, DC., 1997.

Notes: Total revenues include government grants. Data are for the 1993 fiscal year. Comparable statistics for Mexico are not available.

Forum of Federations / Forum des fédérations forum@forumfed.org