Recent Developments in Tax Coordination: A Panel Discussion by Bev Dahlby, Robert Henry, Michael Keen, and David E. Wildasin*

------------------------- Rapporteurs: Jack M. Mintz and Michael Smart**

ABSTRACT
In May 1999, a panel discussion on tax coordination took place at the annual meetings of the Canadian Public Economics Study Group. The panelists were Bev Dahlby of the University of Alberta, Robert Henry of the Department of Finance, Michael Keen of the International Monetary Fund, and David E. Wildasin of Vanderbilt University. This article presents an edited version of the panelists’ comments, followed by a brief summary of questions from the audience and panelists’ responses.

INTRODUCTION
In recent years, problems in coordinating tax policies among national and subnational governments have assumed greater importance in federal states. In Canada, several recent developments have brought tax coordination to the fore in federal policy debates. These developments have been particularly visible in the fields of sales taxation (agreements to harmonize the federal goods and services tax [GST] with provincial retail sales taxes) and personal income taxation (the recent agreement giving provinces the power to levy “tax on income”). In the realm of business taxation as well, spillovers among governments are of increasing

* The panel discussion was organized by the Department of Finance, Ottawa, and the Institute of International Business and the Institute for Policy Analysis, both of the University of Toronto. It took place on May 26, 1999, at the annual meetings of the Canadian Public Economics Study Group, University of Toronto. Bev Dahlby is director of the Institute for Public Economics and professor of economics at the University of Alberta; Robert Henry is of the Intergovernmental Tax Policy Division, Department of Finance, Ottawa; Michael Keen is of the International Monetary Fund, Washington, DC; and David E. Wildasin is of the Department of Economics, Vanderbilt University, Nashville, Tennessee.

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concern. The recent report of the Technical Committee on Business Taxation\(^1\) devoted considerable attention to improving federal-provincial coordination on business tax issues.

With these considerations in mind, the federal Department of Finance, the Institute of International Business, and the Institute for Policy Analysis (both institutes of the University of Toronto) brought together a panel of international experts to discuss recent developments in subnational tax coordination. The panel discussion took place at the annual meetings of the Canadian Public Economics Study Group (CPESG) at the University of Toronto in May 1999. The distinguished panel consisted of Bev Dahlby of the University of Alberta, Robert Henry of the Department of Finance, Michael Keen of the International Monetary Fund, and David E. Wildasin of Vanderbilt University.

Remarks of the panelists are presented, in somewhat revised form, in the four papers published here. The panelists’ papers can be summarized as follows:

- Robert Henry provides a summary of the recent history and current state of federal-provincial tax coordination, in a way that “sets the scene” for the papers that follow. Discussing the long process of decentralization of tax powers in the post-war period, Henry points out that provinces together now account for about the same share of total revenues as the federal government, a situation unparalleled among federations in the world. He discusses in detail recent changes to the tax collection agreements (TCAs), which will permit provinces to levy tax directly on personal incomes, rather than as a percentage of basic federal tax, and establish a cost structure for federal administration of provincial tax measures. The result, he suggests, is a system that allows provincial flexibility but encourages national harmonization.

- Bev Dahlby outlines problems of tax spillovers that arise in a federation, with particular emphasis on business taxes. Canada’s system of corporate income and capital taxes is reasonably successful at “horizontal” (interprovincial) coordination, he suggests, because tax bases are largely harmonized, a common allocation formula is used, and most provinces cede tax administration to the federal government through the TCAs. (Dahlby points out, however, that while a common allocation formula may limit the tendency of provinces to compete excessively in attracting tax bases, it cannot eliminate such competition. Moreover, the formula can have perverse effects, even causing much of the incremental burden of corporate taxes to fall on labour.) On the other hand, “vertical” coordination is poorer, because federal and provincial governments often occupy the same tax bases, and this overlap may lead to excessive rates of taxation.

- Michael Keen provides a fascinating look at how value-added taxes (VATs) work within a federation. In Canada in recent years, the federal government has

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\(^1\) Canada, Report of the Technical Committee on Business Taxation (Ottawa: Department of Finance, April 1998) (herein referred to as “the Mintz report”).
devoted considerable time and expense to inducing provinces to replace retail sales taxes with a single harmonized, national VAT. Keen points out that, because so much trade occurs across provincial borders, it is very difficult to design a system that gives provinces autonomy in setting tax rates while preserving a consistent system of taxation nationwide, based on the destination principle. Keen considers and rejects systems based on “zero-rating” of interprovincial exports and on the “clearing house” mechanism apparently favoured by the European Commission. He then considers two innovative proposals for subnational VATs, the “compensating VAT” (CVAT) and the “viable integrated VAT” (VIVAT), which, he argues, give provinces complete flexibility in setting tax rates without significant increases in compliance costs for taxpayers or administrative complexity for governments. The key point is that the federal GST provides opportunities for more flexible arrangements as compared to the European situation where there is no central VAT on which national states can base their own systems.

- David Wildasin compares subnational corporate income tax systems in Canada and the United States, and he provides an extensive discussion of emerging issues in US corporate taxation. He agrees with other panelists that Canada’s system, based largely on national agreements, creates a tax regime that is simpler, more transparent, and perhaps less likely to induce distortions in economic activity among jurisdictions than is the case with the US system. On the other hand, US states have experimented more in setting policies to meet local needs. He discusses the current ambiguities in US tax law on establishing “nexus” between a business and a state, which is the basis for states’ taxation powers. Nexus is a particularly thorny issue for trade in intangibles, such as income derived from financial transactions, intellectual property, and, perhaps, electronic commerce. Wildasin reviews the economic considerations that suggest states should not have the power to tax intangibles.

We conclude with a précis of questions from the audience and answers from the panelists. We wish to thank Christine Neill for her assistance in preparing this section.

**TAX COORDINATION IN CANADA: SETTING THE SCENE**

**Robert Henry**

The interest of the Department of Finance in sponsoring this type of session, as we did in 1998 with the session on the Mintz report, is to try to forge a better link between the policy work that we do in Finance and the research undertaken in the academic community. This year, we have focused on the issue of tax

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The clearing problem may be readily resolved, however, if there is an overarching federal system. For then in either case it is in principle possible to internalize the clearing of taxes on interprovincial sales and so avoid the incentive problems otherwise involved in running clearing through national tax administrations. This is not to say, of course, that a lower-level VAT is appropriate for all federations: in some the provinces will be too small for cross-border shopping to be controlled, or the capacity of provincial tax administrations will be too weak. There is also a range of issues that arise in designing a CVAT or VIVAT that I have not been able to develop here. These conceptual advances have been enough, however, to put the feasibility of lower-level VATs firmly on the tax reform agenda.

STATE AND PROVINCIAL CORPORATE INCOME TAXATION: CURRENT PRACTICE AND POLICY ISSUES FOR THE UNITED STATES AND CANADA

David E. Wildasin

Introduction

In both the United States and Canada, subnational governments derive significant amounts of revenue from corporate income taxes. In the United States, state governments collected approximately US $31.1 billion from this source in 1998, amounting to 6.5 percent of the tax revenue of state governments. In Canada, provincial governments collect taxes on corporate income as well; revenues from the taxation of corporate income (and, secondarily, from taxation of capital) in 1997-98 were Cdn. $14.7 billion, 10.9 percent of provincial government own-source revenue and 9.3 percent of total revenue.

While corporate income taxes are thus important revenue sources for subnational governments in both the US and the Canadian federations, reliance on these taxes varies substantially among states and provinces. For example, several states—Nevada, Washington, and Wyoming—have no corporate income tax at all, and the corporate income tax contributes less than 4 percent of total revenues for several other states. By contrast, four states—Alaska, Delaware, Michigan, and New Hampshire—derived more than 10 percent of total revenues from this source in 1998. Many states have a single corporate income tax rate,

61 This paper is based on my presentation at the May 1999 meetings of the Canadian Public Economics Study Group, held at the University of Toronto. I am grateful to Jack Mintz for his very helpful detailed review of an earlier draft, and also to A. Castonguay and M. Mansour of the Department of Finance for their valuable comments. I am particularly indebted to Robert Henry, M. Mansour, and S. Gonzalez, all of the Department of Finance, for providing data and answers to many questions concerning Canadian provincial income taxation. None of these individuals, however, bears any responsibility for opinions, errors, or omissions in the following discussion. I also thank the Department of Finance for financial support that made possible my participation in the CPESG conference.
but others apply different rates depending on the level of corporate income. Tax rates in the range of 6 to 8 percent are common, but tax rates of 5 percent or less prevail in a dozen states while as many have rates in excess of 9 percent. There is also substantial variation among the Canadian provinces in the use of corporate income taxes. Provincial corporate income tax rates vary by type of corporation; for large Canadian corporations, they range from a low of 5 percent for manufacturing firms in Newfoundland to 17 percent for both manufacturing and non-manufacturing firms in Saskatchewan, Manitoba, and New Brunswick.

The implementation of a corporate income tax at the subnational level raises a number of interesting and interconnected issues for economic policy, tax administration, and political economy. These issues are of growing importance in an economic environment characterized by increased interregional economic integration, innovative business organizational structure, and the prospect of more information-based and electronic commerce (“e-commerce”).

The next section of this paper discusses some of the fundamental issues that arise in corporate income tax policy at the subnational level. It also reviews recent experience in the United States and Canada, a comparison that is quite instructive because these two federations, which have many similar economic, social, political, and legal institutions, nevertheless have taken quite different approaches to the implementation of subnational corporate income taxes. In particular, US practice exhibits considerable state-to-state variation, whereas policies in Canada are far more uniform. Of particular interest is the divergence between Canadian and US practice regarding the “nexus” issue—that is, the determination of the conditions under which a given corporation is taxable by a province or state. Under current Canadian practice, provinces can tax only corporations with “permanent establishments” within their jurisdiction. In the United States, by contrast, the nexus issue is at present the subject of a legal and policy controversy, revolving particularly around the question whether states may tax corporations that are not “physically present” within their boundaries. A later section of this paper discusses in greater detail the economic consequences of alternative approaches to this “nexus” issue—that is, to the determination of which corporations may or may not be taxed by state or provincial governments. The final section of the paper presents a brief summary.

**Fundamental Issues for State/Provincial Corporate Income Taxation**

Corporations differ from natural persons in at least two respects that are particularly important for subnational income tax policy. First, the location of a corporation is often not easily defined. The spatial location of an individual, at any moment in time, is definite and, for most practical purposes, verifiable. A corporation, by

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62 There is an even lower 2.5 percent rate for manufacturing firms in Yukon.
contrast, can simultaneously undertake economic activities in several or many places; moreover, although it may as a legal matter have a place of incorporation, its location, like its very existence, is a matter of judicial construction and interpretation, not an obviously verifiable matter of fact. Second, again unlike natural persons, corporations can merge, subdivide, or be acquired, dissolved, and restructured in many ways and to varying degrees. When legally distinguishable business entities are affiliated in some fashion, the question arises as to whether tax liabilities should be determined for each entity in isolation or for several in combination.

These two issues—the location and identification of the tax-paying entity—are often intertwined because legal forms of business organization frequently reflect the spatial organization of corporate functions. For example, a parent corporation may own or acquire, in whole or in part, a corporation with operations in one state or province in which components are fabricated and then shipped to the parent (or another subsidiary’s) plant in another state or province; the final product may be marketed through a corporation that manages a network of franchisees or dealers in many states or provinces, with customer purchases financed by a separate corporate entity that engages in other general consumer credit operations. If an expansive definition of the tax-paying unit is utilized, many or all of these potentially separable business activities will be viewed as part of a unified whole, and that whole or aggregate will then be viewed as “present” in a large number of locations. If, however, these units are not aggregated, each may be considered to be located in only one or a few jurisdictions.

Complex structures of business organization present fewer difficulties for tax policy at the national level, provided that all of the activities of a group of affiliated or related corporations occur within a single country and provided that the corporate income tax is applied at a single rate to all income, calculated on a uniform basis and with full offsets for losses. In this case, different groupings of corporations for tax purposes will affect the tax liabilities of individual entities, but not the total amount of taxable income in the corporate sector of the economy or the total amount of tax revenue collected. At the subnational level, however, the identification of taxable entities and groups and the apportionment of income among them, especially in the presence of interstate/interprovincial tax rate differentials, becomes of critical importance. The resolution of these issues affects the economic incentives created by subnational corporate income taxes.

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63 It is an oversimplification to characterize either the US or Canadian corporate income taxes as strictly proportional taxes with full loss offsets. Moreover, intra- and intercorporate multinational business activity is important for both the United States and Canada, raising issues that are substantially similar to those that are the focus of the following discussion. As a matter of degree, however, these issues are more acute at the subnational than at the national level.

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and thus their impact on business organization and resource allocation, the amounts of revenue accruing to taxing jurisdictions, and the incentives that subnational governments themselves face in setting their tax policies.

As suggested by the foregoing remarks, there are three basic issues that must be resolved in the implementation of corporate income tax policy at the subnational level:

1) Where is the tax-paying unit located for tax purposes—that is, in which jurisdiction(s) will the taxpayer be taxed?

2) What is the identity of the tax-paying unit? In particular, if there are several corporate entities, are they treated as distinct and separate units for tax purposes or are they combined?

3) If the taxpayer is taxable in more than one jurisdiction, how is the taxpayer’s income to be apportioned (or “allocated”) among them?

While these issues can be distinguished from one another, they are highly interconnected. The issue of apportionment has, perhaps, attracted the most attention from economists—mainly, however, with an eye to understanding the economic incentives that different apportionment rules create for business activity.64

The following discussion describes how these fundamental issues are managed within the current Canadian and US fiscal systems. It focuses especially on the “where” question, a point of significant divergence in US and Canadian practice.

What Is a Tax-Paying Unit and How Is Its Income Apportioned?

Many aspects of the taxation of the income of corporations by subnational governments differ as between the United States and Canada. Before turning to the “where” question, the discussion below briefly summarizes some of the other main features of current US and Canadian practice.

Identifying the Tax-Paying Unit: “Who”

The economic and legal linkages among corporations take a wide variety of forms. Sometimes, one corporation completely owns and controls one or more other corporations. Sometimes, corporations have no direct commercial connection whatsoever with one another. But in many cases, the degree of connection between two or more corporations falls somewhere between these two extremes. Mergers, acquisitions, explicit and implicit long-term contracts, consortiums,

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64 See, for example, Gordon and Wilson, supra footnote 15; K.D. Edmiston, “Optimal Factor Weights in State Corporate Income Tax Apportionment Formulas” (unpublished, Georgia State University, 1998); K.D. Edmiston, “The Manipulation of State Corporate Income Tax Apportionment Formulas as an Economic Development Tool” (unpublished, Georgia State University, 1999); Mintz, supra footnote 16; and Goolsbee and Maydew, supra footnote 19, and references therein for discussion of apportionment issues.
and innumerable other business and contractual forms give rise, in practice, to almost any conceivable degree of integration between different businesses. For the purposes of state and provincial income taxation, it is critically important to determine where one corporation begins and another ends in order to determine a corporation’s taxable income and to determine which corporations are taxable at all by a given state or province. At a conceptual level, it is not obvious how this issue is best resolved for tax purposes, and it deserves more attention from economists than it has so far received. For present purposes, a concise description of existing policy will have to suffice.

First, in Canada, individual corporations are taxed separately; each is liable for corporate tax on its own income. Corporations and their income cannot be combined for provincial corporate income tax purposes. If related corporations engage in transactions with one another, these transactions must be valued at arm’s-length prices in order to determine the income of each individual corporation. Whatever other possible economic merits or demerits it may have, the Canadian approach is quite simple and transparent.

In the United States, by contrast, the definition of the tax-paying unit varies considerably by state, subject to constitutional restraints. Some states insist on treating affiliated corporations as a single entity, so that (for example) the income of a parent corporation and its subsidiaries must be aggregated for tax purposes. Other states allow or require separate accounting for distinct corporations, analogously to Canadian practice. Of course, from the viewpoint of the system as a whole, it is problematic for different states to apply different rules to individual corporations or corporate groups.

Income Apportionment/Allocation: “How Much”

Whenever a corporate entity is taxable in more than one state or province, the question arises as to how much of its income is taxable in each jurisdiction. In both Canada and the United States, corporations must apportion their income among the taxing jurisdictions.

Under Canadian practice, a corporation must allocate its income among the provinces using a two-factor formula. The corporation first determines what

65 For information about business taxation in Canada generally, and for some discussion of provincial corporation income taxation in particular, see the Mintz report, supra footnote 1.


67 Different allocation rules may apply to corporations in certain sectors, such as finance or transportation. See the Mintz report, supra footnote 1, for additional details.
portions of its revenues and payrolls are attributable to each province where it is taxable. These two factors are then used, in an equally weighted fashion, to allocate the corporation’s income among the provinces. Although individual provinces could in principle depart from this two-factor approach, in fact their policies are harmonized; harmonization is facilitated by the federal government, which assists 7 of the 10 provinces in the administration and collection of their corporate income taxes.

US practice is, again, determined by the individual states, subject to overall constitutional constraints. As revealed in past Supreme Court decisions, these constraints dictate that states use “fair” apportionment rules but do not mandate the use of specific formulas.

About half of the states are members of the Multistate Tax Compact (MTC), which recommends, as a model, that all states should apportion income on the basis of a three-factor formula in which a corporation’s share of revenues, payroll, and assets within each state are equally weighted. The MTC’s model legislation (the Uniform Division of Income for Tax Purposes Act, or UDITPA), however, is not binding on MTC members.

In part because of the influence of the MTC and in part because of historical practice, this simple three-factor apportionment rule is often viewed as the customary practice in the United States. However, states need not, and most now do not, follow the equally weighted three-factor formula for income apportionment. Increasingly, states have come to rely on the sales factor as a primary determinant of the allocation of income. For example, about 20 states now double-weight the sales factor; some attach a weight of one-half to the sales factor, others a weight of between one-third and one-half. Several states even use sales as the sole factor for income apportionment, and a number of states are in the midst of a phased increase in the reliance on the sales factor. Thus, although the “traditional” three-factor formula is sometimes used by states, it would be more accurate to describe the situation in the United States as one where sales are generally used as an apportionment factor, often supplemented by other factors. An interesting question for economic analysis, briefly discussed further below, is to consider why the states may wish to alter their apportionment rules over time.

**Nexus: “Where”**

If it is difficult to determine what a tax-paying unit is for subnational corporate income tax purposes, and if it is difficult to decide how to divide the income of multijurisdictional entities among states or provinces for tax purposes, one might have thought, at least, that it would be relatively easy to determine whether a particular corporation is or is not taxable by a given state or province. Indeed, as Canadian experience shows, straightforward solutions to this problem are possible; as US experience shows, however, complex solutions also are possible.
Canadian Practice

In Canada, a corporation is liable for income taxation within a province if it has a “permanent establishment” there. This policy is uniform throughout the country. The precise interpretation of “permanent establishment” could perhaps be the subject of some dispute, but the concept is fundamentally quite clear: as described in Revenue Canada’s Corporation Income Tax Guide:

A permanent establishment in a province or territory is usually a fixed place of business of the corporation, which includes an office, branch, mine, oil well, farm, timberland, factory, workshop, or warehouse. If the corporation does not have a fixed place of business, the corporation’s permanent establishment is the principal place in which the corporation’s business is conducted.68

In particular, it is clear from this definition that a corporation that has no assets, employees, or other tangible presence in a province is not subject to income taxation there.

US Practice

US states, acting independently, have implemented corporate income taxes with varying definitions of the types of business activities that are subject to taxation. These may include activities that produce income from property within the state, those “doing business” in the state, those that are legally incorporated within the state, and so forth. Broadly speaking, the federal government (Congress and the president) have not intervened heavily in state corporate income tax policy. Because the ability of states to tax corporate income is not, for the most part, spelled out in federal statutes, state taxing powers are limited mainly by the US constitution, as interpreted by the courts, especially the US Supreme Court. The courts have proceeded cautiously in elaborating the meaning of the constitution in this area, leaving many questions open for future decisions. Thus, the story of US state corporate income tax policy is inevitably a story of legal decisions and interpretations—treacherous ground for economists, perhaps, but ground that must be covered if the current state of policy and policy controversy, especially regarding the nexus issue, is to be understood.69

Under now well-established interpretations of the constitution, state fiscal policies cannot interfere unduly with interstate commerce (this would violate the “commerce” clause),70 nor can the states arbitrarily collect taxes from persons (individuals and businesses) located beyond their boundaries (this would violate

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69 See Richard D. Pomp and Oliver Oldman, State & Local Taxation, 3d ed. (Hartford, Conn.: R.D. Pomp, 1998), for a thorough treatment of the constitutional issues involved in state and local taxation and for the text of important court opinions in this area.
70 According to article I, section 8 of the constitution, “[t]he Congress shall have Power . . . [t]o regulate Commerce with foreign Nations, and among the several States.”
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the “due process” clause). In particular, the due process clause has been held to imply that a state can tax only businesses or people with a “sufficiently strong” physical or other relevant connection to it. Without some such requirement, a state could conceivably attempt to tax the income of all individuals and businesses located anywhere in the nation. The term “nexus” is used to describe the connection between a state and a taxpayer. The challenge for jurists and policy makers has been to decide what should constitute nexus.

The determination of nexus becomes complicated when dealing with corporations whose activities, in some direct or indirect fashion, extend beyond the boundaries of a single state. As a broad generalization, it is accurate to say that a corporation’s exposure to state income taxation is at least as great, under current US practice, as it would be to provincial income taxation in Canada. That is, a corporation that has an “establishment” in a state would have nexus in that state. It is probably also true that the activities of employees or agents of firms in a state may establish nexus more readily than would be the case for provincial corporate income taxation in Canada. For example, the regular presence of employees carrying out the firm’s business activities within a state—which would often but not necessarily be associated with a physical place of business (an “establishment”)—would also typically create nexus. But there are grey areas where matters are more debatable. For example, if a firm’s employees

71 The fifth amendment, in addition to providing well-known protections against self-incrimination, provides that “[n]o person shall . . . be deprived of life, liberty, or property, without due process of law.”

72 This basic principle was enunciated in the Supreme Court’s decision in Miller Bros. Co. v. Maryland, 347 US 340 (1954), a case dealing with sales and use taxes rather than corporate income taxation but no less relevant in this context. As to whether a state could tax a corporation, the court wrote, ibid., at 344-45, “Despite the increasing frequency with which the question arises, little constructive discussion can be found in responsible commentary as to the grounds on which to rest a state’s power to reach extraterritorial transactions or nonresidents with tax liabilities. Our [the court’s previous] decisions are not always clear as to the grounds on which a tax is supported, especially where more than one exists; nor are all of our pronouncements . . . consistent or reconcilable. A few have been specifically overruled, while others no longer fully represent the present state of the law. But the course of decisions does reflect at least consistent adherence to one time-honored concept: that due process requires some definite link, some minimum connection, between a state and the person, property or transaction it seeks to tax.” The entire quotation is of interest because it illustrates the sense of ambiguity that pervades US discussions of this and similar issues.

73 It should be noted that, at least from the perspective of economic policy, “nexus” could conceivably be defined as the taxpayer’s having a sufficient link with a state to be subject to the state’s sales tax but simultaneously not to have a sufficient link for the state to subject the taxpayer to income taxation. In the following discussion, the term “nexus” should be taken to mean “nexus for corporate income tax purposes.” Charles E. McLure Jr., “Electronic Commerce and the State Retail Sales Tax: A Challenge to American Federalism” (May 1999), 6 International Tax and Public Finance 193-224, offers a recent discussion of the taxation of e-commerce, including the nexus issue, emphasizing the taxation of retail sales.
attend a trade show in a state where the firm has no other activities, or if vehicles owned by the firm pass through a state in which the firm has no other presence, a state might claim the right to tax the firm but a court might view such a connection with the state as insufficient to establish nexus.74

Can states tax the income of a corporation by virtue of the fact that the corporation derives revenues from the sale of goods or services within a state? One might have thought that the commerce clause, the due process clause, or both, would protect corporations from income taxation on this basis; otherwise, it would seem that states would be impeding interstate commerce by exposing corporations to income taxation merely for the act of engaging in such commerce. In fact, however, the Supreme Court (in its 1959 decision in Northwestern Cement Co. v. Minn.)75 rejected arguments to this effect. The court’s decisions in this and related cases led Congress to become directly involved in the nexus issue in 1959 when it passed Public Law 86-272, the major statutory feature of current US practice.76 This law prevents a state from imposing a tax on the income of a corporation whose only connection with the state is its “solicitation of orders” for tangible goods. Thus, for example, a company might send its representatives into a state to facilitate sales without establishing nexus—subject to certain provisos, for example, that orders from such customers “are filled by shipment or delivery from a point outside the state.” Under this statute, mail-order businesses, and presumably businesses engaged in e-commerce transactions involving tangible goods as well, can protect themselves from income tax liabilities that would otherwise arise solely because of their participation in interstate commerce. Note that US practice is, in this respect, similar to that in Canada, where businesses that sell goods and services in a province but have no establishment there are exempt from that province’s corporate income tax.

While PL 86-272 clarifies the nexus issue, it has nevertheless been the subject of significant litigation, in part because of the difficulty of separating “solicitation of orders” from other business activities not protected by the statute. For example, sales representatives of the Wrigley Company working in Wisconsin would stock display racks with chewing gum and, if they encountered stale gum

74 Some states have established “safe harbour” rules that assure corporations that they can undertake certain activities without risking taxation: for example, California has declared that it will not attempt to tax the income of corporations merely because they send employees to participate in trade shows within the state. Under the Canadian “permanent establishment” criterion, it seems clear that provinces could not elect to tax corporations in such circumstances in any case.


at retail outlets, would replace it with fresh product. In *Wisconsin Department of Revenue v. Wrigley Co.*,\(^\text{77}\) the Supreme Court found that these activities were not “ancillary” to “solicitation of orders” and that the state could therefore tax Wrigley’s income; a minority, however, considered that these activities were part and parcel of solicitation of orders and that Wrigley therefore could not be taxed on these grounds.

If courts are divided on such issues as the definition of “solicitation of orders,” it will come as no surprise to learn that PL86-272, which makes specific reference to *tangible* goods, does not appear to be of much help in settling another rather closely related issue—that is, whether the fact that a corporation derives revenues from the sale or licensing of *intangible* goods and services results in a tax liability. If a corporation has no establishment in a state, if it has no employees in a state, and if it sells no tangible products in a state, can it possibly have nexus there for corporate income tax purposes?

This issue has attracted renewed attention since the decision by the Supreme Court of South Carolina in *Geoffrey, Inc. v. SC Tax Com’n*.\(^\text{78}\) In this case, an out-of-state corporation (Geoffrey) licensed trademarks to retailers in South Carolina in exchange for royalties. The court held that the corporation’s income (properly apportioned) was indeed taxable within the state. Fundamentally, the same questions would arise in connection with the sale or licensing of any intangible products or assets, such as income arising from financial transactions, patents, and other intellectual property. The delivery of goods or services by electronic means—and thus a large fraction of e-commerce—would presumably also be viewed as sales of intangibles. For example, a corporation that allows customers in other states to download software from its Web site would be engaged in interstate commerce in intangibles. Whereas these sorts of transactions would not in themselves establish nexus if they involved *tangible* goods and services, it is an open question whether federal courts would uphold state courts, such as those in South Carolina, in cases involving intangibles, or whether instead they would see valid commerce clause or due process clause arguments for protecting corporate income from state taxation in these cases. Some of the economic pros and cons of alternative decisions are discussed below.

### Intangibles and Nexus in Integrated Economies

The foregoing discussion has identified several important differences between the US and Canadian approaches to subnational corporate income taxation. It also reveals an interesting contrast in the fundamental institutional approaches to policy making. In part owing to the influence of the federal government, Canada’s policies are far more uniform than is the case in the United States. As

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\(^\text{78}\) 437 SE 2d 13 (SC 1993).
compared to Canadian provinces, US states have exercised much more latitude in determining basic elements of their corporate income tax policies. Allocation formulas, the treatment of affiliated corporations, and even, to some extent, the fundamental issue of nexus have been left largely under the control of the states, subject, however, to overall constitutional constraints. Since these constraints are quite general in nature, the US experience is characterized by heavy reliance on the courts to determine, in an evolutionary process with gradual accretion of precedent, the framework within which states may set their policies. The greater transparency, simplicity, and uniformity of the Canadian system, on the one hand, and the greater flexibility of the US system, with more latitude for policy experimentation and for variability of policy in accordance with local priorities and economic circumstances, on the other, are no doubt attributable to basic institutional differences in the ways that policy is formulated.

As noted above, the issue of nexus is currently the subject of legal dispute and controversy in the United States. The Geoffrey case raises the prospect that corporations may become subject to income taxation in states where they have no physical presence. Ultimately, the US Supreme Court will likely be called upon to resolve this issue in the light of constitutional principles; but, however the issue is resolved in the judicial process, it raises quite intriguing and important questions for economic policy. Indeed, precisely because of the legal uncertainties, this may be an unusually opportune time to review the economic policy implications of the nexus issue.

To indicate the context of the current debate, it should be noted that states vary widely in their treatment of corporations that derive income from intangibles. In particular, the income from intangibles is not taxed in some states, namely, a state such as Nevada, which has no corporate income tax at all, or Delaware, which explicitly exempts from taxation corporations that derive income only from trademarks and similar intangible assets. In accordance with standard models of fiscal competition, it is easy to see why some states might not wish to impose a tax on the income of companies with few or no tangible assets: these companies use few, if any, state-provided services and thus impose few costs on them. In order not to discourage the commercial activity associated with trademark protection companies, a state might well provide preferential tax treatment of these corporations.

But consider the implications of such a policy on the part of one or a few states for the corporate income tax in other states. Suppose, as an example, that a corporation in Georgia derives profits from the sale of a product with a well-known trademark. The firm may have invested heavily in the promotion of the trademark and this may result in a high level of corporate profitability. These profits could result in substantial income tax liabilities in Georgia, with its 6 percent corporate income tax rate. Suppose, however, that the trademark of the Georgia corporation is transferred to a corporation in Nevada, Delaware, or some other state where trademark royalties and other returns to intangibles face
zero or very small tax burdens. If Georgia is unable to tax the income accruing to the out-of-state trademark owner, income that otherwise would have produced tax revenue for Georgia will no longer do so.\textsuperscript{79} Of course, Georgia loses tax revenue in this case whether the corporation receiving revenues from the licensing of its trademark is situated in Delaware, Nevada, or some other state, including possibly a state with a high tax burden on the returns to intangibles; it is obvious, however, that tax considerations, in themselves, would favour the transfer of intangible assets to low-tax jurisdictions.

Against this backdrop, the attempt by states to extend their taxing powers beyond their borders is quite understandable, as is their increasing reliance on the sales factor in apportioning income. Since corporations that are not physically present in a state have no payroll or capital assets, using these factors in an apportionment formula does not help states in taxing the income of out-of-state corporations.\textsuperscript{80} In an economy in which information-based goods and services figure prominently and in which the need for physical contact between buyers and sellers is diminished by the advent of new technologies, it is easy to see that the nexus issues in the \textit{Geoffrey} case have potentially far-reaching implications.

\textbf{Nexus: Economic Policy Implications}

The nexus issue, and specifically the issue of nexus for corporations without physical presence in a jurisdiction, raises several economic policy questions. A full and formal analysis of this issue cannot be undertaken here.\textsuperscript{81} In outline, however, there are three main economic dimensions to the nexus issue.

First, from an efficiency viewpoint, subnational governments must have revenue instruments at their disposal that enable them to finance needed public goods and services; constraints on their taxing powers should not make it excessively difficult for them to collect revenues.

Second, subnational governments should also be constrained from imposing taxes that are borne mainly by non-residents, since tax exporting distorts the incentives for efficient public-sector decision making. In the extreme case, if tax burdens could, at the margin, be shifted entirely to non-residents, the self-interest of a given jurisdiction would dictate unlimited public expenditures. To

\textsuperscript{79} The transfer of the trademark to an out-of-state owner could be a taxable event. If the trademark were correctly valued, and ignoring other complicating factors, Georgia could gain revenue from taxation of the transfer of the trademark equal, in present value, to the revenue that would be obtained from taxation of the stream of income accruing to the trademark owner.

\textsuperscript{80} Other considerations, of course, come into play in determining the apportionment formula that any one state might prefer; for example, “consumer” states, generally, might have an incentive to rely on the sales factor more heavily than “producer” states.

\textsuperscript{81} See D.E. Wildasin, “State Corporate Income Taxation: A Normative Approach” (in preparation) for a more detailed analysis.
make this point by means of an extreme example, suppose that the government of Quebec or New York were able to impose taxes on all residents of Canada or of the United States. Quebec and New York would have powerful incentives to expand public service provision for their residents, given that the costs of these services could be shifted to outsiders. If other provinces or states could likewise tax non-residents, their public expenditures would presumably expand dramatically as well. Excessive public expenditures in all jurisdictions—expenditures for which the benefits, at the margin, fall short of costs—would result.

Third, the taxes used by subnational governments should not impose high efficiency costs on the functioning of the national economy, for example by distorting the internal flow of trade in goods and services.

Consider the issues in the Geoffrey case from this viewpoint. Note, to begin with, that intangible assets such as patents, copyrights, and trademarks represent the ownership of property rights in innovations, creative works and concepts, brand names, and intellectual property generally. Their creation, development, and marketing often require intensive utilization of human capital, much of it self-directed—skilled researchers, scientists, engineers, technical staff, artists, authors, performers, and the like—and the financial return to these assets is one of the principal economic rewards for entrepreneurship, innovation, and creative activity. E-commerce is, of course, one form of intangibles-intensive activity that appears likely to play a role in these economies, but e-commerce is just one application of information technology more generally, a sphere of activity in which intangibles—including software—are of central importance. In advanced economies with high levels of education and training, like those of the United States and Canada, these activities play an increasingly prominent role in overall economic performance.

Much of the financial return to intangibles takes the form of quasi-rents. Once created, an intangible asset can often be utilized at low marginal cost; for example, the cost of photocopying a book, of duplicating an audio tape or brand-name label, or of copying computer software is often very small in relation to the cost of creating the valuable intangibles embodied in these items. Protection of the quasi-rents that accrue to intangible assets is therefore very important in preserving the incentives to create these assets in the first place, a principle that is well recognized in the traditional treatment of copyrights and patents. A substantial part of the profits of corporations, such as profits attributable to product and process innovations, takes the form of these quasi-rents. In highly integrated economies with free internal markets such as those of Canada and the United States, the return to intangible assets reflects the fact that they can be directly and indirectly used by many firms and individuals in many locations. Thus, the discovery or creation of a new substance (for example, for the making of semiconductors) may facilitate the development of new devices or processes (such as, computer chips) that are widely employed in several different industries (such as, computer manufacturing) whose goods or services, in turn, are used by many
different types of consumers in different locations (for example, in the distribution or analysis of information). The contractual arrangements by which the creation of a new substance is rewarded can take a wide variety of forms, depending in particular on the degree of vertical integration. They may, for example, take the form of patent royalties accruing to an individual inventor who is many stages removed from the consumers who ultimately pay for the information services that could now be delivered thanks to the original inventive act. Alternatively, an inventor might establish a business that incorporates every intermediate stage of production between the original invention and the ultimate consumer.

Households and firms in any one US state or Canadian province purchase goods and services that directly or indirectly utilize intangible assets that are owned by non-residents. As an empirical generalization, it would be safe to say, in particular, that the returns to intangible assets owned by corporations located outside the jurisdiction are especially likely to accrue to non-residents. Thus, a state or province that is able to tax the income of non-resident corporations will be taxing income that accrues disproportionately to non-resident individuals. To the extent that this income represents economic rents or quasi-rents, subnational jurisdictions have an incentive to tax that income, since the burden of the tax would then fall on the non-resident owners of the intangibles in question—that is, the burden of the tax would be exported. From a tax-exporting perspective, in other words, a state has a powerful incentive to tax the income accruing to corporations that have no physical presence within the state.

Of course, it is important for a state to incorporate a sales factor for income apportionment if it seeks to capture the rents accruing to non-resident corporate owners of intangibles, since these non-resident corporations may well have no employees or establishments within the state. Indeed, as is clear from the literature on fiscal competition, a jurisdiction operating in an open and competitive economic environment may have strong incentives to ease the burden of taxation on the returns to capital or labour since that burden may discourage investment and employment, with consequent adverse effects on wage rates and real estate markets. Thus, states that compete for labour and capital while attempting to

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82 Equity markets, of course, make it possible for residents in any one state or province to receive a share of the income accruing to intangible assets used by corporations located in other states or provinces (or countries, for that matter). Cross-ownership of such assets is nonetheless limited, as has been discussed extensively in the literature on integration of international capital markets. Cross-ownership of assets and the incentives for jurisdictions to devise tax policies that capture the rents accruing to them are discussed in David E. Wildasin and John Douglas Wilson, “Risky Local Tax Bases: Risk-Pooling vs. Rent Capture” (August 1998), 69 Journal of Public Economics 229-47.

83 See, for example, D.E. Wildasin, Urban Public Finance (New York: Harwood, 1986); and John Douglas Wilson, “Theories of Tax Competition” (June 1999), 52 National Tax Journal 269-304, and the references therein.
capture rents from non-residents would benefit from reduced reliance on the payroll and capital factors in formula apportionment; in the extreme, a state might shift to sole reliance on the sales factor, consistent with trends now observed within the United States, as described earlier in this paper.

Since tax exporting may be conducive to inefficient public expenditure, there is a good case to be made, on this score, for limiting the taxing powers of states so that they cannot tax the incomes of corporations that are not physically present within their jurisdiction.

While states have an incentive to try to tax out-of-state corporations in order to capture economic rents accruing to non-residents, their ability to do so varies among industries. Specifically, because the degree of vertical integration differs from one industry to the next and because the optimal contract structure for the exploitation of intangible assets may vary, state corporate income taxes create differential effective tax rates on different types of intangibles. For example, authors often are rewarded by royalties paid to them, as individuals, by publishers. Publishers, in turn, market copyrighted works to distributors and, ultimately, to consumers. The reader who buys a novel at a local bookstore implicitly raises the income of the novel’s author, but there is considerable contractual and organizational “distance” between a reader and an author. In particular, the state in which the reader resides may impose a tax on the income of out-of-state corporations that derive income from intangibles, as in the Geoffrey case, but this tax would not fall on the income accruing to the out-of-state author: too many transactions and business entities separate the original creator of the intangible asset from the state’s corporate income tax. In general, the effective implicit rates of taxation on the returns to intangibles created by a state’s corporate income tax would vary depending on contractual forms and organizational structures, an unevenness in tax burdens that distorts both trade flows and organizational forms.

It appears, in short, that allowing states to tax corporations with no physical presence within their jurisdiction can distort public-sector decision making, through tax exporting, and private-sector decision making, through uneven effective rates of taxation on the returns to intangible assets. Arguably, however, it might be necessary for states to be able to tax the incomes of out-of-state corporations in order to obtain the revenue that they need to finance public services.

At a purely pragmatic and empirical level, the Canadian experience suggests that a system of subnational corporate income taxation in which nexus requires physical presence is certainly feasible. As observed at the outset, Canadian provinces derive a substantial portion of their revenues from corporate income taxes, even though they can tax only those corporations with permanent establishments within their borders.

Aside from these pragmatic considerations, one can ask more fundamentally what role the corporate income tax should play in the revenue structure of a state
or provincial government. It could certainly be argued that subnational governments need to be able to collect revenue from corporations in order to recover the costs of public services provided on their behalf. Indeed, subnational governments often collect revenues from businesses (both corporate and non-corporate) through various sorts of licences, fees, and charges. In addition, taxes other than the corporate income tax, such as local property taxes, provide other means by which businesses can be made to compensate governments for the costs of public services. To the extent that subnational governments provide impurely public (or congestible) goods and services to businesses, the presence of these businesses necessitates additional expenditures on the part of these governments, and “locational efficiency” requires that businesses (and, for that matter, households) pay for the incremental costs that their presence generates. Of course, it is difficult to measure with precision the costs that businesses or individuals impose on a jurisdiction; for example, the deterioration of highways associated with their use by a business will depend on the types of vehicles used by the business, the cargo that they carry, the frequency and length of trips, and other characteristics that differ from one business to another but that are not easily observed by revenue authorities. With a variety of revenue and regulatory instruments at their disposal, subnational governments can to some extent assess different tax-prices to different types of businesses depending on the extent to which they congest local public goods and services, but a precise match between congestion costs and revenue contributions is normally infeasible.

Despite the general difficulty of determining the public-service provision costs that a corporation or other business may impose on a jurisdiction, it is clear on a priori grounds that corporations with no physical presence within a jurisdiction cannot impose meaningful congestion costs on it. For example, although it may be difficult to determine exactly how much wear and tear a corporation’s trucks cause to local highways, it is obvious that there is no wear and tear at all if the corporation has no physical assets, including trucks, located within the jurisdiction. The same is true for other public infrastructure and, indeed, for all other goods and services provided by a subnational government. Consequently, it cannot be argued that a state government must be able to tax the income of out-of-state corporations with no physical presence within the state in order to be able to internalize the congestion costs that these corporations might generate.

In brief summary, basic economic principles can help to shed light on how the nexus issue for state corporate income taxation should be resolved, at least from the perspective of economic efficiency. Corporations that have no connection with a state other than the fact that they derive revenues from the sale or licensing of intangible assets there are not suitable targets for state corporate income taxes. States may indeed seek to tax such corporations, in the interests of their residents, but their attempt to do so distorts their incentives to choose appropriate levels of public expenditure. Such taxes can also distort private-
sector resource allocation because they bear unevenly on different types of goods and services and the intangible assets embedded within them, as well as on organizational and contractual forms. Finally, because corporations that have only an intangible connection with a subnational jurisdiction cannot congest local public services, there is no need for that jurisdiction’s government to impose explicit or implicit tolls on the corporation in order to recover the incremental costs of public goods.

Conclusion
Subnational governments in both the United States and Canada impose taxes on the incomes of corporations. In both countries, this taxing power requires that fundamental policy and administrative problems be addressed. Which corporations or corporate entities can a state or province tax? Must the tax-paying unit, however defined, have some “presence” within the taxing jurisdiction, and if so, must it be physically present? How is income to be divided, for tax purposes, among taxing jurisdictions? And, at a deeper institutional level, how are the answers to these questions to be decided: by central government authorities, by courts, or by some combination of the two? The United States and Canada have answered these questions in rather different ways. The Canadian system is characterized by fairly simple and harmonized policies, achieved partly by coordination and cooperation among the provincial and federal governments. The US approach is much less precisely specified, with states exercising substantial policy independence within broad constitutional constraints requiring frequent judicial interpretation and clarification.

One of the important issues now facing policy makers and courts in the United States is the question of nexus, especially with reference to corporations that do not have any physical presence within states that attempt to tax them. This issue has been resolved by statute in Canada: a corporation with no “permanent establishment” within a province cannot be subject to corporate income taxation there. The courts in the United States will ultimately decide this issue in accordance with their interpretation of the meaning of the constitution. But however the problems of judicial interpretation are ultimately resolved, one can inquire, from the viewpoint of economic analysis, what the implications of alternative decisions might be.

A complete analysis of all aspects of this question is beyond the scope of this paper. However, established principles of public finance in a federal system suggest the desirability of limiting the taxing powers of subnational jurisdictions so that they cannot impose taxes on the incomes of corporations beyond their boundaries. Indeed, these principles suggest that states would have incentives to impose such taxes in order to export the burden of taxation to non-residents. While such tax exporting (or rent capture) serves the interest of each state acting independently in the interests of its residents, it does not promote efficiency in the functioning of the national economic system as a whole.
An interesting issue for investigation concerns the implementation of corporate income taxes in an international setting.\textsuperscript{84} From an analytical viewpoint, the taxation of multinational corporations by national governments is analogous to the taxation of corporations within a country by subnational governments, and it is clear that somewhat analogous principles should guide policy in these two contexts. There are, however, some significant differences between the two. In particular, it is quite reasonable (and certainly commonplace in the literature) to evaluate institutional and policy regimes in a federation like that of Canada or the United States from the perspective of economic welfare within the nation as a whole. In the international context, one could by analogy evaluate alternative policies and institutions from the perspective of world economic welfare. While such an approach is certainly of interest, it is more customary to think of the nation rather than the world as the natural unit for policy evaluation. The development of multinational institutions such as the EU suggests that still other lines of analysis—starting from the perspective, say, of a regional trading bloc or an emerging economic union—would be fruitful. These and other issues must await further study.

**SUMMARY OF QUESTIONS AND ANSWERS**

On the question whether the presence of national government in a particular tax area supports subnational taxation in the same area, Jim Davies (of The University of Western Ontario) put forward two examples from Canadian experience. First, when the federal government vacated the estate tax in the early 1970s, the provinces, which had also had a presence in the field, left also. This example seems to suggest that just having a federal presence, even if the federal and provincial systems are not integrated, has some role in anchoring what the provinces are doing and preventing outright tax competition. The second example is a comparison of corporate taxation in Canada and Europe. In Europe, there currently seems to be very fierce competition over reduction of corporate income taxes, whereas in Canada the fraction of overall tax collections from corporate tax has been rising. This appears to be another case where having a national government imposing a particular tax in addition to the provinces makes a difference.

Gordon Myers (of Simon Fraser University) pointed out the vertical tax externality that occurs when governments occupy a common tax base and asked whether the effect of the externality can be so bad that there is a possibility of getting to the “wrong side” of the Laffer curve. Has there been any work on this issue?

\textsuperscript{84} Charles E. McLure Jr., “U.S. Federal Use of Formula Apportionment To Tax Income from Intangibles” (March 10, 1997), 14 Tax Notes International 859-71, discusses the international dimensions of corporate income taxation, drawing numerous parallels with the experience of US states.
Mick Keen responded that there is some evidence for the suggestion of Davies and Myers that common tax bases lead to higher taxes, and referred to recent papers by Tim Besley and Harvey Rosen,85 and by Robin Boadway and others.86 It might be that a federal presence is necessary for harmonizing tax bases, as opposed to tax rates. At first glance, in Quebec the movement of the QST base toward the federal GST base seems to be an example of spontaneous coordination of tax bases. However, closer study suggests that it is more likely the result of positive action on the part of the federal government to coordinate policies with the provinces. As a counter-example, there has been quite effective coordination of the VAT base in the EU since 1977, but clearly with no federal presence. On balance, it seems that a federal government presence is neither necessary nor sufficient for this kind of spontaneous coordination.

Jay Wilson (of Michigan State University) suggested that, if political-economic factors mean that governments do not always act in the best interests of their residents, tax competition may have a beneficial role in constraining government officials. Such competition would have to be balanced against the usual externality arguments. Stan Winer (of Carleton University) added that similar issues arise when, because of majority-rule decision making, governments adopt policies that redistribute income through policies that are not Pareto-efficient. Tax competition can alleviate this problem. Is there some way of reconciling this political economy approach to the issue of tax coordination with the conventional analysis?

Mick Keen noted that one can construct models in which governments care partly about the surplus they extract and partly about the welfare of consumers. Using these models, it is possible to make some statements about whether coordination is beneficial or not. Thus, there is a way to seek some middle ground in modelling between traditional views of tax competition and public choice approaches. Bev Dahlby said that it is very hard to define what is good tax competition and what is bad tax competition. He discussed the recent OECD report on tax competition87 and the difficulties that the OECD had had with just that question. The report contains an eloquent defence of tax competition in an addendum by Switzerland and Luxembourg, explaining why they do not want to be part of the agreement, but their dissent was largely based on their banking secrecy provisions. This is an area where there is room to develop more analytical

87 Supra footnote 6.
knowledge, such as that which Mick Keen has developed, which might get us closer to resolving these sorts of questions.

Dave Wildasin noted that the points made by both Wilson and Winer turned on whether competition among jurisdictions affects the ability of one group in society to exploit the interests of others for its own benefit. Behavioural margins of adjustment limit the ability of the public sector to extract rents from people. If, for example, a minority is being exploited but can move, members of that minority have an exit option that is going to discipline the behaviour of the majority. Often, on the other hand, the levers of power are controlled by a minority that attempts to exploit a majority, including those that are not residents of the jurisdiction but own resources there. In either case, the ability to use government policy to transfer resources among agents is constrained by the mobility of the resources across jurisdictional boundaries. The argument is reminiscent of Hirschman’s “exit-voice” dichotomy. Non-residents of a jurisdiction cannot participate in the jurisdiction’s political process and so do not have much voice. But insofar as they own resources that can move among jurisdictions, they do not really need voice because they have a great exit option. Since there will always be some resources that are relatively less able to escape taxes by moving to another jurisdiction, competition among jurisdictions can never eliminate the possibility for political conflict. But the battleground will be over rents that accrue to those resources within the jurisdiction that are immobile.

Ken McKenzie (of the University of Calgary) noted that tax bases that are mobile across jurisdictions within a federation also tend to be mobile internationally, and that this factor should be considered in judging whether or not tax competition within a federation is cause for concern. One idea that had emerged in the general discussion was that special tax preferences might be more desirable than complete harmonization, since they allow governments to confine tax competition to tax bases that are highly mobile. McKenzie mentioned that this idea was quite similar to the Ramsey rule, which prescribes that highly elastic tax bases should be taxed at lower rates than relatively inelastic ones. Mick Keen said that he thought the issue was more to do with strategic interaction rather than the Ramsey rule, but that nonetheless the upshot was broadly similar.