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TAX HARMONIZATION AND TAX COMPETITION

CONTRASTING VIEWS AND POLICY ISSUES IN THREE FEDERATIONS

Taryn A. Rounds

No. 15 March 1992

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INTRODUCTION

Among both academic analysts and public sector officials there are significant differences in views about the consequences of tax competition between subnational jurisdictions, and about the extent to which tax harmonization is a desirable objective. Tax harmonization is promoted by some as a means to improve both efficiency and equity of state taxation in a federation. In Australia, reform proposals to eliminate the negative aspects of tax competition vary from uniform state taxation to harmonization of tax bases across states. On the other hand, some provinces in Canada have been threatening to move away from the nearly uniform system of provincial income and corporate taxation in order to achieve greater flexibility in promoting economic development objectives. While some claim this will have overall harmful results, other economists welcome increased competition between the provinces. Recent literature in the United States in particular emphasizes the newly-discovered virtues of tax competition, and of interjurisdictional competition in general.

The purpose of this paper is to explore the basis of these opposing views and to examine whether governments, state or federal, should attempt to promote harmonization through various policies and cooperation, or refrain from such interventions, and, thus, permit competition at the subnational level. Part I discusses the various attitudes toward tax harmonization and tax competition in three federations: Australia, Canada, and the United States. Part II contrasts the two alternatives and clarifies the various positive and negative impacts associated with each. Because tax harmonization and tax competition involve tradeoffs between important values such as freedom of choice, equity, and efficiency, this debate cannot be resolved using objective analysis. However, some of the problems of competition persist unless

* Research Associate, Federalism Research Centre. Special thanks to Cliff Walsh for his support and comments. I would also like to thank Cambell Sharman and Francois Viallancourt for their comments.

harmonization is pursued to an extreme degree. Hence, this paper concludes by exploring some policies which can diminish the costs associated with subnational competition.

I. THE STATE TAX ENVIRONMENT IN THREE FEDERATIONS

Before continuing further it is necessary to define both tax harmonization and tax competition. In this paper harmonization refers to any situation where differences in taxation between the states (provinces) are reduced either by an agreement between them or by a federal government policy. Tax harmonization can be implemented in differing degrees of intervention. The most extreme is a uniform state tax system, so that all states would have identical tax bases and tax rates. As long as preferences for subnational tax and expenditure levels vary considerably, such a system would not be optimal or practical. The more moderate, and more commonly referred to definition is the specification of uniform definitions of either all state tax bases, or of the bases of specific tax instruments. This outcome can be achieved either through state cooperation or through tax sharing arrangements with the federal government.

Several forms of tax sharing arrangements can be distinguished. An approach which is used by the federal government in Canada to harmonize provincial taxes is the system of tax sharing agreements using a federally defined tax base. This system allows states to set their own tax rates on federal tax liabilities. Tax base sharing occurs when the states or provinces use a federally defined tax base, but determine their own rates. Tax revenue sharing means the federal government collects the revenue and returns to the states a specific percentage of the revenue collected from that state.[1] Since the percentage and method of distributing is generally controlled by the federal level, revenue sharing of this form leaves states with less control over their revenues and also clouds the connection between state taxation levels and state expenditures. Hence, tax base sharing should provide greater accountability to the public at the state level of government. Than revenue sharing arrangements controlled by the federal level of government.

The least interfering means of tax harmonizing is to allow states to define tax bases and rates as they please, but to limit the overall differential between state taxes paid. This last option can be achieved

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1 If the revenue is distributed using a formula other than on the basis of origin, then 'tax sharing' really becomes a form of intergovernmental grant because it is controlled by the federal government and is being distributed in such a fashion as to achieve a federally-defined goal.

using several methods, but generally depend on federal government interventions. First, equalization payments are one means to limit competition at the state level. If these payments are reduced for states which attract greater resources, and increased for states which lose, states will benefit less from using tax competition to purposefully attract resources and investment from other areas. Meanwhile, those states which lose have less to worry about since some of the loss is made up to them. However, they do lose resources from their own sources and become more dependent on the federal level of government. Although both Canada and Australia have equalization payments, only Australia's operates to discourage tax competition from attracting resources from other areas. A second means of limiting subnational competition is through federal tax deductions or tax credits for state taxes paid so that residents of the high tax states receive larger deductions or credits.[2] This of course might encourage states to raise more revenue through these taxes at the federal government's expense.

Pure tax competition, by contrast, implies the absence of any type of agreement or policy to reduce tax differentials. However, the absence of a 'harmonizing policy' does not necessarily mean the states are actively competing. It is also important to note that the process of tax competition can result in similar tax rates or bases while states with harmonized bases can compete vigorously in terms of rates, overall tax level, and the type and quality of services provided.

Of course, all countries lie somewhere between the extremes of perfect harmonization and pure competition. What conditions have led to each country's position on this continuum? What attitude do they have concerning increasing or decreasing competition and why? The remainder of this section will address these issues by describing conditions and attitudes in three federal countries: Australia, Canada, and the United States.

State Taxation in Australia

Australia has developed a 'Father Knows Best' model of federalism in which the federal level collects far more revenue than it needs and determines how much 'allowance' each state deserves through transfer payments. The Commonwealth collects 79% of total tax revenue, but only accounts for 51% of total public sector outlays. On the other hand, states spend 43% of total public sector outlays, but only collect 17% of total tax revenue so that on average, the Commonwealth effectively

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2 Tax deductions reduce the amount of taxable income by the amount of state taxes paid and favor the higher income earners in the higher tax brackets. Tax credits reduce the amount of taxes payable to the federal government by a percentage of state taxes.

funds 45% of state own-purpose outlays (Walsh 1990, 55). In addition, state spending priorities are influenced by the increased use of specific-purpose payments (categorical grants), sometimes combined with substantial Commonwealth controls and conditions imposed on their use (Galligan & Walsh 1990, 9).

While similar arrangements exist in other federal countries, Australia is unique because states are extremely restricted in their own-source revenue-raising abilities, while the payments they receive from the federal level are more or less arbitrarily determined (i.e. not based on explicit formulae, such as revenue sharing). However, the Commonwealth Grants Commission, which is charged with recommending 'equalization payments' to the states, attempts to assess the states' needs and revenue raising abilities in determining state shares of general revenue grants. Its recommendations to the Commonwealth to even out the differences between the states are virtually always implemented. This policy should limit competition because states which attract resources will lose out in the equalization process.

In Australia, it is unconstitutional for states to impose excise taxes, which has been defined judicially as broadly as to preclude their use of general sales taxes on goods, but not services. Attempts to implement a turnover tax on commercial and personal transactions were ruled unconstitutional by the High Court in 1970. Furthermore, states relinquished their income tax powers during World War II in return for compensating general revenue grants. States have the constitutional right to re-introduce an income tax, but if any state did so, it almost certainly would lose its general revenue payments without receiving a compensating decrease in the federal income tax rate. The state would have no more revenue than before it imposed the income tax, but its citizens would be taxed twice. In earlier times, this arrangement was unsuccessfully challenged in the High Court by some states, and the failure of these challenges has effectively deterred the states from implementing an income tax since then. Even when states had the opportunity to tax income without penalty,[3] high income tax rates at the Commonwealth level left little room for state taxation, and hence, no state opted for this choice.

Table 1 summarizes the percent of total taxes collected by each level of government in Australia, Canada, and the United States. Of the three countries, Australia is by far the most centralized nation in terms of

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3 From 1977 to 1989 states had the right to impose a surcharge, or to offer a rebate, on the federal income tax liabilities of their residents. Not withstanding this, the Commonwealth has been reluctant to provide 'room' for state taxation because it maintains that it needs control of the income tax for macroeconomic policy reasons.

revenue collection, while Canada is most decentralized at the provincial level, and the United States is most decentralized at the local level. Provinces in Canada and states in the United States are much more independent than states in Australia which can only fund 38% of their own-source expenditures from their own-source revenues compared to 93% and 87%, respectively, for Canada and the United States. The argument is made that due to this fiscal imbalance in Australia, states are not as accountable or efficient in spending as they would be if forced to raise most of their own revenue (Walsh 1990, 1991). Moreover, the equalization grants probably have a discouraging effect on fiscal effort in own-source revenues[4] and lead the states to focus on lobbying the federal government for as much 'allowance' as they can get: 'The states...have been only too willing to sacrifice the principle of fiscal autonomy on the altar of political expediency and to consider the main issues in fiscal federalism to be the amounts of financial assistance they are able to extract from the Commonwealth'. (Mathews 1982, 3). The resulting fiscal system, Mathews argues, 'maximizes political noise and minimizes the degree of electoral accountability, financial responsibility, economic efficiency and effective policy choice'. (Mathews 1982, 5).

Table 1

Percentage of Total Taxation and Own Purpose Expenditures by Level of Government, 1985

	Federal	State	Local	Total
A. % of Total Taxation				
Australia	82.14	14.45	3.41	100
Canada	49.3	41.42	9.27	100
United States	66.77	20.6	12.63	100
B. % of Own Purpose Expenditure				
Australia	57.5	37.97	4.53	100
Canada	40.69	44.31	15.0	100
United States	52.09	23.77	24.14	100
C. Self-sufficiency (Ratio A/B)				
Australia	1.43	.38	.75	
Canada	1.21	.93	.62	
United States	1.28	.87	.52	

Sources: Table 2 in Walsh 1990; *Government Financial Statistics Yearbook*, Vol XI 1987, International Monetary Fund. *Revenue Statistics of OECD Member Countries 1965–84*, OECD. *State and Local Government Finance Australia 1986–87*, ABS Cat. No. 5504.0.

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4 Another economic argument against equalization grants are that they induce inefficient location decisions. The logic of this argument is made more clear in the review of Canadian literature on tax harmonization.

Table 2 summarizes state and local taxes in Australia.[5] Without the major sources of revenue used by states in most other federations, Australian states have resorted to a variety of creative revenue-raising devices. The result is a complex 'mish-mash' of taxes and duties including a payroll tax,[6] a land tax, a variety of stamp duties on financial and capital transactions, taxes on gambling, insurance, and motor vehicles, franchise fees on gas and petroleum, liquor, and tobacco businesses, plus other fees and fines.

The figures in Table 2 demonstrate that sources of revenue for each state vary greatly. For example, Queensland collects only 2.9% from franchise fees compared to 17.7% for Tasmania. The Northern Territory receives 37.2% from payroll taxes compared to 18.6% for South Australia. Tasmania receives only 9.4% compared to New South Wales' 19.5% from stamp duties. The Northern Territory collects 1.6% from taxes on goods and services compared to 12.9% for New South Wales. It is clear that individuals and businesses are taxed very differently depending on their location. Collins (1990) and others give the impression that this diversity is undesirable, but this is not necessarily so without evidence that it negatively affects efficiency and/or equity. If differences in tax levels are accompanied by differences in expenditure levels; or if expenditure levels are similar, but the tax mix is different, why shouldn't citizens be able to choose the type of tax mix and expenditure level they prefer?

The state tax environment in Australia gives rise to concerns which are not commonly expressed in the literature on tax competition. First, in Australia protection of own-source revenue is a more poignant issue than elsewhere because states are so extremely limited in their revenue bases. Second, according to Vaillancourt (forthcoming) state tax rates are more harmonious in Australia than in either Canada or the United States, and therefore, it is the type of tax bases used by the states combined with differences in their definitions across states which create a number of difficult problems. The variety of exemptions offered in all states narrow the tax bases and, accordingly, raise the tax rates needed to generate a given amount of revenue. The end product is an inefficient and inequitable system of state taxation (Walsh 1990).[7] The following briefly describes some of the problems of state taxation and how tax harmonization could improve on them.

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5 Keep in mind, however, that states have local sectors of varying size which means these figures are not directly comparable since they are percentages of total state *and local* tax revenue.

6 This tax was previously a Commonwealth tax which was turned over to the states in 1971.

7 See also Freebairn, Porter & Walsh, 1987, ch. 12 and Mathews, 1985.

Table 2
State and Local Government Taxes, Fees and Fines by Type and State 1987/88.
As a percentage of each State's Total Receipts

	NSW	Vic.	Qld	SA	WA	Tas.	NT	All State
Employer's Payroll taxes	21.3	22.7	19.0	18.6	21.2	20.7	37.2	21.3
Taxes on Property	42.8	42.5	45.3	39.1	40.9	33.2	27.3	42.3
Taxes on immoveable property	20.3	21.9	24.9	23.1	19.1	20.3	13.9	21.4
Land taxes	5.5	3.9	2.6	4.2	3.7	2.8	0.0	4.3
Municipal rates	14.7	17.4	19.6	18.7	14.8	16.6	13.9	16.4
Metropolitan imp. rates	0.0	0.6	0.0	0.0	0.6	0.0	0.0	0.2
Fire brigade contribs	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.4
Taxes on immov, prop. nec.	0.0	0.0	0.0	0.1	0.0	0.9	0.0	0.0
Estate inher. & gift duty	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Taxes on fin. & cap. trans	22.5	20.6	20.3	16.0	21.8	12.9	13.4	20.9
Stamp duties	19.5	18.0	20.3	13.1	19.9	9.4	13.4	18.5
Financial instits. taxes	2.5	2.6	0.0	2.8	1.9	3.5	0.0	2.2
Govt borr. guar. levies	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Taxes on Provision of G and S	12.9	15.3	9.8	14.9	11.1	12.7	1.6	13.1
Excises	0.4	3.9	0.3	2.6	2.5	2.1	0.0	1.8
Taxes on gambling	8.0	7.1	6.7	6.8	4.8	7.6	1.6	7.2
Taxes on govt lotteries	2.2	0.0	3.2	3.7	2.2	0.0	0.1	1.7
Taxes on priv. lotteries	0.0	4.2	0.2	0.2	0.0	5.0	0.0	1.4
Poker machine taxes	2.8	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Casino taxes	0.0	0.0	1.0	0.9	0.7	1.2	1.5	0.3
Race betting taxes	3.0	2.9	2.3	2.0	1.9	1.4	0.0	2.7
Taxes on gambling nec.	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Taxes on insurance	4.5	4.3	2.8	5.6	3.8	3.0	0.0	4.2
Ins. cos. fire brig. contribs	1.4	2.1	0.0	2.2	1.6	0.6	0.0	1.5
Third party ins. taxes	0.0	0.0	0.0	0.2	0.3	0.3	0.0	0.0
Taxes on insurance nec.	3.1	2.2	2.8	3.2	1.9	2.1	0.0	2.7
Taxes on Use of Goods etc.	17.7	16.2	17.3	23.0	23.0	28.5	29.7	18.4
MV taxes	10.0	7.5	14.1	11.5	10.7	9.9	6.8	9.9
Mv reg. fees & taxes	7.0	3.6	9.6	6.4	5.9	5.4	6.8	6.2
Stamp duties on mv reg.	2.0	3.3	2.5	3.6	3.5	3.5	0.0	2.7
Drivers' licences	1.0	0.6	0.5	1.5	1.1	0.8	0.0	0.8
Road trans. & maint. taxes	0.0	0.0	1.6	0.0	0.2	0.2	0.0	0.2
Franchise fees	7.7	8.4	2.9	11.4	12.3	17.7	22.2	8.3
Gas	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Petroleum products	3.1	4.4	0.0	5.0	5.4	8.7	7.7	3.6
Tobacco	2.3	2.3	0.0	3.3	3.8	6.0	7.3	2.3
Liquor	2.3	1.7	2.9	2.7	3.1	2.9	7.2	2.3
Other	0.1	0.3	0.3	0.1	0.0	0.9	0.7	0.2
Fees and Fines	5.2	3.4	8.6	4.4	3.8	4.8	4.2	4.9
Compulsory fees, of which	4.0	1.9	6.5	2.7	2.2	3.5	2.2	3.4
Tertiary ed. charges	0.5	0.6	0.7	0.7	0.6	0.5	0.4	0.5
Fines	1.3	1.5	2.1	1.7	1.6	1.2	2.0	1.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Collins 1990, 30. ABS 1987/88. Taxation Revenue Australia.

The negative assessment of tax competition is partially based on the belief that competition to attract businesses and individuals causes a downward spiral in tax rates, resulting in diminished revenue and inadequate services. Australia has had recent dramatic experience with reduced revenue due to interstate competition. When Queensland abolished death and gift duties, increased migration (or at least the fear of it) to Queensland led the remaining states to abolish these duties as well, even though this migration may have been related to other factors (Grossman 1990). Decreased public support of death duties[8] also may have played a role in the policy change; however, the literature claims fierce competition to be the major culprit (Nieuwenhuysen 1990, 52). Furthermore, Queensland's reluctance to charge a franchise fee on tobacco was criticized vehemently as a 'black hole' in the system of state taxation (Australian Tax Research Foundation 1988). Another way in which states appear to compete is with charges for basic services provided by public enterprises (rail transportation, electricity, and water, for example). The end result is that states have tended to charge far below the real costs of providing the services. Given these recent experiences in tax competition, it is not surprising that harmonization is promoted as a means to protect limited revenue sources (Collins 1990).

Overall, the Australian literature discussing the 'horrors of tax competition' in Australia tends to be rather anecdotal. In Australia the problem of tax competition is described as the inability to achieve some degree of harmony in tax-base definitions because there always is one state which does something to put it 'out of sync' with the others. The various differences in tax-base definitions are believed to create confusion which clouds business location decisions and discourages international investment. However, the problems of barriers to inter-state trade and allocative inefficiency do not receive specific attention as they do in the Canadian literature.[9]

The state tax differences lead to additional problems. Businesses operating in different states have difficulty complying with the various rules and some may even be taxed twice on the same transaction. Interstate businesses bear high compliance costs because they must file in each state at different times and each state applies different rules. Because one-stop filing would be much easier to implement with tax harmonization, compliance costs would be reduced.

Simplicity and administrative cost savings are a third benefit of harmonization. To prevent opportunities for tax avoidance, current

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8 The fact that the Commonwealth also abolished the death and gift duties suggests the existence of a wider political pressure which did not need interstate competition to achieve its ends.

9 See page 10 of this paper.

legislation is complicated and enforcement costs are high. Administrative costs are reduced with harmonization because legislation would be simpler and definitions would be the same across states. In addition, computer programs designed for nation-wide use would be less costly. Moreover, enforcement costs are reduced because tax harmonization lessens the possibilities for tax avoidance and evasion.

Finally, many individuals and businesses take advantage of the interstate differences in tax base definitions to avoid paying taxes on transactions — particularly those who can afford lawyers to help them achieve this goal. Currently many taxes and duties are avoided by going to other states to carry out transactions or by finding other loopholes resulting from interstate differences in tax bases. One way of avoiding taxes is to keep cars registered in a state with lower registration fees without maintaining residence in that state. The stamp duties in particular offer opportunities for tax avoidance merely by registering a document in another state or opening a bank account in Queensland to avoid charges for certain financial transactions. It is apparent that those who do avoid their taxes are those who stand to gain the most by doing so. The result is a regressive tax incidence. Harmonization would increase the fairness of the tax system by preventing double taxation as well as limiting tax avoidance.

In recent times a variety of approaches to increase harmonization have been proposed in Australian literature on state taxation. Groenewegen (1981, 1977) promotes the creation of a National Tax Council to implement a system of uniform taxation and revenue sharing with the state governments, or at least uniform assessment and collection of the most important taxes: income, wealth, and consumption taxes. The New South Wales Tax Task Force argued in 1988 that tax harmonization was seriously inadequate and that state taxation problems were exacerbated by outright and deliberate tax competition (NSW Tax Task Force 1988, 378–80). The task force proposed improving tax harmonization and coordination between states by creating an Interstate Tax Commission. Both Buchanan (1988) and Walrut (1988) support the task force proposal for greater harmonization, particularly where tax bases between the states are already similar. Collins (1990) recommends a more complete method of harmonization by standardizing the definitions of tax bases so that all states have identical tax bases with positive rates. Rates and tax mix would still be allowed to vary, although Collins also recommends limiting the degree of variation in tax rates.

While a movement toward tax harmonization is generally viewed as beneficial in Australia, it would be misleading not to emphasise that many authors also see the benefits of diversity and flexibility at the state and local level — see responses to Groenewegen's proposal by Gates, Grewal, Nevile, and Else-Mitchell in Mathews, ed. 1981. Furthermore, Walsh, in responding to Buchanan's proposal to promote harmonization, argues that an important advantage of federalism is that it provides an environment in which creative policy competition and tax competition benefit the public by constraining the 'excessive use of exploitive powers' (Walsh 1988, 66). Buchanan, Walrut, and Collins also recognize that differences in state environments justify differences in state tax systems, but believe that competition has gone beyond the point where it would yield benefits to the public in excess of its costs.

Supporters of harmonization in Australia claim it would decrease inefficient business decisions, decrease administration and compliance costs, and increase equity, while differences in tax rates and tax mix would be sufficient to allow consumer choice and beneficial competition. Most of the costs of tax harmonization are seen as communication, information gathering, and decision-making costs as eight jurisdictions (states and territories) with different priorities and preferences must reach agreement on tax-base definitions. However, the potential costs to citizens when competition for revenue is reduced should not be overlooked. The Australian literature on tax harmonization could benefit by considering the more favourable assessment of tax competition in North America.

Provincial Taxation in Canada

In 1940, the Rowell-Sirois Commission investigated the effects of tax competition between the Canadian provinces and concluded that the existing 'tax jungle' was arbitrary and discriminatory, raised the costs of tax compliance, increased the disparities in the burden of taxes and the disparities in service levels provided between regions, and was a source of friction between the provinces. To remedy this situation the commission recommended that the provinces withdraw completely from the taxation of income (Rowell–Sirois 1940, 134). The provinces rejected this proposal, but shortly afterward took the first step toward greater tax harmonization in Canada by 'renting' their income tax to the federal government during World War II. The rental payments, however, were not related to the amount of taxes collected in the province.

Almost immediately after the end of the war the provinces began to expand into the area of direct taxation. In 1947, Quebec and Ontario enacted corporate taxes and in 1954 Quebec was the first province to reestablish a personal income tax. From 1956 to 1962 the tax 'rental' payments for the remaining provinces were changed to tax sharing arrangements in which each province received ten percent of the personal income tax and nine percent of the corporate income tax collected in that province. This meant that revenue per capita would vary greatly between provinces and led to the creation of a system of equalization payments

(Courchene & Stewart[10] 1991, 267–8). Unlike the system of equalization payments in Australia, however, Canada's equalization system does not discourage competition because it does not consider needs explicitly, and does not punish states which are overall winners in attracting resources. Instead, it determines the average tax capacity of five provinces (British Columbia, Manitoba, Ontario, Quebec, and Saskatchewan) and provides transfers to provinces which fall short of this average capacity (Boadway & Flatters 1989, 101).

In 1962, Canada achieved a high degree of uniformity in provincial income and corporate taxes by establishing tax collection agreements between the federal government and the provinces. These collection agreements provide for joint federal–provincial use of the same income tax base and allow provinces to set their own rates (expressed as percentages of their residents' federal income tax liabilities so that it is a tax on tax liabilities rather than a tax on a federal tax base). The provinces benefit because the federal government collects their share of the income tax revenue free of charge. Since both federal and provincial taxes are collected through the use of one form, it minimizes taxpayer compliance costs and reduces total administrative costs. All but one province (Quebec) accepted the income tax agreements and, consequently, provincial income taxes are almost uniform in Canada (Parliamentary Task Force on Federal–Provincial Fiscal Relations 1981). Both Quebec and Ontario continued with their own corporate tax, but nevertheless chose to adopt the same base and allocation methods. Even ignoring the issue of differences in tax base definitions, tax rates on the four major subnational taxes are more harmonized in Canada than in the United States (Vaillancourt 1990). Furthermore, since provincial income taxes are applied at flat rates piggy-backed onto progressive federal income tax liabilities, the provinces (and territories) until recently maintained a similar degree of progressivity (Courchene & Stewart 1991, 279).

In 1972, the federal government established guidelines under which it would administer provincial tax credits and surcharges on the personal income tax. Basically, they had to be feasible to administer, and provinces could not enact measures which would deviate from the federally defined tax base or erect barriers to trade between provinces. This compromise disuaded Ontario from abandoning the tax agreement and has subsequently permitted more flexibility and diversity in the

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[10] According to Courchene & Stewart (1991) the progress of decentralization from the federal to the provincial level of government would not have proceeded as far as it has with an explicit system of equalization payments. This decentralization of the income tax has been dramatic. In 1962 provincial income tax as a percent of total income tax was only 13.9%, but by 1987 was 40.4% (Courchene & Stewart 1991, 271).

provincial element of the income tax. Since then, the number of surcharges and credits administered by the federal government has swelled and the original guidelines have eroded. The federal government has been increasingly willing to implement development tax credits, which do erect barriers to trade between provinces, in order to appease the provinces and maintain the tax agreements. Tax credits and rebates also create differences in the progressivity of the state income taxes (Parliamentary Task Force 1981, 178).

Table 3 summarizes the four major subnational sources of tax revenue in Canada and the United States. In Canada, the income tax is by far the most important source of revenue for the provinces. The retail sales tax is second while the corporate tax is relatively insignificant as a revenue source. Despite the relatively harmonized rates and tax base definitions, quite large differences in the importance of revenue sources are apparent as a consequence of differing provincial circumstances. Manitoba collects only 22.3% of its revenue from the income tax while Quebec collects 45.5% from the income tax but only 2.1% from its corporate tax. Alberta relies more heavily than other provinces on the corporate tax, which is 14.5% of its tax revenue. Meanwhile, Newfoundland relies most strongly on the retail sales tax, which is 42.3% of its total tax revenue.

Table 3

Share of Four Main Taxes in Total Tax Revenues Provincial Governments in Canada, 1986

Newfoundland	27.3	5.6	42.3	9.9
Prince Edward Island	29.5	6.0	41.1	15.5
Nova Scotia	36.0	5.8	30.2	17.9
New Brunswick	31.3	5.9	36.0	16.1
Quebec	45.5	2.1	22.2	18.8
Ontario	30.4	8.3	22.1	27.2
Manitoba	22.3	6.4	21.5	29.8
Saskatchewan	29.6	5.5	16.3	30.0
Alberta	37.1	14.5	2.6	41.4
British Columbia	29.8	6.7	23.5	27.4
MEAN:	34.8	6.4	21.7	25.2

Source: Francois Vaillancourt. *Subnational Tax Harmonization, Canada and the United States: Intent, Results, and Consequences*. Revision of a paper presented at the US–Canada Tax Comparison Project. Niagra-on-the-Lake Conference. October 1990, 7.

The Canadian literature contains some views which coincide with the Australian literature on tax harmonization. Like the Australians, the Canadians are concerned with revenue adequacy under tax competition: 'In a federal system the pressures of tax competition between different subfederal units may result in either the partial or total destruction of some tax bases that are available to them. In the absence of a co-operative solution to this problem, the erosion of a jurisdiction's tax base may prevent it from supplying an efficient level of public goods...' (Thirsk 1983, 427). Furthermore, Bossons (1991) also notes the problem of tax avoidance when rates and bases vary between provinces. In particular, the corporate tax on multistate corporations provides opportunities for tax avoidance which he refers to as 'tax arbitrage'. This occurs when 'a firm that operates in two or more jurisdictions can rearrange its affairs for tax purposes so as to reduce the total taxes it pays in all jurisdictions without at the same time changing the location of its actual operations' (Bossons 1991, 303). The key means of preventing tax arbitrage is for all jurisdictions to adopt a common tax base and similar rates. However, since most significant tax arbitrage occurs through transactions between related companies, Bossons (1991, 306) recommends adopting a policy used in the United States which requires related companies (owned by the same shareholders) to file a consolidated tax return.

Canadian literature also strongly focuses on allocative efficiency in the private sector and inter-regional equity as the major benefits to be gained through tax harmonization. Both of these issues are related to the movement of labor and capital induced by tax competition. First, some states are larger and wealthier than others, and they have an 'unfair' advantage in the tax competition game. Harmonization of taxes reduces the ability of one government to use tax measures to attract mobile resources and, thus, achieve economic gains at the expense of the other jurisdictions (Task Force 1981). Second, differences in provincial taxation are considered a barrier to interprovincial trade which reduces economic productivity. Harmonization of taxes, therefore, is discussed in terms of reaping the benefits of comparative advantage and specialization by removing barriers to trade.

Any tax which influences behavior is deemed inefficient in economic analysis because it distorts the allocation of resources, and may reduce economic development and growth. Tax differentials create inefficiencies in the private sector in several ways. First, differences in the income tax or corporate tax can influence location decisions or labor and firms away from the optimal choice. 'The corporate tax may be considered a barrier to capital mobility in situations where tax differentials between the provinces create distortions in the investment pattern that would result from an efficient allocation of resources'. (Trebilcock, et al. 1983, 314). Second, differences in income taxes cause distortions by creating variations in the labor/leisure tradeoff and in the relative price of labor and capital between provinces. This, in turn, influences a firm's choice between hiring labor and investment in capital away from the optimal mix. Third, differences in the sales taxes distort consumer behavior by encouraging them to spend more on some items relative to others. Cross-border shopping (sales tax avoidance) can also be a problem when sales taxes vary, but this is limited in Canada by the large size of the provinces.

Uniform taxation ensures that taxes on individuals and businesses are the same regardless of location and, hence, do not interfere with locational choice and eliminate distortions in resource use created by tax differentials. Such distortions are seen as a negative influence on economic productivity because they diminish the gains from specialization and trade. Consequently, the Canadian literature is generally supportive of tax harmonization.

It needs to be recognized, however, that it is difficult to determine when tax differentials are in fact a barrier to trade and when they merely represent legitimate differences in cost or reflect differences in the level of public goods and services provided. Therefore, the presence of tax differentials does not necessarily distort location decisions: if low taxes are generally accompanied by low expenditure levels, they will not necessarily attract people or businesses (Thirsk 1980). Furthermore, uniformity will not achieve efficiency if preferences for tax and expenditure levels vary: 'If citizens' tastes for public goods do differ across provincial boundaries, it is only with different levels and mixes of public goods that Pareto optimality is attainable'. (Courchene 1983, 80). Thirsk (1980) adds a condition to this argument: tax differentials are only non-distorting as long as the function of redistributing income is placed exclusively with the federal government. Then provincial governmental would simply be taxing according to benefits received.

So how do you define a barrier to trade? The key is whether differences in policy or taxes discriminate against the non-resident. It is easy then to view specific tax concessions and subsidies to businesses as the most significant barriers to trade: 'a capital subsidy that causes a plant to be built in one province which, in the absence of the subsidy, would have been built in another, reduces economic efficiency because it also detracts from the potential gains available through specialization and exchange'. (Pritchard & Benedickson 1983, 8) Furthermore, Courchene (1983) makes a distinction between old and new capital and argues that since old capital is less mobile, one province can inflict costs on in-place capital in other provinces and attract new investment which would have gone elsewhere. He concludes that although an open economy discourages them, 'beggar-my-neighbor' policies can and do exist. He also claims that firms become dependent on these 'protectionist' policies, which enable inefficient firms to continue in operation, and this diminishes the overall competitiveness of the economy. Courchene and Stewart (1991) support the tax agreements and harmonization in general to prevent barriers to trade. They argue that provinces deserve the freedom to set tax rate progressivity, but draw the line at development tax credits which are clearly distortionary.

Because expenditures can be used in addition to tax policies to attract industry, the Parliamentary Task Force on Federal–Provincial Fiscal Relations (1981, 178) concluded: 'Any efforts to harmonize taxes must be accompanied by agreements to limit the use of provincial government expenditures to influence location decisions. Therefore, what might be termed 'fiscal harmonization' is both more comprehensive and more important than tax harmonization'. The Task Force (1981) and Thirsk (1983) both view fiscal harmonization as equalizing fiscal residuals — the difference between taxes paid and benefits received from public services.[11] To promote tax harmonization, the Parliamentary Task Force (1981) recommends not only maintaining the tax agreements, but going further by developing a 'tax code of conduct' to prevent improper competitive behavior using taxes not included in the tax agreements. They suggest that the federal government create a task force to encourage the provinces to formulate and adopt a tax code of conduct and eventually to work toward an 'economic code of conduct' which would place limitations on fiscal competition by considering expenditures as well as taxation. The Economic Council (1982) endorsed these recommendations, but little work has been done to determine what these codes should include and how to enforce them.

Despite such pleas for harmonization, Canada's relatively uniform system of provincial income and corporate taxation recently has begun to deteriorate. The provinces, particularly British Columbia and Alberta, feel restricted by the tax agreements and feel that they can improve their provincial economies by implementing their own tax policies. Currently, three of the country's largest provinces, Ontario, Quebec, and Alberta, which account for over two-thirds of the total corporate taxable income in Canada, are outside the corporate tax agreements (Courchene 1983, 56). Ontario, Alberta, and British Columbia also threaten to abandon the income tax agreement, and in order to remain competitive, other provinces are tempted to follow suit. Moreover, a wide array of provincial regulations, policies, and taxes continue to act as barriers to trade between the provinces. Such policies include government procurement regulations, transportation regulations, agricultural policies especially provincial marketing boards, variations in employment standards, controls on land ownership, and restrictive investment policies

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[11] Thirsk (1983) recommends equalizing fiscal residuals, but this will only permit redistribution if tax levels are also equalized. Such a policy, apart from being difficult if not impossible to implement, would eliminate interjurisdictional competition completely.

and other business restrictions (Trebilcock, et al. 1983). Exemptions from the sales tax also vary widely from province to province (Dean 1989, 1019).

Some Canadians support the movement toward greater competition between the provinces. Belanger (1982) argues that since provincial economies are open, competition will force the provinces to harmonize taxes or fiscal residuals. If they do not, he argues that the right actors — those who continue with inefficient policies — will bear the consequences. Breton (1987) asserts that 'cooperative federalism' is really 'executive federalism', which allows bureaucrats to make decisions behind closed doors rather than submitting them for public approval. Cooperation among governments at best 'mutes' the public voice and at worst, leads to undemocratic 'secret deals'. On the other hand, competition between governments or 'competitive federalism', increases the public's influence over government because politicians and bureaucrats must act as entrepreneurs who compete for public support. They must not only keep prices (taxes) down, but must also employ innovative policies to provide the highest quality, most preferred public goods and services. As in a competitive private market, competition among governments will lead to the most efficient allocation of resources. According to Breton, the only time cooperation is appropriate is in the implementation of a policy when interdependence makes coordination necessary. Although he favors intergovernmental competition, he places responsibility for monitoring competition with the federal level of government which can use policies and intergovernmental grants as tools to limit unfair competition, but not to eliminate competition all together. The following section reviews the history and literature in the United States where recent sentiment toward tax competition echoes that of Breton.

State Taxation in the United States

The United States experience and attitude toward tax competition tends to be quite different from Australia and Canada. From 1789 to 1913 the federal and state governments of the United States were financially independent, while the lower level of wealth during the same period in Canada made the provinces dependent on payments from superior level governments (Birch 1955, 13). Consequently, the states have a long history of financial independence and still remain relatively independent in financial terms.[12] Furthermore, in 1939 the federal income tax was quite small in terms of revenue collected and substantial room was available for expanding the federal income tax during World War II (Break 1967). While the United States federal government assumed greater

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[12] See Table 1.

responsibilities during the Great Depression and World War II, this movement toward centralization was not accompanied by monopolization of the income tax. Therefore, unlike Canada and Australia, the United States has no recent history of a completely centralized income tax.

Laissez-faire has been a strong influence on government policies in the United States and might also describe the attitude of the federal government toward the states. Unlike most other federations, the United States has not developed equalization or other significant general revenue grants to reduce the impact of tax competition. Even the system of general revenue sharing (1972–82) was not distributed in an equalizing fashion and represented only a minute amount (6%) of total state tax revenues. The United States 'has developed a strong tradition that Washington should not interfere in regional development...The tradition in Canada is, if anything, the opposite'. (Courchene 1983, 86) These basic differences underline the strong values of independence, competition, and freedom of choice in the United States. Unlike the other federal countries examined in this paper, the United States seems to place less value on equity or equalization and greater emphasis on diversity and decentralized ways of doing things. Consequently, it appears content to remain the least harmonized of the three federal countries.

The United States Constitution provides relatively little direction in the division of tax bases vertically between levels of government and consequently except for customs duties, all tax bases are shared between two or more levels of government. Having few barriers to choice of tax instruments, states have chosen a wide variety of tax bases and rates. Table 4 provides a summary of the four primary subnational taxes in the United States. Most states rely on the general sales tax as their primary source of revenue, and their rates tend to vary between two and seven percent. Six states have no sales taxes, seven states have no personal income tax, and three have no corporate tax. Most states apply progressive rates, which vary between two and eight percent, to the income tax base. (Vaillancourt 1990). Only three states base their income tax on a percentage of federal income tax liabilities, eight states employ the same definition of taxable income and twenty-one states use the federal determination of adjusted gross income (Thirsk 1983, 439; Break 1980). Delaware relies most strongly on the income tax (37.4% of total revenue), while California, Michigan, Delaware, Connecticut, and Massachusetts rely most heavily on the corporate tax (8% to 9% of total revenue). Washington state, which has no income or corporate tax, and Mississippi rely greatly on the state retail sales tax, which generates 43.9% and 40.7% of total tax revenue, respectively.

Until recently, economists in the United States were critical of the great divergence in state taxation and several efforts were made to increase cooperation and coordination in state taxation. The corporate tax is the

Table 4

Share of Four Main Taxes in Total Tax Revenues State Governments in the United States, 1986

Maine	20.3	3.1	23.1	33.8
New Hampshire	2.0	7.9	0.0	60.7
Vermont	20.0	3.9	12.3	37.5
Massachusetts	32.1	9.5	15.3	31.1
Rhode Island	19.2	4.6	19.5	40.8
Connecticut	4.8	9.9	26.2	37.5
New York	25.7	4.2	10.5	29.5
NewJersey	14.4	6.7	18.4	40.5
Pennsylvania	15.3	5.6	18.7	26.6
Ohio	18.3	3.1	20.9	27.9
Indiana	19.6	2.7	32.0	32.1
Illinois	14.8	4.8	18.8	34.8
Michigan	20.9	9.3	17.2	38.2
Wisconsin	27.0	4.9	18.6	34.7
Minnesota	27.0	5.1	18.8	30.8
Iowa	21.4	3.4	19.0	38.4
Missouri.	19.1.	3.0	26.2	21.1
North Dakota	8.4	6.4	20.3	28.3
South Dakota	0.0	3.0	24.6	41.8
Nebraska	16.5	2.6	16.4	43.3
Kansas	17.0	4.5	16.4	38.2
Delaware	37.4	8.5	0.0	13.4
Maryland	24.8	3.2	15.3	25.1
Virginia	26.8	3.5	12.6	28.2
West Virginia	20.6	3.8	34.8	16.7
North Carolina	28.5	6.6	17.9	21.6
South Carolina	23.6	3.9	28.9	22.9
Georgia	24.9	5.3	21.0	25.7
Florida	0.0	3.3	33.8	32.2
Kentucky	19.9	5.7	21.4	17.6
Tennessee	1.3	5.2	36.1	21.9
Alabama	18.3	3.8	20.2	11.6
Mississippi	10.8	3.8	40.7	22.9
Arkansas	21.3	4.7	29.1	18.0
Louisiana	8.1	4.7	20.1	15.1
Oklahoma	16.2	2.5	15.5	18.2
Texas	0.0	0.0	20.1	40.0
Montana	15.3	5.2	0.0	47.3
Idaho	24.2	4.1	23.7	28.4
Wyoming	0.0	0.0	13.8	44.7
Colorado	19.7	2.4	15.2	35.1
New Mexico	5.6	3.9	34.1	11.5
Arizona	14.3	3.5	29.8	28.6
Utah	21.0	3.1	26.0	28.4
Nevada	0.0	0.0	34.6	21.8
Washington	0.0	0.0	43.9	27.8
Oregon	30.8	4.2	0.0	45.3
California	24.4	8.2	22.3	26.1
Alaska	0.0	7.4	0.0	24.2
Hawaii	24.7	2.3	39.4	17.6
MEAN:	18.1	4.9	20.1	29.9

Source: Francois Vaillancourt. *Subnational Tax Harmonization, Canada and the United States: Intent, Results, and Consequences.* Revision of a paper presented at the US–Canada Tax Comparison Project. Niagra-on-the-Lake Conference. October 1990, 7.

area which has received most attention. The Willis Committee (1965) emphasized the great differences in state corporate tax laws, and cited instances of non-enforcement by the states and examples of businesses failing to comply with tax regulations. As a result, the distribution of the corporate tax burden is arbitrarily distributed among corporations. A conference of state tax commissioners in 1957 led to the creation of a model law for the state corporate income tax and twenty-five of the forty-six states levying a corporate tax have chosen to conform to this model. In 1967 an additional step was taken toward interstate cooperation by creating the Multi-State Tax Commission. However, this voluntary association has only nineteen members and even they have not adopted a uniform tax code. While thirty-three states employ a similar corporate tax base, substantial diversity still exists in the definition of corporate income, in apportionment formulas, and in tax rates.

Having fifty states compared to Australia's eight or Canada's eleven jurisdictions makes cooperation, coordination, and agreement among them much less likely. If greater uniformity is to be achieved, it is most likely to come from federal government interventions. Like Canada, under the Federal–State Tax Collection Act of 1972 the United States federal government has offered to administer state and local taxes based on the common federal income tax base, but leaving them to set their own tax rates. One problem is that states face declining revenue if federal income taxes decline.[13] However, unlike the Canadian provinces in 1962, most US states are accustomed to collecting their own income taxes and therefore, they have less incentive to accept these agreements. One important device which does help to increase tax harmonization in the United States is the federal tax deduction and tax credits for state income taxes which reduce, but do not erase, interstate income tax differentials.

Recent literature in the United States confirms its commitment to competition and non-uniformity. In 1981, the Advisory Commission on Intergovernmental Relations (ACIR) reported that tax competition in the United States was overall harmful to the nation's economy because it was likely to cause inadequate state spending, a shift away from ability-to-pay taxes, a shift away from business taxation, and wasted resources as states compete to attract industry. In 1987, however, ACIR reversed its position on interstate tax competition, finding that it had overall favorable results. This 'new view' sees beneficial effects of tax competition such as a check on government power, increased responsiveness to citizens, improved resource allocation, greater efficiency in government operations, and higher quality public services.

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[13] Canada avoids this problem by guaranteeing reimbursement for losses greater than one percent of the federal basic tax. See Thirsk 1983, 440.

Some public choice economists perceive government as a monopolist, which can force taxpayers to pay for its unlimited appetite to grow. They believe the public sector is oversized, inefficient, and unresponsive. To explain why governments might expand beyond the optimal level of expenditures, they tend to view bureaucrats and politicians as driven by self-interest rather than by the 'public interest' (Niskanen 1971). In addition, the electorate tends to be 'rationally ignorant' since the costs of gathering information about government practices and options exceeds the benefits since the marginal impact of one vote is so small. Therefore, the bureaucrats and politicians have a monopoly on information which they can use to their advantage (Brennan & Buchanan 1980, 20). Furthermore, politicians may cooperate with each other to reach common goals, but at the expense of the electorate.

This cooperation can lead to oversized government because a politician pushing a policy to buy him votes in his home constituency, can 'trade votes' (I'll vote for your program if you vote for mine) with other Congressmen in a similar position. The result is that policies or programs get passed which would not otherwise have received a majority vote. In addition, specific groups, which have a lot to gain from certain policies, will lobby strongly for their passage. While the benefits are concentrated, the costs are dispersed to the general public. Therefore, politicians may be unduly swayed by these lobby groups to back programs which are not strongly supported by the citizens in general. Finally, bureaucrats also exercise discretionary power in policy implementation, but they do not face the constraint of electoral defeat as politicians do. Niskanen (1971) claims bureaucrats want to maximize their budgets to obtain power and prestige, and without effective constraints cause public expenditures to increase above the optimal level. Many other theories to explain the increasing size of government have been developed, but the point here is that the extent to which one accepts these arguments determines the necessity for constraining government behavior.

If governments are forced to compete for resources, they are forced to become more efficient and responsive. Otherwise, they will lose population and investment, unemployment will increase, and the tax base, as well as the incumbent's popularity, will decline. When people and firms 'vote with their feet' (Tiebout 1956), they signal to governments their preferences and prevent excessive taxation. Consequently, interjurisdictional competition is considered one means to force the monster government, Leviathan, to behave more responsibly and with greater efficiency (Brennan & Buchanan 1980). As in the private sector, competition between governments will result in the provision of the optimal level of public services. With this view, nothing could be worse than harmonization of taxes combined with interstate communication which would make it possible for states to collude to keep tax rates at higher levels as well as make them less sensitive to their citizen's needs.

Another view recently expressed in the American literature is that tax competition does not necessarily reduce revenue and service levels (Kenyan 1988) because interjurisdictional competition includes much more than pure tax competition. *Fiscal* competition more accurately denotes the fact that states compete in both taxation and service provision. Evidence in the United States shows that states have learned to compete in many ways, including through variation in the tax mix, the types of services provided, quality of education and training programs, investment in physical infrastructure, investment in technological development, investment in the development of natural resources, and business, worker, environmental and land-use regulations (Fosler 1989). In fact, many public services are key inputs to businesses and they respond to the quality of these services as well as to the tax level. Helms (1985) presents evidence that increases in business taxes to finance services such as infrastructure or education have a positive influence on economic growth. Wasylenko and McGuire (1985) found that state spending on education at all levels is positively related to employment growth rates especially in retail and finance sectors. The end result of intergovernmental *fiscal* competition in the United States is that state and local revenue from taxes has not gone down, but increased substantially. In the forty year period between 1946 and 1986, state and local own-source general revenue more than doubled, rising from 5.4 percent of GDP to 12.5 percent (Shannon 1988, 7). Some state and local governments have had to increase tax rates in order to compete with the level and quality of services in nearby jurisdictions (Kenyan 1988).

The literature on tax competition in the United States recognizes that there are different types of competition and that some are harmful while others are beneficial. The faults of tax competition discussed in the literature include how to deal with 'government failure', and the decline in the use of ability-to-pay taxes at the state level. The American literature also gives much attention to the detrimental effects of 'tax packages' for businesses.

'Just as the analysis of private market competition has pointed to externalities as a major cause of market failure, the existence of spillovers between governments may negate the potential benefits of competition among governments' (Kenyan 1990, 33). Benefits of some types of public services may have positive spillover effects on other jurisdictions, and hence, less than the optimal amount of these services are provided. Other actions can have negative spillovers. For example, waste dumped by New York City has washed up on the shores of New

Jersey beaches; effluent dumped in a river have negative effects on the down-stream communities; and smoke emitted in one area causes air pollution and acid rain in others. To attract industry and economic growth, governments have the incentive to be lenient on environmental and other regulations, particularly when a portion of the benefits of regulation are reaped by other jurisdictions. The provision of welfare services is another burden which jurisdictions can 'export'. By providing insufficient amounts of welfare services, low-income individuals are encouraged to move to other jurisdictions. The result is that all jurisdictions provide less than optimal amounts of welfare services.

The charge is often made that competition will lead to more regressive taxation policies for several reasons. Progressive taxes encourage high income individuals and businesses to move to where their taxes are lower. States want to attract rather than lose these 'assets' and will lower their tax rate on these people.[14] Under competitive conditions '... the equity of the tax structure will deteriorate as governments seek to maintain their revenue positions by shifting the burden away from the mobile factor ... and toward the less wealth and less mobile'. (Musgrave 1991, 287) Oates and Schwab (1988) have used economic modeling of intergovernmental competition to show that under certain assumptions the value of an individual's or business's tax burden will exactly equal the benefits they receive with no possibility for state and local governments to finance redistribution. While benefit taxes lead to an efficient allocation of resources, they are unfair in terms of providing services for the poor. Oates and Schwab conclude that as long as the federal level of government fulfills the role of redistribution, fiscal competition is beneficial. However, when the federal government falls short in its redistributive responsibilities, interjurisdictional competition can be criticised for making it impossible for state and local governments to fill the gap.

The literature on tax harmonization makes an important point: differences in highly mobile tax bases permit opportunities for tax avoidance and tax evasion. This reduces revenue collected and is also unfair since those who avoid taxes tend to be those who can afford it most. Significant tax avoidance is also inefficient because competition between jurisdictions will not provide the optimal level of public services when individuals and businesses enjoy the benefits of public

[14] It should be noted that early literature believed taxes on businesses to be progressive and criticised tax competition for reducing the progressiveness of taxation. More recently this argument has been seen as invalid: since firms can shift taxes forward or backward, the incidence of this tax could very well be regressive.

goods and services, but find ways to avoid paying for them.[15] While the connection between benefits and costs is less clear in the public sector, a large amount of tax avoidance and evasion make it even more inefficient.

The strongest criticism in the American literature refers to special tax packages or tax concessions designed to attract certain businesses to one state from another, or to deter certain firms from leaving. These tax packages are, at best, a zero-sum game with each state giving up revenue to keep its level of economic growth from declining. A negative-sum game results if these tax packages shift activity and resources from their most productive uses to less productive ones (Netzer 1988). A second criticism of tax packages for businesses is that governments are willing to spend more on them than they are worth. A politician's perception of the political damage from large firms leaving their jurisdiction appears to be greater than the actual economic costs. Ledebur and Hamilton (1986) analysed the cost-effectiveness of tax concessions and found the revenue lost by the states exceeded the benefits gained. They felt it unlikely that any form of tax concession would be cost-effective.

Reschovsky (1989) cites many examples where businesses have formed lobby groups to push governments for special tax treatment. Tax concessions for businesses are inefficient because firms will not pay for the many public goods which are used as inputs in the production of private goods. Reschovsky claims firms should pay their share of taxes so the marginal cost of public goods will equal, more or less, their marginal productivity (although this connection is somewhat blurred since public goods are used and financed collectively). Even if firms can shift some of the tax burden forward or backward, Reschovsky argues that these individuals are paying for the benefits of public services they receive indirectly through the business.

Finally, special tax packages are both unfair and inefficient because they favour mobile firms over immobile ones, and firms in similar circumstances may receive very different treatment. They also interfere with the efficient working of the market: lobbying for tax concessions is not a productive activity, yet firms which are successful at this may continue operating even if they are inefficient producers relative to other firms. It would be much better if states would compete in terms of overall tax levels or even levels of specific taxes rather than by granting special tax concessions to specific industries or businesses. Whether, and

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15 This argument also applies to states or governments which can export significant amounts of taxes to those who do not benefit from state expenditures. However, it is likely that state expenditures do have positive spillovers on non-residents and tax exportation helps to internalise this externality. See Reschovsky (1989).

how, the federal level should enforce or encourage this behaviour are important questions which still need to be addressed.

II. COMPARING TAX COMPETITION AND TAX HARMONIZATION

It is argued that both harmonization and competition in state taxation increase efficiency; however, the comparison is complicated because each affects a different type of efficiency. Consequently, it is useful to clarify the criteria which are the basis of this comparison. Several types of efficiency and various concepts of equity are clarified in this section.

Three types of efficiency include 1) allocative efficiency within the public sector, and between the public and private sector, 2) allocative efficiency in the private sector, and 3) administrative efficiency in government operations (Thirsk 1983; Musgrave 1991). Efficiency in the public sector means that it does not over- or under-spend and therefore, the division of resources between private and public sector yield maximum benefit. Furthermore, the public sector should provide the exact quality and level of services its citizens demand in the aggregate. In economic terms total benefits to society are maximized when marginal social costs equal marginal social benefits. This condition is satisfied automatically in a perfectly competitive private sector (assuming no externalities, perfect information, etc.) through the use of pricing mechanisms, but because of the properties of public goods, it is an elusive goal which no government can achieve completely.

Theoretically, as in the private sector, the more competition a government faces, the closer it comes to reaching this goal because it will make the public sector more responsive to the preferences of its citizens. This competition may be in several ways including elections, writing to representatives, joining a lobby group, and community choice. Downs (1957) provides some reasons why competition might fail to elicit an efficient response from the public sector. For example, inefficiencies arise if citizens miscalculate the benefits they receive or the costs (taxes) they pay. The existence of spillover costs and benefits, tax avoidance or evasion, and tax exporting to non-residents can cause under- or overexpenditures by the public sector. Downs supports decentralization because he argues individuals make more accurate assessments of the costs and benefits of public services at this level. Brennan and Buchanan (1981) come to a similar policy prescription, but for different reasons. They argue that the greater choice of communities at the local level provides more competition and hence, reduces an overexpanded public sector.

Second, allocative efficiency is achieved in the private sector when there are no barriers to trade across jurisdictions, no false incentives which affect the location of capital or labor, and nothing which inappropriately encourages the use of some resources over others. 'This requires the consumers of any unit to pay the same tax on the goods which they consume whether produced in their own jurisdiction or another, and it also requires that investors and workers should face the same effective tax rates on their returns whether they choose to invest or work at home or abroad' (Musgrave 1991, 281). This is also a nearly impossible goal to achieve as all taxes would have to be poll taxes, any differences in taxes would have to be exactly offset by differences in costs or service levels, and all other policies (i.e. labor laws, environmental regulations, etc.) would have to be identical between jurisdictions. Therefore, the more uniform the systems between jurisdictions, the more efficient will be the allocation of resources in the private sector.[16]

Clearly the means for achieving efficiency in the public and in the private sector conflict with each other and hence, the perfect system is not possible. A country which chooses to promote diversity and competition might achieve greater efficiency in public sector spending choices and greater operational efficiency, but at the expense of achieving allocative efficiency in the private sector. On the other hand, a country which pursues harmonization is more likely to improve allocative efficiency in the private sector. Also, by reducing opportunities for tax avoidance, tax harmonization can improve equity as well as enhance public sector decision making. The risk, however, is greater inefficiency in the public sector when decreased competition and cooperation make collusive practices more likely.

Efficiency gains from either tax competition or tax harmonization are not easily measured and, hence, this debate is not resolvable using purely objective analysis. Those who support tax competition typically are those who believe, for theoretical reasons, that government is overextended and that any gains from increased efficiency in the public sector will offset the loses from any inefficiency created in the private sector. On the other hand, those who are most concerned with economic productivity tend to believe that the possibility of greater government inefficiency is outweighed by other benefits: 'The efficiency cost of budgetary overexpansion which prevails with fiscal coordination may well be less than that of misallocation of capital which results from budget restriction by competition'. (Musgrave 1991, 291) What one concludes depends on where he or she starts.

Administrative efficiency requires minimal waste in public sector operations. In the private sector, the profit motive provides strong incentive to minimize costs by monitoring work and by searching for the cheapest inputs. The public sector lacks these important incentives, but

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[16] This assumes there are no differences in tastes between jurisdictions.

again competition would theoretically encourage governments to improve efficiency in operation. On the other hand, tax harmonization can improve administrative efficiency through simplification and consistency in tax laws, by lowering enforcement costs since incentives to avoid taxes are reduced, and by gains from economies of scale if the federal level administers a state level tax as in Canada. Administrative efficiency also includes minimizing the compliance costs placed on citizens. For businesses at least, compliance costs are likely to be lower with tax harmonization.

This paper also refers to several concepts of equity. Horizontal equity means that individuals and firms in similar financial situations will be treated similarly in terms of taxes and benefits received. Vertical equity is achieved when those having a greater ability to pay contribute a greater share to tax revenues, or when those in disadvantaged circumstances receive greater benefits from government expenditures. While neither tax competition nor tax harmonization guarantee greater vertical equity per se, the presumption seems to be that it is easier to achieve this with tax harmonization by say harmonizing progressive tax rates, or defining tax bases with exemptions for low-income individuals, which might be driven out by tax competition. However, there may still be differences in the types of programs to provide aid to the poor. Hence, even with tax harmonization, competition on the expenditure side of the budget might be associated with underprovision of public services for the poor. Second, because tax harmonization leads to similar treatment of individuals in terms of taxation regardless of jurisdiction, it certainly appears to provide greater horizontal equity than tax competition. On the other hand, tax competition provides equity according to the benefits principle: those who benefit from a good or service should also be the ones to pay for it.

This review of the literature was begun with the assumption that tax harmonization and tax competition led to substantially divergent results. After assessing these differences, however, it appears that both sides of this debate have been exaggerated in the literature. In the final analysis, it seems the two are not really so disparate. For example, it is claimed that interjurisdictional competition improves the responsiveness and efficiency of government operations and encourages greater experimentation in taxation and provision of public services. Theoretically, competition between governments leads them to provide the optimal amount of public services just as competition between firms in the private sector leads them to provide the optimal quantity of output. This theoretical argument is based on the ability of citizens to 'vote with their feet', but this model is subject to many limitations (Zodrow & Mieszkowski 1986). It is questionable that competition at the state level in particular will elicit a strong public sector response, and there is little evidence in the literature to show that it does. Its effectiveness is called into question by the high costs associated with moving. The ability to move is restricted by income level, housing costs, work opportunities, other amenities, and the many adjustment costs of relocating. Businesses must consider market conditions, resource costs, transport costs, and other regulations. It is not likely that people or firms will move only to obtain a different tax/expenditure package. A significant amount of empirical research on business location decision has failed to find a any relationship between state tax rates or even special tax concessions and choice of location (See Struck 1967; Carlton 1979; Kieschnick 1983; and Morse & Farmer 1986).

Second, even allowing that competition does have many positive impacts and that diversity increases this competition, the difference in the level of competition between tax harmonized and tax competitive situations are not all that great. Tax harmonization[17] does not eliminate competition on the expenditure side of the budget and it is difficult to imagine governments colluding to provide a uniformly low level of public services considering the variety of goods and services they do provide. The tax mix and type and quality of services can still vary between jurisdictions and permit a significant degree of competition. Jurisdictions with harmonized tax bases, in particular, can still be quite competitive and very diverse in all ways except the type of tax bases employed.

Third, since tax harmonization does not prevent competition on the expenditure side of the budget, it does not prevent the state governments from offering businesses or industries special subsidies. If the prevalence of tax concessions for businesses is any indicator, tax harmonization is likely to result in higher tax rates for the general public combined with special subsidies on the expenditure side of the budget for chosen firms and industries. This result has all the disadvantages of tax packages. Hence, whether a policy of tax competition or tax harmonization is followed, it will be necessary to deal with the problems of 'micro level' competition.

Fourth, since competition does not disappear with tax harmonization, the problems of spillover effects and redistributive programs will not disappear either. These are fundamental issues faced by all governments: if neighboring jurisdictions provide differing levels of redistribution and the low-income and high-income individuals respond to these differences, all will be discouraged from providing redistribution. Spillovers in the area of environmental damage or protection are also difficult problems for any government to solve — regardless of the level of tax harmonization.

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[17] I am referring to tax-base harmonization rather than fiscal harmonization or uniform taxation. I choose this definition as the basis of comparison because it seems the most likely form to be chosen.

Finally, those who are critical of tax harmonization claim it makes it easier to maintain high tax levels through collusive practices. However, some countries — particularly Canada and Australia — will face this problem regardless of whether or not they introduce tax harmonization policies since they have a small number of states or provinces. According to Grewal and Mathews (1977) tax competition for firms is most intense when jurisdictions are close to each other, and hence, offer the same locational advantages. Moreover, the small number of states makes cooperation (and collusion) much easier. As evidence they cite many examples of apparent tax coordination in Australia where tax rates have all increased by the same amount at about the same time. While the state or provinces may compete vigorously, the absence of harmonization does not guarantee this, and it is questionable whether harmonization would actually increase the amount of collusive practices.

In conclusion, the various benefits of tax-base harmonization seem to outweigh the possible costs. These include greater horizontal equity, the possibility of harmonized policies to provide vertical equity, greater administrative savings, lower compliance costs, and diminished tax avoidance. It appears this level of harmonization provides a good compromise: adequate competition with less distortions. However, it should also be recognized that such a level of harmonization would be inappropriate for the United States, first, because fifty states would probably never be able to reach this level of agreement on tax bases, and second, because in terms of values, the United States is more concerned with providing diversity and limiting government size. However, all governments should be concerned with preventing both tax avoidance and 'micro level' competition as well as with overcoming the problems of spillovers across jurisdictions, regardless of the degree to which they pursue tax harmonization policies. The following section briefly discusses these major issues and presents some policy recommendations to deal with them, however, further policy analysis is required for each of these problems.

Micro-Level Competition

The greatest problem which has yet to be addressed sufficiently is how to promote competition on a more general level and avoid the inefficiencies resulting from specific tax concessions or subsidies to firms or industries. One option is for the federal level to regulate against them in order to save the states from engaging in this negative-sum game. Regulations, however, are not only a distasteful way of achieving a goal, but usually have ways to get around them. They would place a heavy burden on the federal level of government because such regulations would be extremely difficult and costly to enforce. Regulations are also rigid because it is difficult to make exceptions for special cases in a fair way. Finally, it is not clear that federal governments necessarily have the authority to interfere in state tax policies. One way of circumventing this constraint would be to tie some federal grant funds to the states developing and adhering to such regulations.

Another option is to follow the recommendations of the Canadian Parliamentary Task Force on Federal–Provincial Fiscal Arrangements (1981) and promote some sort of 'fiscal code of conduct' between the provinces or states. Part of this code would involve refraining from offering tax concessions or subsidies to firms or industries. The businesses themselves are likely to support either regulation or a code of conduct to prevent special concessions, as it would provide increased horizontal equity, and they would no longer have to worry about a competitor getting a better tax package than they are getting. The problem then becomes how states will monitor each others behavior. Presumably they would develop some sort of interstate committee to oversee and investigate improper behavior, but it would still be difficult and costly to monitor and enforce these codes.

A third option would be to follow the United States' example of permitting deductions for state income taxes in determining federal tax levels by allowing corporate income tax deductions. This policy helps to decrease tax competition and limits the use of special tax packages by reducing the value of tax concessions. A more generous federal tax credit equal to a fraction of the amount of corporate taxes paid to the state would also limit the states ability to attract firms or industries through tax packages and deter firms from wasting resources lobbying for these tax packages. However, deductions and tax credits are expensive for the federal government to finance and encourage states to tax firms since their tax is automatically reduced by the federal government.

Another variation, which would be beneficial for the federal government, would be to place a surcharge on firms which are under-taxed compared to others of its type. Deciding which firms in fact pay too little, however, would be a difficult game to play. Tax sharing of the corporate tax as in Canada, or forcing states to use the federally defined corporate tax base and a uniform allocation principle are other possible solutions. Numerous other alternatives are possible which would permit competition on a macro level, but limit inefficient and wasteful competition at the micro level. Such policy alternatives deserve greater attention in future research.

Tax Avoidance

If states or provinces are going to compete, it is important to prevent individuals or firms from being able to benefit from public expenditures while avoiding paying their fair share. The equivalent practice in the private sector is called stealing and is severely punished, but tax avoidance is perfectly legal. Probably the best way to prevent tax avoidance is to broaden the tax base, by eliminating various exemptions, and secondly, tp have all states competing with an identically defined, broad based tax. Second, a tax which is difficult to avoid when tax base definitions do differ is one which requires moving and, hence, giving up the benefits which accompany the level of taxes paid. These types of taxes include income or payroll taxes and property (land) taxes. Sales taxes, consumption taxes, license fees, and corporate taxes on multistate firms offer greater opportunities to avoid taxes, but Australia's wide variety of stamp duties are the worst in this respect. If such tax bases are to be used at the subnational level, it would be best to harmonize bases to avoid avoidance problems, alleviate tax compliance problems, and improve administrative efficiency.

In the United States and Canada most states and provinces tax mobile bases (i.e. sales taxes), which permit tax avoidance without giving up the benefits of public expenditures. A person living in New York or New Jersey, who is going to make a major purchase, can travel to Pennsylvania and other nearby states to pay a lower sales tax. This problem, of course, is more intense at the local level, but may be problem near border areas and where states are clustered. The problems associated with tax avoidance, however, have received little attention in the criticism of tax competition. Some effort should be made to assess the amount of tax avoidance in the United States and other countries. How serious is the problem and how does it effect overall tax incidence?

Spillover Problems and Redistribution

More attention should be devoted to various solutions for overcoming the 'market failures', most of which fall in the area of environmental and redistributive policies. The problems due to externalities between governments can be addressed in several ways including federal regulation and monitoring of state and local activities, reassignment of responsibilities to a higher level of government, the use of categorical grants to promote certain activities at the state level, consolidation of jurisdictions, or by creating a new jurisdiction which encompasses the effected area to internalize the spillover effects. This last alternative is often done by creating a special district or authority.

All of these options have their pros and cons. For example, reassignment of responsibilities leads to less decentralized, and perhaps less efficient, ways of doing things. Monitoring is nearly always resisted by the level of government being monitored and claims are often made that higher level governments do not understand the implementation problems faced by lower level governments. Monitoring is expensive and difficult to accomplish thoroughly. Money is fungible and therefore grants may merely substitute for state level expenditure and reduce fiscal effort at the state level. Special districts and authorities are often criticized as being less accountable to the public and hence, less democratic. Future research needs to provide a clear contrast between these alternatives for resolving spillover effects.

Another notable problem of fiscal competition is the difficulty of providing redistribution and low-income programs at the state (province) level. Of course, the simple solution to this problem is to leave this responsibility to the federal level of government. However, it is clear the federal government in the United States is pulling away from this responsibility which, in fact, may be a response to citizen preferences for more local methods of addressing poverty issues. During the Reagan years many states took over welfare programs once funded by the federal government. Weinstein and Keough (1987) report that 31% of total state financed programs are targeted to low-income people.

In an atmosphere of competition between the states, it is not likely that these sorts of programs will receive the amount of funding they deserve. Oates and Schwab (1988) claim that under these circumstances a 'second-best solution' is to limit competition between the states. Future research should address this issue by seeking to determine the most appropriate ways to constrain interjurisdictional fiscal competition. This might be done by harmonizing exemptions or low tax rates for the poor; or through fiscal tax codes or agreements to harmonize the level of expenditures on programs for low-income households. Of course the United States, with fifty states and large differences in the poverty level and the cost of living, devising an agreement acceptable to all states will be difficult to accomplish. Australia, being the most centralized of the three in revenue raising might be more successful with redistributive policies, while Canada represents the inbetween case.

The tax competition literature should also consider why it is that the states in the United States have been attempting to fill in the gaps in welfare provision. Are people more willing to pay for welfare in their own state as opposed to nationwide? Do they believe states can do a better job than the federal government? Businesses and individuals may very well submit to higher levels of taxes if they support the policies and expenditure level of their community. In fact, redistribution may be something they value and are willing to pay for through progressive tax rates. One problem, however, is the free-rider effect: although most people value poverty reduction, they would rather let someone else pay for it if they can. But how strong is this free-rider effect? Further research on the ability of subnational governments to provide programs for the disadvantaged would indeed be worthwhile.

CONCLUSION

In conclusion federal nations need to learn to balance the benefits of decentralisation and competition with the benefits of equity and efficiency which result from more centralised-harmonised approaches to taxation and expenditures. A country's choice on this continuum is essentially a value-based decision because it depends on their preferences for the types of efficiency and equity each approach achieves. However, various strategies are possible to enable a nation to reap the best of both worlds.

Whether a country chooses to harmonize or to promote competition, improved intergovernmental relations will be the key to a successful outcome. In order to harmonize the states or provinces must cooperate in determining tax base definitions which all can accept. Intergovernmental cooperation is also necessary to resolve market failure problems and limit 'micro-level' competition.

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