TAX COMPETITION AND THE FISCAL UNION:
BALANCING COMPETITION AND HARMONIZATION IN CANADA
Proceedings of a Symposium, June 2000

Contents

Foreword

The Institute of Intergovernmental Relations held a symposium at Queen's University on June 9-10, 2000. Entitled "Tax Competition and the Fiscal Union: Balancing Competition and Harmonization in Canada", it drew about 70 participants from governments, universities and some media and business.

The symposium was held to share information and views on rapidly moving fiscal policy in Canada, particularly at the provincial level – with a focus on recent reform in personal income tax (PIT) and the potential for increased competition in PIT and other tax sources.

Two sessions dealt directly with the PIT issues, providing an opportunity for officials from Alberta, Saskatchewan, Nova Scotia and Ontario to explain recent budget measures and the broader policy context. Perspectives were provided from the private sector, academic economists and from Quebec (the latter dealing with what that province has done with its autonomy in PIT). Two other sessions dealt with broader tax issues such as the potential for green taxes, business tax reform, sales tax competition and harmonization, and taxes in the new economy.

The most compelling issue throughout the conference remained the PIT reforms – the new direct tax on income being levied by several provinces. Debate focussed on the effects of increased tax competition, the erosion of the common income tax base, the integrity of the tax collection agreements, and the accountability and fairness gains for provincial taxpayers. These topics raise important concerns for the Canadian fiscal union and for Canada's competitiveness – concerns that will remain current in the coming decade.

Thanks also to the Department of Finance of the Government of Canada for support of the June Symposium, and to Patti Candido and Mary Kennedy for conference support. Peter Stoyko prepared an initial report of the conference and helped in other ways. Final thanks to all of the contributors for lively contributions to the symposium and their cooperation in achieving this published proceedings.

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ALBERTA'S SINGLE TAX SYSTEM

Nancy Wright

Let me begin with some background to the tax reform issue in Alberta. After the 1996 budget federal officials and members of the federal/provincial territorial tax committee indicated that they were willing to consider provincial tax on income, an old chestnut that dates back to the 1970s. The most recent iteration of this exercise had been in the early 1990s but had died, we were told, because of a strong lobby of tax practitioners against it. Apparently the tax practitioners thought that it would have been a failure-- the exercise would have been a way for the provinces to hide tax increase and they were very concerned about that.

So in 1997, five provinces -- Newfoundland, Manitoba, Saskatchewan, British Columbia, and Alberta-- submitted a paper outlining the parameters for a tax on income system. At the end of 1997 the federal, provincial and territorial ministers agreed that provinces can move to a tax on income. Now this required a rethinking of the personal income tax cuts that were announced in the 1996 budget as they would not necessarily be the favourite initiatives with the availability of tax on income. Around the same time, after the 1997 provincial election, Stockwell Day became the provincial treasurer. He was interested in tax cuts but he was also interested in issues of family taxation, specifically the difference in taxes between one and two income families. The provincial treasurer was enthusiastic about tax on income because he saw it as a vehicle to address the issue of family taxation and other issues.

So in the 1998 Alberta budget, the provincial treasurer announced another tax review committee to consider whether Alberta should move to the tax on income system and, if so, what that system should look like. The committee was to take into consideration a number of factors including confirmation that overall taxes were not to increase. This is a signal that: no we're not intending to use this as a vehicle of tax increase, so don't worry. Other issues covered were: the impact on the economy, e.g., simplicity and transparency; tax competitiveness; family versus individual taxation; and the work/welfare trade-off. The committee came out with a report in the fall of 1998 that made recommendations to address issues such as:

- the need to lower taxes in order to improve Alberta's competitive positions;
- the impact of high marginal and average tax rates on the Alberta economy, including investment planning and the ability to attract and keep highly skilled individuals;
- bracket creep;
- the need to give low income Albertans a tax break;
- the difference in taxes paid by single and double income families;
- and the elimination of the deficit taxes and the surtax applied in 1997 when the government was fighting the deficit.

The committee came out with recommendations for a single rate system which increased and equalized the basic spousal exemptions to $11,620 and had a rate of 11% on taxable income, and called for a return to proper indexing. The government adopted all of the recommendations in its 1999 budget indicating that the new system would begin in 2002 but it could begin earlier if the revenues cooperated. The tax would be phased in over a period of three years with the major cut happening as a person moved to the new system. Revenues did cooperate so the start date was moved forward to 2001. This was announced in the fall of 1999.

After Alberta's 2000 budget which reiterated the government's intention to move the reform measures to 2001, the federal government announced an income tax cut of its own. It necessarily follows that when you have different systems, the incidence of the tax will be different and so the incidence of the tax cut will also be different. The tax cut will have a different impact under the federal tax system than it would under a single rate system. Some Albertans would receive bigger tax cuts if we stayed under the current system. Now this drew a fair bit of media attention. The Premier committed to flow through federal cuts ensuring that all Albertans would be at least as well off under the new system as they would under the current system. Consequently, the government announced that personal exemptions would be increased further to $12,900 and that the rate would be reduced to 10.5%.

Now one could see this commitment to flow through the federal cuts as inconsistent with disentanglement from the federal system. Why would you go to your own system if you want to just pass through what the federal government is doing anyways? To put myself in the Premier's shoes for a moment, I might want to ensure that the new tax system is better for all Albertans. In this particular instance, that principle is more important than the autonomy of provincial tax policy.

So, here's what the new system looks like (see Table 1). We have provincial income tax on taxable income. We have a basic spousal exemption increased to $12,900, and a single rate of 10.5%. All other non-refundable credits continue, including the dividend tax credit. Now this is part of the agreement with the federal government that we would continue to with the non-refundable credit. And the non-refundable credits are fully indexed to the Alberta consumer price index to offset inflation.

Here's the cost of the tax plan (see Table 2). From 1999 to 2001 the government will be reducing provincial income tax by about 1.3 billion. Table 2 is a bit misleading because I just basically took what we had in our budget and then changed the numbers to reflect the additional cuts that the government has announced. However, what isn't reflected in here is the federal cuts in 2000. So the matching of federal changes may be a bit high. But, basically, next year Albertans will be getting close to a billion dollar tax cut. Increasing the exemptions to $12,900 and reducing the rate to 10.5% increased the tax cut by about $425 million annually.

Now, to the benefits of the new system. Albertans will continue to file one return. It will still be part of the tax collection agreement. The federal government continues to collect Alberta taxes. Under the new system, the bracket creep is eliminated. Overall this system is more progressive than the current one because of the higher exemptions. These remove 190,000 from the tax rolls. Not many realize that the new single rate system is more progressive than the current system. People have come to assume that progressive rates are synonymous with progressivity when actually progressive rate structure is simply a tool for making a tax system progressive. To listen to the debates surrounding the passage of Bill 18, and that was the income tax legislation, that enacted our new system, it goes even further than that. For some, rate progressivity which is supposed to be an instrument of progressivity, has become the goal itself. Bob Howard, a member of the Treasury Department in Alberta refers to this as reification. In fact, Bob presented a paper last weekend at the Canadian Economics Association which demonstrated that under reasonable assumptions, a single rate tax is more progressive than any possible multiple rate system. Another benefit is that the new system reduces the differences in income taxes as paid by one and two income families.

The difference in taxation stem now from three things. The spousal amount is levied under the federal system on the basic amount. The income of the one- income family gets pushed into higher brackets sooner, and the two income family can use the child care expense deduction. The new system addresses the first two of these items explaining a good part of the appeal of the single rate system. Single parents are also better off because they have access to the spousal equivalent credit.

Table 3 appeared in our budget this year. We didn't change these figures after the reduction to the 10.5 and 12.9, but it is illustrative of what's happening in the family taxation area. You can see that there are four different family types here. There's the one income family, the single income family and the two income family. Then there's the single parent family with the child care expense deduction, and then the two income family with child care expense deduction which are the second two. So if you look over into 2001, what's happening is you see the difference between the first two is reduced and the difference between the second two is reduced. You still retain the difference that arises as a result of the deduction for child care expenses, which is a natural cost for these families.

Finally, overall personal income tax will be reduced by over 20%. The new tax system boosts economic growth. Five full years after implementation in the tax plan, Alberta's economy is expected to be 1.5% or $2 billion larger than it would have been without the tax changes and employment is about 30,000 higher. Finally, it makes Alberta more attractive. The top marginal rate will be 40.7 percent in 2001 and 39.5 percent once the federal surtax is phased out. And this is to address the issue of the mobility of highly skilled workers.

So, in conclusion, let me return to the beginning and our original discussion of the convergence of factors for reform. These were the factors that led to the new single rate system: a) the desire for fiscal flexibility; b) the availability of tax on income as a tool; and c) a minister with an interest in tax reform. A final factor that I have not mentioned here that perhaps I should have is the interest of Albertans and Canadians in general in tax cuts, which has received higher profiles due to media attention– Albertans were ready for a tax cut.

Table 1

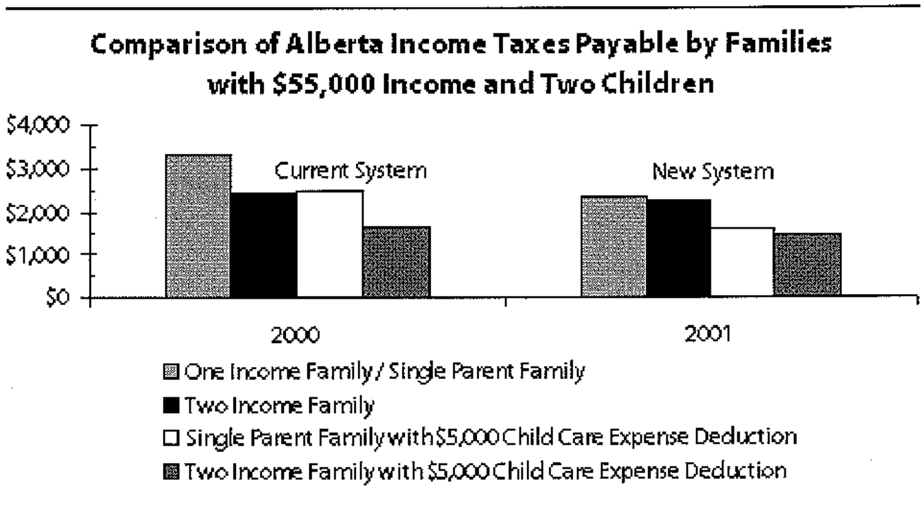
Alberta Tax Review Committee's Recommendations	New Single Rate system
Provincial income tax on taxable income	Provincial income tax on taxable income
Basic and spousal exemptions increased to $11,620	Basic and spousal exemptions increased to $12,900
A single rate of 11%	A single rate of 10.5%
All other non-refundable credits continue, including dividend tax credit, etc	All other non-refundable credits continue, including dividend tax credit, etc.
Non-refundable credits fully indexed to Alberta Consumer Price Index to offset inflation	Non-refundable credits fully indexed to Alberta Consumer Price Index to offset inflation

Table 2

Annual Tax Savings Under Accelerated Tax Plan
Calendar Year *(millions of dollars)*

	1999	2000	2001
1999 Tax Savings			
Match federal increase to basic and spousal exemptions	55	92	94
2000 Tax Savings			
Eliminate surtax on January 1, 2000	-	144	162
Match federal changes		100	102
2001 Tax Savings			
Eliminate 0.5% flat tax and move to new single rate system on January 1, 2001	-	-	918
TOTAL	**55**	**336**	**1,276**

Table 3



Comparison of Alberta Income Taxes Payable by Families with $55,000 Income and Two Children
$4,000
$3,000
$2,000
$1,000
$0
Current System
New System
2000
2001
One Income Family / Single Parent Family
Two Income Family
Single Parent Family with $5,000 Child Care Expense Deduction
Two Income Family with $5,000 Child Care Expense Deduction

A PLAN FOR GROWTH AND OPPORTUNITY: PERSONAL TAX REFORM IN SASKATCHEWAN

Kirk McGregor, Arun Srinivas, David Pratt, and Nathan Dvernichuk

INTRODUCTION

Saskatchewan's personal tax system requires a comprehensive reform to achieve greater simplicity, fairness and competitiveness.

The current tax system has raised a number of fairness issues. The Saskatchewan Flat Tax places an onerous tax burden on lower income earners, particularly seniors. The low level of personal tax credits results in many families paying income taxes while still relying on income support programs. As well, the income tax system provides only limited recognition of the costs incurred by families in raising children.

Saskatchewan also faces significant competitive pressures from outside the province as other jurisdictions introduce tax reduction strategies. If ignored, Alberta's introduction of an 11 per cent single-rate tax system and Ontario's significant reduction in personal income taxes could impair Saskatchewan's ability to attract and retain skilled workers and investment.

Recent intergovernmental discussions regarding the administrative arrangements for income taxation in Canada have led to a new opportunity for Saskatchewan to achieve a simple, fair and competitive personal income tax system that offers increased growth and opportunities for the province.

CONTEXT FOR REFORM

In the 1999-2000 Saskatchewan Budget, the Minister of Finance began a process to reform Saskatchewan's personal tax system. The Government's stated objectives were to achieve a simpler, fairer and more competitive tax system that would be more responsive to the needs of Saskatchewan people and would strengthen the Saskatchewan economy.

An independent committee[1], chaired by Professor Jack Vicq of the University of Saskatchewan, undertook a six month study of the provincial personal tax system focusing on the Government's objective to improve:

- fairness in the tax system;
- support for the family;
- simplicity for both the taxpayer and the Government; and,
- competitiveness in attracting and retaining skilled workers.

The work of the Committee involved public consultations comprising of six public meetings held throughout Saskatchewan and a number of other discussions with interested parties. A broad spectrum of interest groups participated in this process, including business, labour, seniors and students. The Committee presented its report on November 19, 1999 to the Minister of Finance who immediately released the report for public review.

The Committee's major findings were that:

- the current method of levying personal income tax should be replaced with a tax structure that facilitates fairness, simplicity, transparency and competitiveness;
- a progressive tax system must be maintained, but it should not unduly impair the competitiveness of Saskatchewan's tax system;
- greater acknowledgment of family circumstances is necessary in determining income tax levels;
- taxes should not automatically increase as a result of inflation; and,
- lower tax rates are required to improve

[1]The Personal Income Tax Review Committee was appointed by the Government and consisted of Jack Vicq, FCA, Charlie Baldock, CA and Shelley Brown, CA.

economic efficiency and improve the ability to retain capital, income and consumption in Saskatchewan.

The Committee recommended the introduction of a simplified three-rate income tax structure and higher personal tax credits for the family to replace the current system's reliance on a complex array of taxes, surtaxes and a low income reduction. It further recommended a substantial expansion in the Education and Health (E&H) Tax base, combined with a rate reduction from 6 per cent to 5 per cent.

PUBLIC REACTION

Public response to the Committee's report has been widespread. Thousands of responses were received in the form of letters and petitions and through the Internet. Views were also expressed on open-line shows and through other media.

The extent of public reaction to the Government's tax review reflects the Committee's success in raising public awareness of the taxation issue and the significance of the Committee's recommendations.

Some groups and individuals fully endorsed the Committee's recommendations, maintaining they are essential if Saskatchewan is to continue to grow economically and have the necessary resources to enhance social programs.

Proponents maintained tax reductions would mean a more positive business climate, a corresponding increase in investment and more job opportunities for Saskatchewan residents.

Others had reservations about the E&H Tax recommendations, specifically the proposal to broaden the application of the Tax to a wider range of items, such as restaurant meals and family essentials like heating fuels, residential electricity, insurance and children's clothing.

Many raised two key considerations: that tax reductions must not lead to a return to deficits and that tax reductions must not jeopardize valued public services such as health care and education.

SASKATCHEWAN'S PERSONAL TAX REFORM

The Government of Saskatchewan is introducing a major reform of the personal tax system that will result in a significant reduction in personal income taxes. This reform begins immediately and will be fully implemented by January 1, 2003.

Key components of the reform include a new way of determining personal income tax and a fairer means of applying the E&H Tax that introduces the Saskatchewan Sales Tax Credit. Together, these initiatives create a simpler, fairer, more competitive tax system that lowers overall taxes for all Saskatchewan residents and provides significant support for families with children.

A New Personal Income Tax System

The current provincial income tax system relies very heavily on the federal determination of taxes payable. This system, referred to as a "tax on tax" structure[2], places social and economic policy constraints on provinces.

Beginning January 1, 2001, Saskatchewan will convert its personal income tax system from a tax on tax structure to a "tax on income" structure that will provide the flexibility to choose the distribution of taxes and the extent of tax system support for the family.

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[2] Tax on tax refers to the current income tax arrangement where provincial governments are required to levy provincial income tax as a percentage of Basic Federal Tax. Tax on income refers to the provincial income tax arrangement that permits unique provincial income tax rates applied to taxable income. (See Appendix A).

The new personal income tax system will have the following features upon full implementation.

- Simpler, lower provincial tax rates applied to taxable income will replace the current system's Basic Saskatchewan Tax, Flat Tax, Debt Reduction Surtax, High Income Surtax and low income reduction.

  Tax Rates:

  11% - on taxable income of $35,000 or less
  13% - on taxable income between $35,000 and $100,000
  15% - on taxable income over $100,000

- Higher personal tax credit amounts will focus support on the family, including:

  - a basic personal tax credit of $8,000;
  - a spousal (or equivalent) tax credit of $8,000;
  - a new $2,500 per child tax credit; and,
  - a $1,000 seniors supplement to the age credit.

- An 11 per cent tax rate will be applied to taxable capital gains on qualified farm property and small business shares exceeding the lifetime $500,000 capital gains deduction.
- Inflation protection will be introduced once the tax system is fully implemented through the indexation of the provincial income brackets and personal tax credits.

A Fairer E&H Tax System

The E&H Tax is levied at a rate of 6 per cent (the lowest sales tax rate in Canada) on a very narrow tax base which exempts many goods and services taxed elsewhere, such as restaurant meals, used goods, utilities and many personal and professional services. Although Alberta has no sales tax, that province collects an annual $816 per family health care premium.

Commencing midnight Budget night, the E&H Tax base will be expanded to apply to the following goods and services:

- Repair services (excluding repairs to real property and exempt items);
- Computer services;
- Real estate fees;
- Non-prescription drugs;
- Maintenance contracts;
- Bedding plants, trees and shrubs;
- Pet food;
- Dry cleaning;
- Veterinary fees (excluding farm-related fees);
- Security and investigation services;
- Credit bureau and collection services; and,
- Telephone answering services.

Commencing July 1, 2000, the E&H Tax base will be expanded to include the following services:

- Professional services (including legal, accounting, architectural, consulting and engineering services);
- Building services;
- Advertising services; and,
- Employment services.

In addition, a number of related adjustments will be made to provincial consumption taxes. Unless otherwise noted, these adjustments are effective Budget night.

- Used goods will be added to the E&H Tax base. However, personal acquisitions of used goods, other than vehicles, will be permitted a $300 per item deduction applied against the sales price in determining the tax owing. This deduction means that most used goods for personal consumption will continue to be tax-free.
- Dealers of new and used vehicles will be permitted to deduct the value of vehicle trade-ins in determining the E&H Tax on their vehicle sales. Private sales of used vehicles will be subject to the

- E&H Tax, with a $3,000 deduction applied against the sales price in determining the tax owing.
- Status Indian purchases occurring off-reserve will be subject to the E&H Tax, unless the taxable items are delivered to a reserve. This change is being introduced as a consequence of recent legal challenges being brought against the Government's tobacco and fuel tax policies respecting on-reserve purchases by First Nations people. Beginning immediately, First Nations will be given the opportunity to enter into administrative arrangements with the Province respecting the effective removal of provincial tobacco and fuel taxes on on-reserve Status Indian purchases of these products.
- The Insurance Premiums Tax rate will increase by one percentage point effective April 1, 2000, but insurance premiums will not be added to the E&H Tax base.
- The Canada Customs and Revenue Agency will begin collecting the E&H Tax on taxable items purchased outside Canada as soon as administrative arrangements are completed with the federal government.

Appendix B provides a description of the E&H Tax changes.

Introduction of the Saskatchewan Sales Tax Credit

In conjunction with the E&H Tax reforms, a new $32 million per year refundable sales tax credit is being introduced effective April 1, 2000 to offset the effect of sales taxes on lower income earners. The Saskatchewan Sales Tax Credit will consist of an adult component and a child component.

The Saskatchewan Sales Tax Credit will be fully refundable, meaning that a person does not have to pay income tax in order to receive benefits. A recipient must file an income tax return as a resident of Saskatchewan and meet the income and family criteria to be eligible for a cheque. The Credit will be paid quarterly.

The adult component of the Credit will rise at a rate of one per cent of individual net income (reaching its $77 maximum at an income of $7,700). It will be reduced at a rate of one per cent as family net income increases above $27,300. An individual will also be eligible for $77 in additional benefits for a dependent spouse or equivalent. This amount will be reduced at a rate of one per cent as family net income rises over $19,600, so that the entire adult component will be eliminated at a family net income of $35,000.

The child component of the Credit will provide an additional $55 per child. For two-parent families, the maximum child component will be $110, resulting in a maximum annual Saskatchewan Sales Tax Credit of $264. For single parent families, the first child will be eligible for the adult benefit of $77 and the maximum child component will be $55, for a maximum annual Credit of $209 (see Figure 1). The child component of the Credit will be reduced at a rate of one per cent as family net income rises over $14,100 ($8,600 if there is more than one qualifying child).

The Saskatchewan Sales Tax Credit significantly improves the fairness of the E&H Tax. As Figure 2 illustrates, families earning below $25,000 will pay less sales tax even after the impact of the base expansions are considered.

IMPACTS OF THE REFORM

Saskatchewan Residents Will Pay Lower Taxes

Under the reform, provincial residents will see their combined income and sales taxes reduced by about $260 million per year once the reform is fully implemented.

- Higher personal tax credits, including the introduction of a $2,500 per child tax credit, and the Saskatchewan Sales Tax Credit ensure that taxes will be reduced for all Saskatchewan taxpayers.
- The replacement of the Basic Saskatchewan Tax, Flat Tax, Debt Reduction Surtax and High Income Surtax with a progressive three-rate tax structure ensures a simple and fair application of tax.
- Provincial indexation of the personal tax credits and income brackets ensures that tax increases will not automatically occur as a result of inflation.

Lower taxes under the reform:

- provide greater disposable income for individuals and families, thereby creating greater spending power and choice for people in their daily activities;
- improve the ability of Saskatchewan-based businesses to attract and retain qualified labour, as taxes represent a significant element in a prospective employee's compensation decision; and,
- ensure a higher standard of living for Saskatchewan residents.

Once fully implemented, the reform will lower personal income taxes by more than $440 million per year (see Figure 3). The distribution of this reduction is weighted in favour of taxpayers earning less than $35,000 per year. These taxpayers currently pay about 34 per cent of total provincial income tax, but will receive about 41 per cent of the income tax savings.

Aggregate income and sales tax savings, as a percentage of current taxes, are largest for lower income families. For example, for a one income family earning $25,000, combined income and sales taxes will be reduced by more than half, from $1,526 to $662 (see Figure 4).

Saskatchewan's E&H Tax Will Be Lower Than Other Provinces

The continued exemption of most family essentials, like heating fuels, residential electricity, insurance and children's clothing, and the introduction of the Saskatchewan Sales Tax Credit ensure that the E&H Tax reforms result in an overall reduction of tax for lower income earners.

When combined with the lowest provincial sales tax rate in Canada, Saskatchewan's reliance on sales tax is still the lowest of all provinces which levy a sales tax. Furthermore, the amount of E&H Tax paid by a family earning $50,000 will still be less than the health care premiums paid in Alberta and British Columbia (see Figure 5).

Saskatchewan's Tax System Will Be Fairer

The personal tax reform will address a number of fairness issues which exist with the current tax system.

- The Flat Tax places an onerous burden on lower income people. In particular, seniors and students who incur higher medical and education expenses are unable to deduct these costs against the Flat Tax.
- The personal tax credit amounts under the federal tax system have created a situation where social assistance recipients are subject to income tax, placing a difficult financial load on these individuals and families and adding to the financial disincentives to entering the work force.
- A large disparity in the tax treatment of one income and two income families exists as a result of the differing treatment of such families under the federal tax system.
- The federal tax system does not acknowledge dependent children in determining income taxes payable.

Saskatchewan's new tax strategy will address these issues as well as enhance the progressiveness of the tax system. The combined effect of the progressive tax rate structure, the higher personal tax credits, including a new child tax credit, and the introduction of the Saskatchewan Sales Tax Credit creates a very progressive application of tax.

Under tax reform, the relative differential in taxes payable between lower income and higher income taxpayers will widen since lower income taxpayers receive a proportionately greater tax reduction than higher income taxpayers. This improvement in the tax system's progressiveness is demonstrated in the following chart, which depicts the amount of tax payable at particular income levels as an index based on the amount of tax payable by a family earning $10,000 (see Figure 6).

The introduction of higher personal tax credit amounts will remove about 55,500 lower income earners from the income tax rolls, many of whom are currently receiving some form of income support from the Government (see Figure 7).

Families with children receive special consideration under tax reform. In particular, lower income families will see dramatic reductions in their taxes payable due to the combined impact of the $2,500 per child income tax credit and the family-sensitive Saskatchewan Sales Tax Credit (see Figure 8).

For a minimum wage earner, tax reform will provide significant tax

- Under the current tax system, an individual working at the $6 per hour minimum wage would earn $12,480 in a year, would pay provincial income taxes of $575 (4.6 per cent of income) and face a marginal tax rate for provincial income tax of 15.2 per cent on any incremental income.
- Under the reformed tax system, this individual will pay provincial income taxes of $423 (3.4 per cent of income) and face a marginal tax rate of 11.0 per cent. The reform provides a $152 income tax reduction and a net sales tax reduction of $43 after receiving a Saskatchewan Sales Tax Credit of $77, for a total tax reduction of $195, or a 25.9 per cent decline in taxes.

A minimum wage earner supporting a dependent spouse and child currently pays no provincial income taxes. However, this family's sales taxes will decrease by $169 because of the offsetting effects of a $209 Saskatchewan Sales Tax Credit, resulting in a 58.9 per cent decline in taxes.

Saskatchewan's Recognition of Family Expenditures Will Increase

Saskatchewan provides considerable financial support for families through the non-refundable tax credits. The current tax system's support relies on the interaction between the federal and Saskatchewan tax systems. The basic Saskatchewan tax credit rate equates to 8.2 per cent.

Under the reform, Saskatchewan's tax credit rate will increase to 11 per cent. This results in a significant increase in provincial support for all personal tax credits, including those which acknowledge family costs like medical and educational expenses, and charitable donations (see Figure 9).

Finally, the tax reform reduces the disincentives to moving from social assistance into the work force. The income threshold at which residents become subject to provincial income tax increases significantly under the tax reform structure. When combined with the general overall lowering of provincial income tax rates under the reform, the incentive to work is improved (see Figure 10).

Saskatchewan's Tax System Will Be More Competitive

Taxation levels are an essential element in a jurisdiction's competitive make-up. Reducing taxes has therefore become necessary to compete for jobs and investment.

The current trend in Canada and elsewhere is to reduce personal income taxes. Larger provinces like Ontario, Quebec and Alberta have all introduced significant income tax reduction strategies. All provinces are committed to the tax on income structure.

Ignoring these pressures from other jurisdictions would put at risk Saskatchewan's ability to attract and retain both jobs and capital investment. While other factors also influence locational decisions, the level of taxation is an element that escalates in importance as tax differentials with competing jurisdictions increase.

The tax changes introduced in Saskatchewan's 2000-01 Budget result in a major improvement in the competitiveness of Saskatchewan's tax system. Following reform, tax rate differentials with neighbouring jurisdictions will decline and, when combined with Saskatchewan's locational advantages, will improve the province's ability to attract and retain skilled labour (see Figure 11).

One of the most significant improvements in competitiveness is the reduction which will occur in the marginal tax rate, which is the rate at which the taxpayer pays income tax on the last dollar of income earned. Saskatchewan's current top marginal tax rate is equal to 19.9 per cent. Under reform, this rate will decline by 4.9 percentage points to 15.0 per cent, the second lowest in Canada.

While this improvement is dramatic, a similar reduction in marginal tax rates occurs for taxpayers earning much lower incomes. For example, a taxpayer earning $30,000 will experience a 4.9 percentage point marginal tax rate reduction to 11 per cent, and a taxpayer earning $50,000 will experience a 5.1 percentage point marginal tax rate reduction to 13 percent (see Figure 12).

Saskatchewan's Tax System Will Be Simpler

Saskatchewan's current reliance on the federal tax system and the Province's efforts to achieve its social and economic goals through the provincial tax system have resulted in a complex tax structure where three surtaxes are added to the basic provincial income tax and a complex low income reduction is deducted. The result is a tax system that is complex to administer and comply with, and one which fosters confusion and suspicion about its fairness.

Tax reform promotes a simpler, more transparent tax system by replacing all of the surtaxes and the reduction with a simplified three-rate tax structure. For about 70 per cent of all taxpayers, the new system will amount to a single tax rate of 11 per cent on taxable income, the same rate as in Alberta following that province's reform.

The new structure will promote greater transparency and confidence in the fairness of the tax system. An example of how the tax calculation under the reform compares to the current tax system is presented in Figure 13.

Saskatchewan's Tax Reform Will Be Affordable

Taxation levels must be sufficient to finance key public services like health care, education and social programs. As a result, a tax reduction strategy that lowers taxation levels to the extent that services are reduced or deficits occur is not effective or sustainable.

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When fully implemented in 2003, personal tax reform will result in an affordable overall reduction in tax revenues of about $260 million annually. The upcoming fiscal year is a transitional period that contains significant personal tax reductions as a result of the phase-out of the Saskatchewan Flat Tax and the introduction of the Saskatchewan Sales Tax (see Figure 14).

TRANSITION TO TAX REFORM

The year 2000 will provide a transition to the new tax reform structure. To ensure that taxpayers will benefit from lower taxes in the current year, a series of tax measures are being introduced:

- the Flat Tax will be reduced from 2 per cent to 1 per cent effective July 1, 2000;

- the E&H Tax will be expanded in two stages -- Budget night for most items and July 1, 2000 for professional, building, advertising and employment services; and,

- the Saskatchewan Sales Tax Credit will be paid in full during 2000-01, so that lower income earners will experience an offsetting tax reduction.

The combined impact of all tax measures introduced for 2000 will be a substantial reduction in combined sales and income taxes for lower incomes (see Figure 15).

Beginning in the 2001 taxation year, Saskatchewan will phase-in its new personal income tax system. As illustrated below, the three-year transition will see tax rates reduced, income brackets expanded and personal tax credits increased in each year (see Figure 16).

CONCLUSION

Saskatchewan's personal tax reform successfully addresses the Government's objective of improving fairness, simplicity, competitiveness and support for the family.

When fully implemented in 2003, Saskatchewan's tax reform will:

- lower personal taxes by $260 million annually;
- ensure that Saskatchewan families continue to pay the lowest sales taxes in Canada;
- introduce inflation protection to the provincial income tax system once the reform is fully implemented;
- improve the progressiveness of provincial personal taxes;
- increase the tax system's support for families through the new $2,500 per child tax credit;
- enhance the tax system's recognition of family expenditures through increased support for personal tax credits;
- simplify tax compliance and administration; and,
- achieve a competitive tax system.

The reform:

- provides greater disposable income for individuals and families, thereby creating greater spending power and choice for people in their daily activities;
- improves the ability of Saskatchewan-based businesses to attract and retain qualified labour, as taxes represent a significant element in a prospective employee's compensation decision; and,
- ensures a higher standard of living for Saskatchewan residents.

APPENDIX A

FEDERAL-PROVINCIAL INCOME TAX ARRANGEMENTS

Current Income Tax System

Under the terms of the existing Tax Collection Agreements with the federal government, provincial income tax is generally based on a single provincial tax rate applied to Basic Federal Tax. This system is commonly referred to as "tax on tax". The Agreements also permit provinces to apply special surtaxes and low income reductions but require provincial governments to accept the federal government's definition of taxable income, income brackets, federal taxation rates and non-refundable tax credits.

For the 1999 taxation year, Saskatchewan levied:

- a 48 per cent basic rate on Basic Federal Tax;
- a 2 per cent Flat Tax levied on Net Income;
- a 10 per cent Debt Reduction Surtax levied on basic provincial tax; and,
- a 15 per cent High Income Surtax on basic provincial tax in excess of $4,000.

In addition, a low income tax reduction is deducted to finally determine provincial income tax payable. The net result is that Saskatchewan generated approximately $1.4 billion of revenue from personal income taxes in 1999-2000, or about 25 per cent of total provincial revenue.

The Opportunity for a Tax on Income Structure

In response to the growing complexity of the income tax system at the provincial level and in recognition of the lack of flexibility in the current system, the federal government has agreed to changes in the Tax Collection Agreements that allow the provinces the option of adopting tax on income rather than using the current provincial tax as a percentage of Basic Federal Tax. The Canada Customs and Revenue Agency would still act as the collection agency and the definition of taxable income continues to be defined by the federal government.

A tax on income structure allows Saskatchewan to determine income brackets and tax rates separate from the federal system. This permits a significant improvement in the simplicity and transparency of Saskatchewan's tax structure through the elimination of the current system's flat tax, surtaxes and low income reduction. It also allows for both an increase in the Province's support for existing non-refundable tax credits and the creation of new tax credits to meet the Province's social and economic goals.

APPENDIX B
E&H TAX MEASURES

The Education and Health (E&H) Tax rate remains at 6 per cent, the lowest sales tax rate in Canada.

As part of the 2000 tax reform to improve the fairness of Saskatchewan's tax system, the Government of Saskatchewan is:

- expanding the tax base of the E&H Tax in two steps; and,
- introducing the Saskatchewan Sales Tax Credit to reduce the impact of the sales tax on Saskatchewan's lower income taxpayers.

The Government will also be entering into an agreement with the Canada Customs and Revenue Agency to collect the E&H Tax on taxable commodities entering Saskatchewan from outside Canada. Both the travellers stream, and the postal and courier streams of taxable commodities will be subject to the E&H Tax. The current federal exemption limits will apply for provincial tax purposes.

TAX BASE EXPANSIONS EFFECTIVE MARCH 30, 2000

Effective March 30, 2000, the E&H Tax will apply to the following categories (with exemptions within certain categories noted).

Repair Services

Repair services to items such as vehicles, business equipment, appliances, and furniture.

- Repairs to real property, such as house painting, roofing or driveway repairs remain exempt. Repairs to exempt items, such as farm equipment, also remain exempt.

Dealer Sales of New and Used Vehicles

The application of the E&H Tax to dealer sales of vehicles is being changed to take into consideration the value of trade-in vehicles. Effective March 30, 2000, the E&H Tax will apply to the cash difference on sales of all new and used vehicles by dealers.

Private Sales of Used Vehicles

The private sale of a used vehicle (i.e. by someone other than a licensed vendor).

- The purchaser will be allowed a deduction of $3,000 in calculating the amount on which tax is owing.

Used Goods

Used goods, including appliances and business assets.

- On the purchase of used personal goods, the tax will apply to the selling price of the goods less a deduction of $300 per item to ensure that lower-priced goods remain tax exempt. "Personal goods" (other than vehicles) means any item purchased by an individual for personal, non-commercial use (e.g. items such as appliances, adult clothing, furniture, computers, jewellery, sporting goods and household items).

Computer Services

Pre-written and custom programs, including charges for software modifications, installation, configuration, accessing a database, data entry, and other computer-related services.

Off-reserve Purchases by Status Indians

Purchases made off reserve by Status Indians.

- Goods that are delivered to a reserve by the retailer remain exempt from tax upon presentation of a Certificate of Indian Status identification card number issued under the federal *Indian Act.*

Non-prescription Drugs and Medicines

Non-prescription drugs and medicines (e.g. pain relievers, vitamins, and ointments).

- Drugs and medicines prescribed by a medical practitioner remain exempt.

Maintenance Contracts

Maintenance contracts that provide for regular servicing of equipment.

- The parts, labour, materials and supplies used to repair or service the equipment under the terms of the contract will be exempt from tax.

Bedding Plants, Trees and Shrubs

Bedding plants, grass seed, garden seed, flower bulbs, trees, shrubs, and sod.

Veterinary Fees, Veterinary Drugs and Medicines and Pet Food

Veterinary fees, drugs and medicines and pet food, including vitamins and dietary supplements.

- Livestock veterinary fees and drugs and medicines administered to farm livestock by a veterinarian remain exempt from tax. Drugs and medicines purchased by a farmer for livestock also remain exempt.

Dry Cleaning and Laundry Services

Dry cleaning and laundry services excluding coin-operated laundering.

Real Estate Fees

Fees and commissions paid to real estate agencies for selling real property. The tax will not apply to appraisal fees and property inspection fees.

Other Services

Telephone answering services; credit bureau and collection agency fees, including charges to collect accounts; and security and investigation services including monitoring commercial buildings, private investigations, guard dog services, patrol services, armoured security services and alarm monitoring services.

Other Tax Changes Effective March 30, 2000

The E&H Tax will apply to:

- Flyers and advertising materials inserted into newspapers;
- Business use aircraft, including repair parts and labour (but excluding aircraft used for crop-spraying); and,
- Oilfield chemicals, including demulsifiers, desulfurizers, dehydrators, dispersants, and antifoamers.

TAX BASE EXPANSIONS EFFECTIVE JULY 1, 2000

Effective July 1, 2000, the E&H Tax will apply to the following services consumed in Saskatchewan:

- Professional services, including legal, accounting, architectural, consulting and engineering services;
- Commercial building cleaning services;
- Advertising services; and,
- Employment placement services.

Figure 1

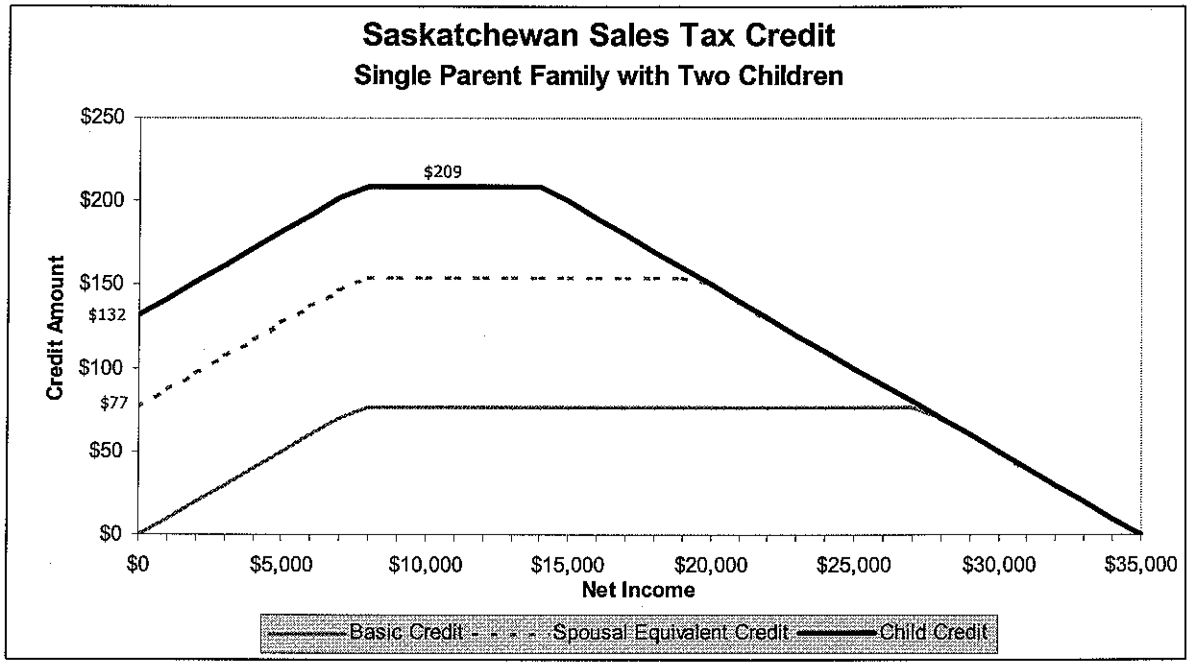


Figure 2

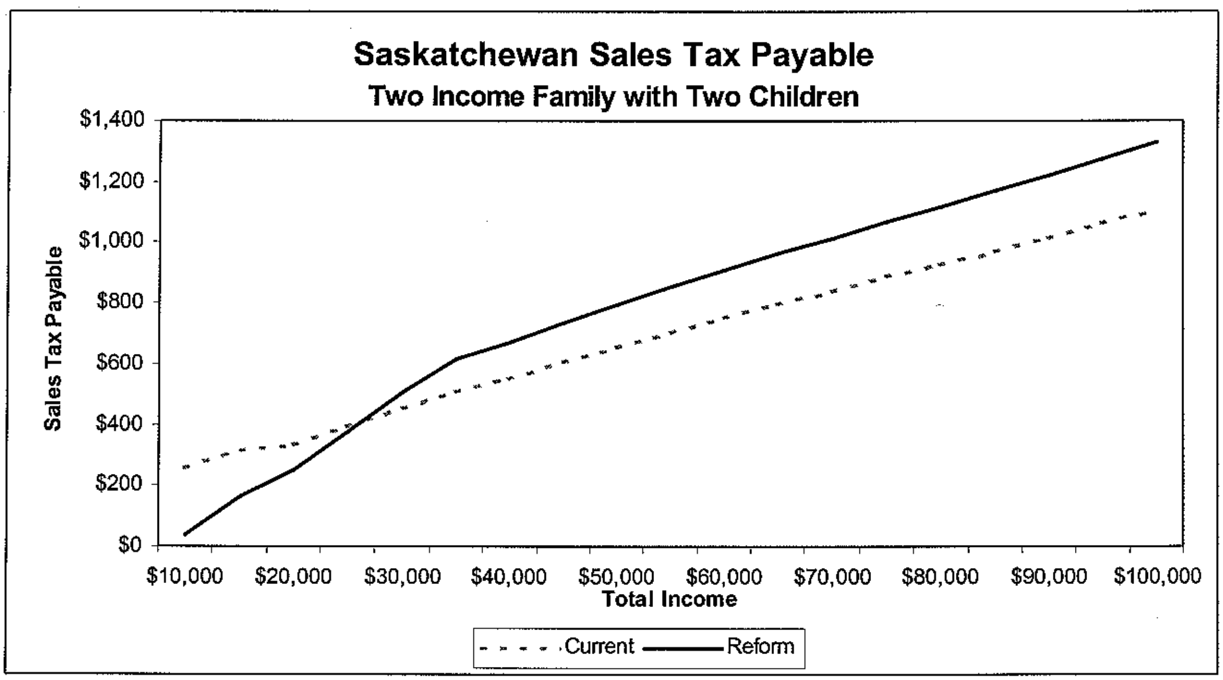


Figure 3

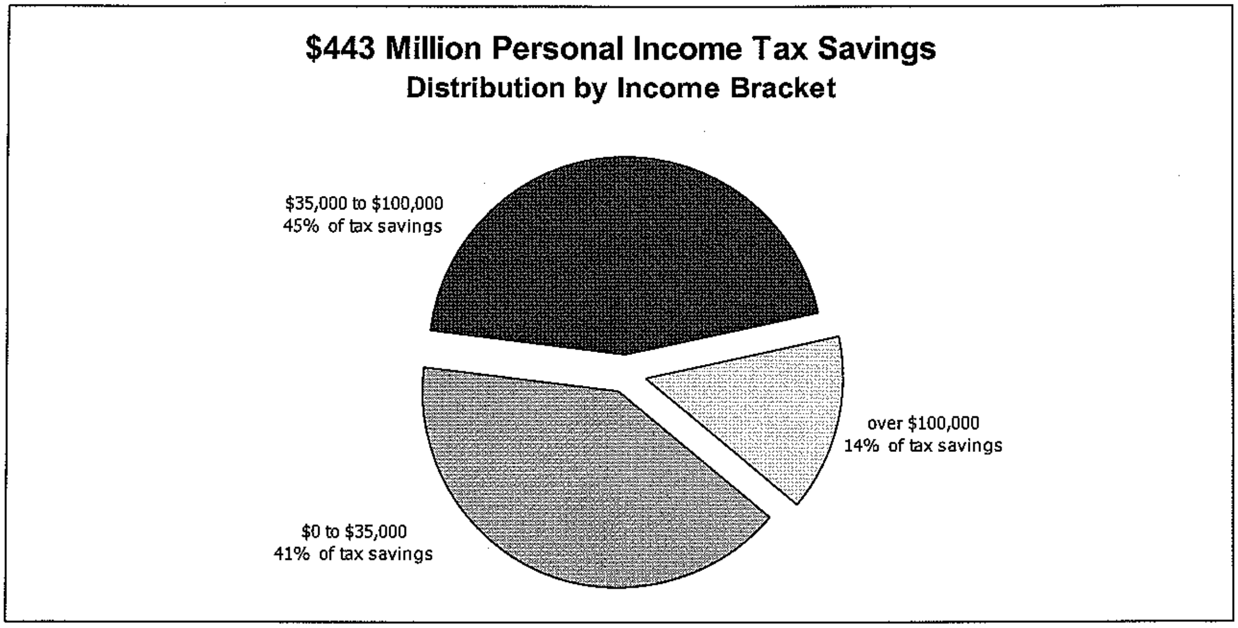


Figure 4

Impact of Tax Reform on Families					
Family Income	Current System		Tax Reform		% of Reduction in Tax
	Combined Tax	Tax as a % of Income	Combined Tax	Tax as a % of Income	
One Income Families:					
$10,000	$257	2.6%	$38	0.4%	**85.2%**
$20,000	$722	3.6%	$249	1.2%	**65.5%**
$30,000	$2,385	8.0%	$1,308	4.4%	**45.2%**
$40,000	$4,048	10.1%	$2,621	6.6%	**35.3%**
$50,000	$5,858	11.7%	$4,044	8.1%	**31.0%**
$75,000	$10,901	14.5%	$7,570	10.1%	**30.6%**
$100,000	$16,093	16.1%	$11,078	11.1%	**31.2%**
Two Income Families:					
$25,000	$841	3.4%	$345	1.4%	**59.0%**
$35,000	$2,182	6.2%	$1,560	4.5%	**28.5%**
$50,000	$4,195	8.4%	$3,348	6.7%	**20.2%**
$75,000	$7,875	10.5%	$6,454	8.6%	**18.0%**
$100,000	$12,247	12.2%	$9,747	9.7%	**20.4%**

Figure 5

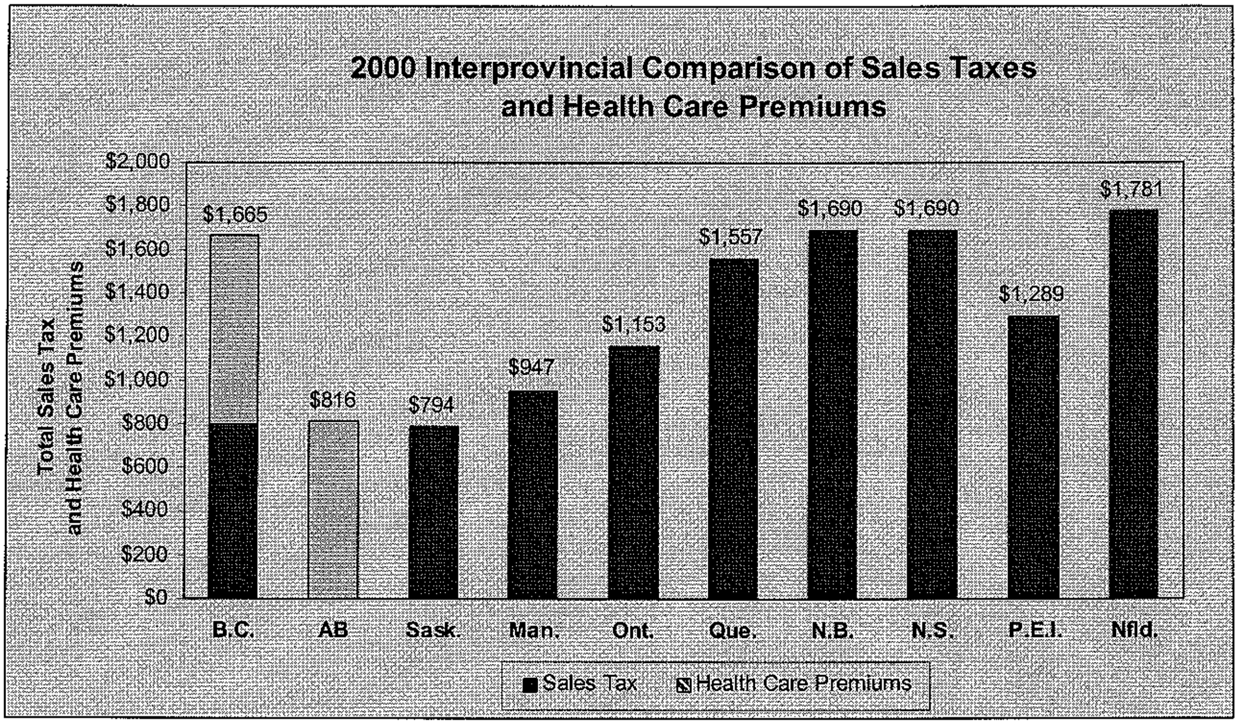
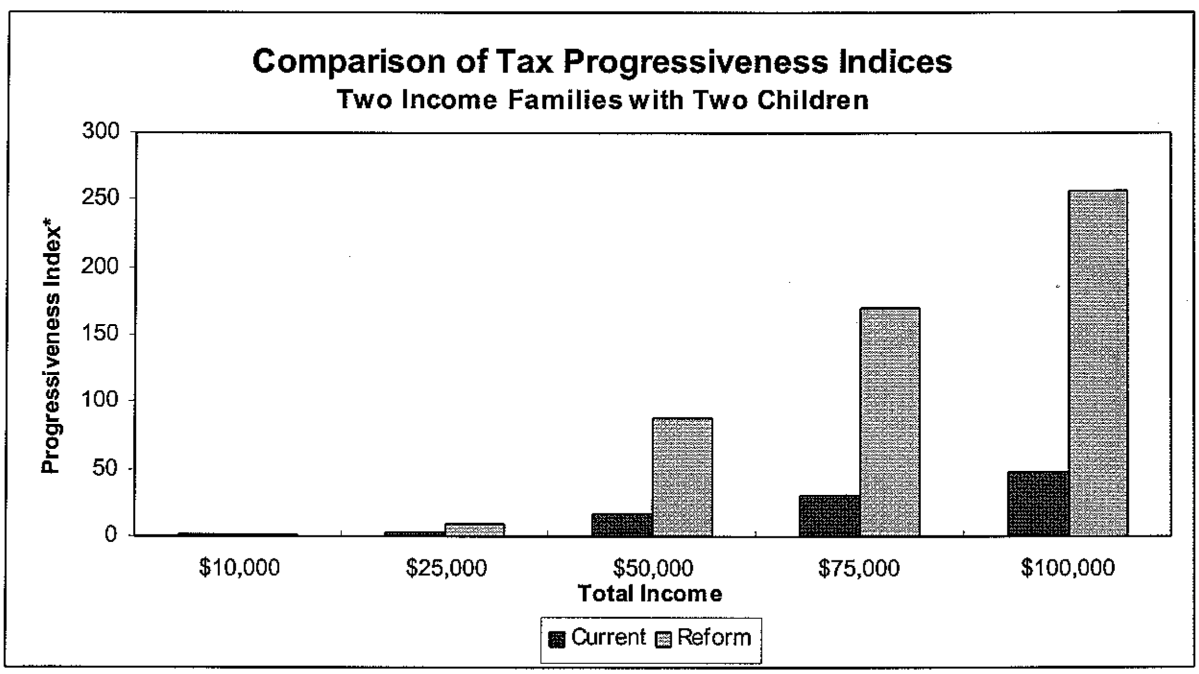


Figure 6



* The Progressiveness Index is determined by dividing the combined income and sales taxes payable by a family at a particular income level by the combined income and sales taxes payable by a family earning $10,000, which represents the base index of 1.

Figure 7

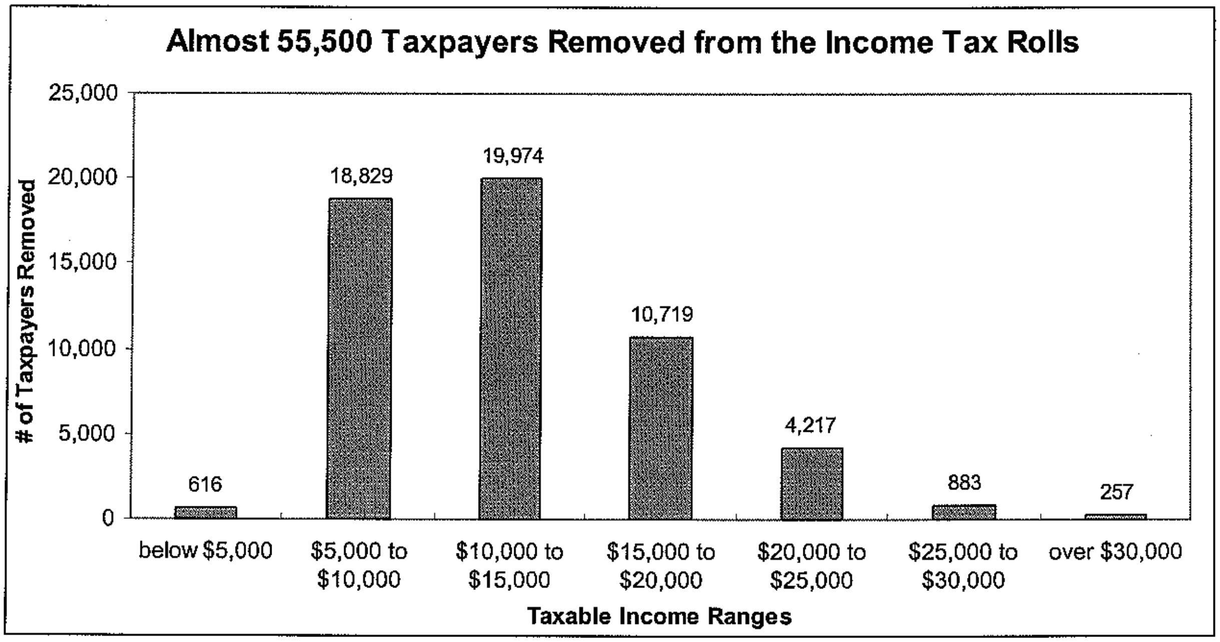


Figure 8

Tax Reform Savings for Families					
Family Income	Income Tax Savings	Sales Tax Impact	Sales Tax Credit	Net Tax Savings	Savings as a % of Tax*
One Income Families:					
$10,000	$0	($31)	$250	$219	85.2%
$20,000	$391	($68)	$150	$473	65.5%
$30,000	$1,127	($100)	$50	$1,077	45.2%
$40,000	$1,546	($119)	$0	$1,427	35.3%
$50,000	$1,953	($139)	$0	$1,814	31.0%
Two Income Families:					
$25,000	$448	($82)	$130	$496	59.0%
$35,000	$672	($110)	$60	$622	28.5%
$50,000	$986	($139)	$0	$847	20.2%

* Equal to Net Tax Savings divided by combined provincial income and sales taxes payable in 1999.

Figure 9

Saskatchewan Personal Tax Credits* (millions)			
	Current	Tax Reform	Increase
Age amount	$28.5	$34.9	$6.4
CPP contributions	30.3	37.1	6.8
EI premiums	17.9	21.9	4.0
Pension income	8.1	9.9	1.8
Tuition and Education	15.3	18.7	3.4
Student loan interest	2.0	2.5	0.5
Medical expenses	9.0	11.0	2.0
Charitable contributions	16.5	18.5	2.0
Care givers	1.4	1.7	0.3
Total Credits	**$129.0**	**$156.2**	**$27.2**

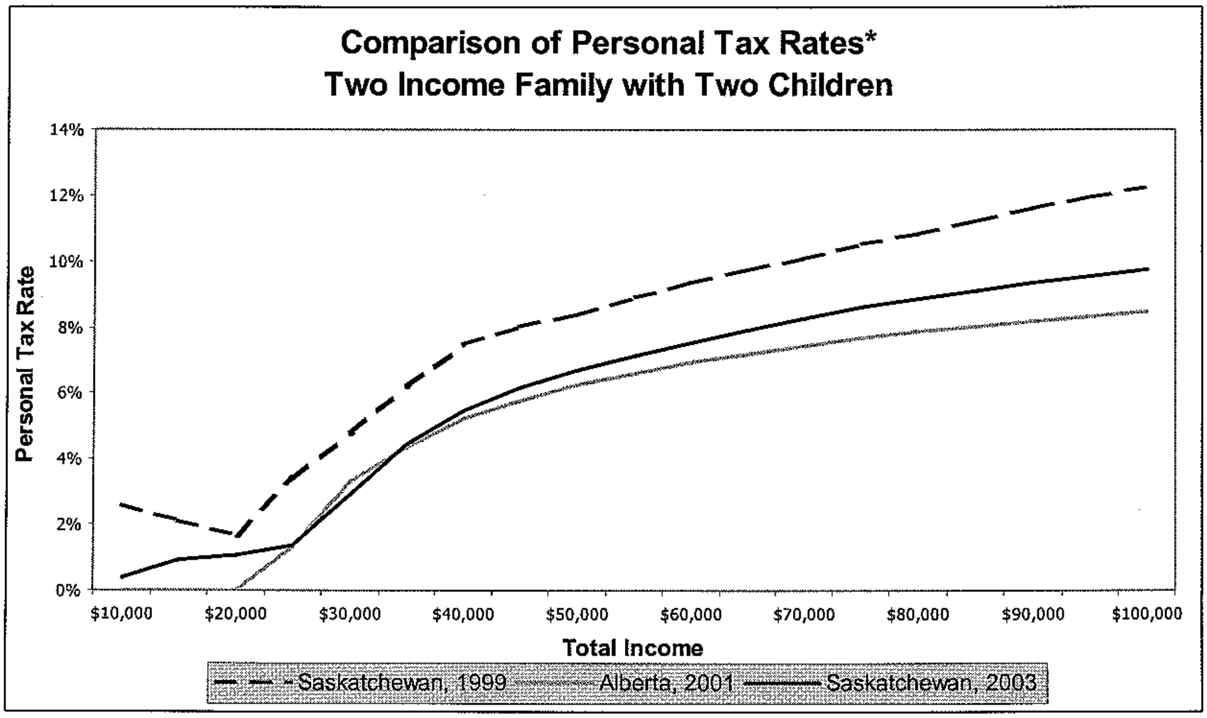
* Value of personal tax credits as estimated by Saskatchewan Finance.

Figure 10

Income Thresholds at Which Income Tax Becomes Payable*				
	Single	Senior	Single Parent	One Income Family
1999 Threshold for Federal Tax	$7,370	$11,430	$13,730	$13,730
Threshold for 1999 Saskatchewan Tax	$7,910	$12,080	$17,370	$17,370
Threshold for Reformed Saskatchewan Tax	$9,290	$14,990	$21,630	$24,330

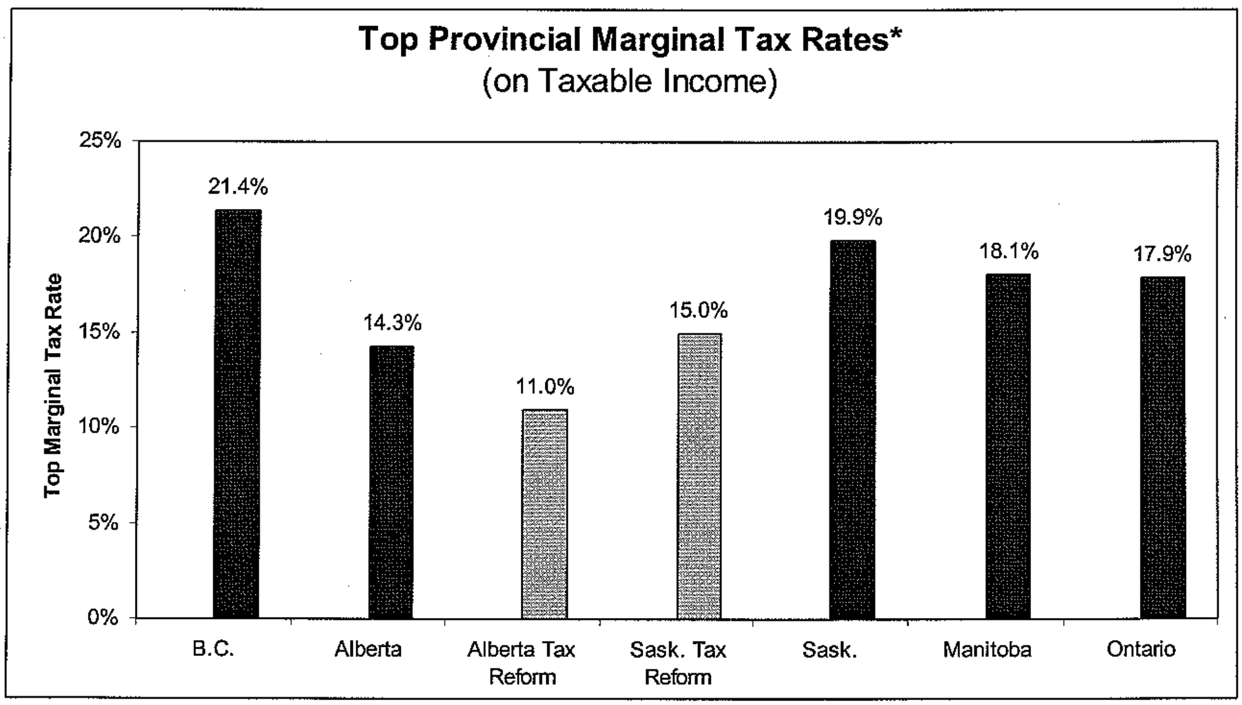
* Assumes that all income is derived from employment, that only the basic deduction and CPP/EI credits have been claimed, and that the families have two children but have not claimed child care expenses.

Figure 11



* Personal Tax Rates are determined by dividing combined provincial income and sales taxes and health care premiums payable by total income.

Figure 12



* Top Provincial Marginal Tax Rates for the 1999 taxation year. Alberta's tax reform will lower its top marginal tax rate to 11%. Saskatchewan's tax reform will lower its top marginal tax rate to 15%.

Figure 13

Saskatchewan Income Tax - Current vs. Reform
One Income Family Earning $50,000 with Two Children

Determination of Taxable Income (federal calculation)
$50,000

Calculation of Saskatchewan Tax - Current (1999	
Taxable Income	**$ 50,000**
Preliminary Federal Tax:	
Bracket 1 Tax	$ 5,030
Lesser of Taxable Income and $29,590 x 17%	
Bracket 2 Tax	5,307
Taxable Income over $29, 590, but not over $59,180 x 26%	
Bracket 3 Tax	0
Taxable Income over $59,180 x 29%	
Preliminary Federal Tax	$ 10,337
Federal Non-Refundable Tax Credits:	
Basic Amount	$ 6,794
Spousal Amount	5,718
Other Amounts (EI/CPP)	2,181
Total Amounts	$ 14,693
Total Credits *(Total Amounts x 17%)*	$ 2,498
Basic Federal Tax:	
Preliminary Federal Tax	$ 10,337
Minus: Federal Tax Credits	(2,498)
Basic Federal Tax (BFT)	$ 7,839
Saskatchewan Income Tax:	
Saskatchewan Tax (48% of BFT)	$ 3,763
Add: High Income Surtax	1,000
Basic Saskatchewan Tax	$ 4,763
Add: Debt Reduction Surtax	326
Add: High Income Surtax	114
Total Saskatchewan Tax	$ 5,203
Minus: Saskatchewan Tax Reduction	0
Saskatchewan Income Tax - Current	$ 5,203

Calculation of Saskatchewan Tax - Reform	
Taxable Income	$ 50,000
Preliminary Saskatchewan Tax:	
Bracket 1 Tax	$ 3,850
Lesser of Taxable Income and $35,000 x 11%	
Bracket 2 Tax	1,950
Taxable Income over $35,000, but not over $100,000 x 13%	
Bracket 3 Tax	0
Taxable Income over $100,000 x 15%	
Preliminary Saskatchewan Tax	$ 5,800
Sask. Non-Refundable Tax Credits:	
Basic Amount	$ 8,000
Spousal Amount	8,000
Child Amounts	5,000
Other Amounts (EI/CPP)	2,181
Total Amounts	$ 23,181
Total Credits *(Total Amounts x 11%)*	$ 2,550
Total Saskatchewan Tax:	
Preliminary Saskatchewan Tax	$ 5,800
Minus: Saskatchewan Tax Credits	(2,550)
Saskatchewan Income Tax - Reform	**$ 3,250**

Tax Savings:	
Saskatchewan Income Tax - Current	$5,203
Saskatchewan Income Tax - Reform	$3,250
Tax Saving	$1,953

Figure 14

Fiscal Impact of Tax Reform (millions)		
Fiscal Year	2000-01	Mature Tax System
Income Tax Reform	($206.4)	($442.6)
Sales Tax Reform	$142.7	$160.9
Other Measures*	$20.0	$21.2
Subtotal	($43.7)	($260.5)

* Includes a 1 point increase in the Insurance Premiums Tax and an increase in the tax rate on cut tobacco and cigars.

Figure 15

Transition to Tax Reform Tax Savings in 2000 for Two Income Families			
Income Level	Income Tax Savings*	E&H Tax Impact**	Total Tax Savings
$15,000	-	$124	$124
$25,000	$105	$16	$121
$35,000	$222	($65)	$157
$50,000	$349	($139)	$210
$75,000	$640	($182)	$458
$100,000	$952	($223)	$729

* Includes the provincial impact of the federal budget measures.

** Includes the impact of the Saskatchewan Sales Tax Credit.

Figure 16

2001 Taxation Year:

Tax Rate	Income Brackets	Personal Credit Amounts	
11.5%	Up to $30,000	Basic/Spousal	$8,000
13.5%	$30,000 - $60,000	Per Child	$1,500
16.0%	Over $60,000	Senior supplement	$500

2002 Taxation Year:

Tax Rate	Income Brackets	Personal Credit Amounts	
11.25%	Up to $30,000	Basic/Spousal	$8,000
13.25%	$30,000 - $60,000	Per Child	$2,000
15.50%	Over $60,000	Senior supplement	$750

2003 Taxation Year:

Tax Rate	Income Brackets	Personal Credit Amounts	
11.0%	Up to $35,000	Basic/Spousal	$8,000
13.0%	$35,000 - $100,000	Per Child	$2,500
15.0%	Over $100,000	Senior supplement	$1,000

TAX ON INCOME IN NOVA SCOTIA

Elizabeth Cody

Nova Scotia announced its decision to shift its Personal Income Tax System from a percentage of the Federal Basic Tax to Taxable Income (TONI) on February 23, 2000. This decision however, did not come lightly.

When the federal government made available to provinces the opportunity to make such a change to its tax system two years earlier, the province was not one of the first to opt for such a move. Nova Scotians had just come through tax reform in 1997 as part of its decision to harmonize its sales taxes system with the federal Goods and Services Tax. As part of that reform package, the province had announced a decrease in its personal income tax rates of 2 percentage points from 59.5% to 57.5% of Federal Basic Tax. As well, the province had announced a doubling of the value of its Low Income Tax Reduction Program which saw 220,000 Nova Scotians receive relief under this program. In combination, these two personal income tax relief measures were taken in an effort to provide Nova Scotians with some assistance from the increase in taxes on goods and services that had been tax free under the previous provincial sales tax system. Additional components of the 1997 tax reform package included the provision of input tax credits to business under harmonization to the GST system, the implementation of a 5-year Corporate Capital Tax on all business to help offset the net cost of harmonization to the Nova Scotia government and the creation of a Direct Assistance Program to provide relief to the working poor who didn't pay taxes.

With this package of tax changes just launched in the province, the appetite of the Government of Nova Scotia to engage in yet another round of tax reform was not great. There was clear concern that the communication of such a change would be difficult and the perception by taxpayers would be of a tax grab by government. In addition, the province was concerned over the increased complexity on the Nova Scotia tax return by adopting the flexibility offered under a TONI system. Under the "Tax on Tax," the province had a single rate of 57.5% and a single surtax of 10% on tax payable over $10,000. This was in contrast to the multiple surtaxes and flat taxes existing in certain other jurisdictions who were seeking increased simplicity from such a system change. For Nova Scotia to move to a TONI system would mean an additional page of calculations on the tax return to determine the value of the provincial Non-Refundable Tax Credits.

In addition to these concerns, the province was concerned over the difficulty of forecasting PIT revenues under a system where all provinces had the flexibility to provide multiple rates and brackets as well as credit initiatives. While it was recognized that this would be a concern regardless of whether or not Nova Scotia decided to harmonize, given that there was real interest by certain other jurisdictions to move in this direction, the detailed information available to the province to do accurate forecasting was a serious concern.

While Nova Scotia and other provinces pondered the option of moving to a TONI system, the federal government had turned the corner on its deficit reduction path and pressure was mounting on two fronts. Calls by provinces for the federal government to restore funding on essential health spending was matched by increasing pressure to take meaningful action to lower the personal income tax burden on Canadians.

In its 1997-98 budget, the federal government had initiated steps to begin a tax reduction strategy. With its first balanced budget since 1969-70, the federal government announced various changes to the non-refundable credit block which lowered Nova Scotia's PIT revenues by nearly $4 million in that year alone.

Similarly in its 1998-99 Budget, a series of federal tax relief measures which targeted low income individuals were provided. While the priorities reflected in these budget measures were in step with Nova Scotia's own priorities of providing relief for those most in need and addressing the mounting pressures facing the student population, the federal measures came at an additional price tag to the Nova Scotia revenue base. As a result of federal actions taken in its 1998-99 budget, the provincial Personal Income Tax revenue base began to lose ground. An estimated $9 million was lost to the province as a result of such federal decisions as the $500 increase in the basic personal credit and the enrichment of the non-refundable personal credit block.

This federal tax relief strategy continued in its 1999-2000 budget. In a partial response to provincial concerns over federal tax measures which effectively erode the provincial tax base, the Government of Canada chose to eliminate the 3% federal surtax which had no impact on the provinces. In an effort to maximize the effect of tax relief on all income levels however, they once again targeted the personal credits. As a result of the 1999-2000 federal budget tax measures, the PIT revenues for Nova Scotia were an estimated $20 million lower than they would have been otherwise.

This posed a difficult challenge for the province. While federal tax relief measures were eroding the provincial revenue base, federal expenditure reduction strategies, similarly implemented as part of their deficit reduction plan, were continuing to restrain the level of federal funding support to the province. Between 1994-95 and 1999-2000 the province had lost an estimated $400 million in reduced funding levels through the Canada Health and Social Transfer Program for essential programs. In contrast, provincial health expenditure pressures continued to mount, reflecting staggering increases in such elements as escalating drug costs, home care and acute care. The 1999 federal budget CHST supplement of $107 million to Nova Scotia over three years, was only a beginning to the restoration of funding so badly needed.

In 1999, the Province also underwent a change in government and the inevitable restatement of its budgetary position. This resulted in an anticipated deficit for the year of $386 million before extraordinary items. Given the loss of expenditure flexibility which comes from increasing debt levels and associated debt-servicing costs, the new government was firmly committed to turning this trend around. The risk of a downgrade in our ratings by the rating agencies was very real. Meaningful action had to be taken immediately. The difficulty of this challenge was made even more severe given that 80 percent of provincial government spending was in the three critical social program areas of health, education and social assistance.

As the province considered its options and strategy for reducing its expenditure base as part of its 2000-01 budget deliberations, it also looked closely at its revenue sources. The federal government was clearly continuing on its tax relief track with the development of a medium-term plan in this regard. As part of its election platform commitments leading into the 1999 provincial election, the Nova Scotia Government had announced its intention to "stimulate the economy by reducing provincial personal income taxes by at least 10 percent, once government finances and our health care system have been put in order".

While the federal and provincial tax relief goals were similar, the timing was not. The province's first priority was to achieve a balanced budget. This was a marker that the federal government had already reached. Consequently, the Government of Nova Scotia was not prepared to continue to link its personal income taxes to the Federal Basic Tax System. It could not afford to pass along the provincial reductions in PIT that inevitably result from federally driven tax strategies affecting our revenues. The significant challenges of achieving the expenditure reductions required to turn around the 1999-2000 deficit pressures were already tremendous. Employment for over 1600 public servants had to be terminated. Our Department of Health is required to absorb a 2% reduction over last year, the only province endeavoring to reduce expenditures in this area. Education, through the School Boards, is taking a $20 million hit and the termination of 400 teaching positions. Our Economic Development Department is taking a 45% hit. All other departments are taking an 8% reduction. Exacerbating this problem by flowing through further revenue reductions determined federally, was not in the cards. An estimated 400 additional positions would have had to be terminated if the province was to shoulder these lost income tax dollars.

As a result of all of these considerations, the province followed through its February 2000 announcement to move to the TONI system by tabling legislation as part of its Financial Measures Act. The move was a deliberate step by the province to gain control over when provincial personal income tax relief was provided to Nova Scotians and the manner and extent of that tax relief. As per statements made by the Minister in his announcement, "Decisions on provincial income tax policy should be made in Nova Scotia and not at the federal level."

Three things were also made clear by the Minister;

- The change to tax on income would not result in Nova Scotians paying any more in provincial income taxes, it is simply a different way of calculating the same amount of money;
- Nova Scotians would receive the full benefit of any federal personal income tax reduction; and
- Nova Scotia will have more control over such issues as income brackets, non-refundable credits and tax rates.

For the most part, the initial move to TONI announced for the 2000 taxation year, provided no change in the tax incidence among taxpayers from that levied in the 1999 tax. This meant that the province did not implement indexation of the bracket thresholds as had been announced in the federal budget. The Nova Scotia income brackets remain the same in 2000 as they had in 1999. The federal government however, also made adjustments to raise the thresholds of some of the non-refundable credit block (ie the basic and spousal exemption) and to the taxation of capital gains as determined in the Taxable Income Base. Both of these changes had the effect of reducing federal and provincial taxes payable.

Given that the province accepted the importance of a common definition of the taxable base in its decision to move to TONI, reflecting the importance to such issues as competitiveness, consistency and taxpayer simplicity, the province was prepared to accept the impacts on its revenues from changes to the treatment of capital gains. Similarly, the province held steadfast to its commitment that the tax burden would not increase for Nova Scotians, and chose not to take the very direct action that would have been necessary to offset the tax relief in the non-refundable credit block resulting from the federal budget,. These savings were allowed to flow through to Nova Scotia taxpayers. By moving to TONI however, it limited its reduction in provincial income taxes arising from the 2000 Federal Budget measures to an estimated $7.5 million as opposed to the potential losses of $25 million which would have occurred otherwise.

At this stage in its tax policy planning, the province continues on its deficit reduction path and is committed to balancing its budget position by 2003-04. In preparation for that time however and in response to commitments made by the Government to consult with Nova Scotians before it takes any steps towards overall tax reform in the province, a serious look must be given to the tax profile of Nova Scotians. In certain respects, the profile of our taxpayers is notably different than certain of my provincial colleagues here today.

In Nova Scotia, 38 percent of the assessed taxable income in the province is in respect of tax filers who have income of $30,000 or less. This is notably higher than the 26% in Alberta and 24% in Ontario generated by this same lower income group. On the high income end, 25% of our assessed taxable income is generated by tax filers with income greater than $60,000. This compares to 35% in Alberta and 34.6% in Ontario.

It is clear from such statistics, that a proportionately greater number of lower income Nova Scotians are paying a higher percentage of the income taxes available to fund provincial programs and services. This higher component of low income tax payers coupled with proportionately higher costs due to such issues as low health status, high disability rates and high illiteracy rates, create significant problems for the province in terms of providing comparable levels of programs and services relative to other, more wealthy, jurisdictions. It also helps to explain such things as the higher take up rates and average cost to the province of its Low Income Tax Reduction program relative to certain other jurisdictions.

These are but some of the issues that the province must come to grips with as it determines what, if any, recommendations for further tax reform are necessary going forward. Given the large number of low income tax filers in the province, the whole issue of a progressive tax approach versus a flat tax approach must be considered carefully. Certain platform commitments made by the Government must also be considered in the context of the new flexibility accorded under TONI. The Government has made commitments to undertake certain tax relief programs through the personal income tax system such as: relief for family care givers who stay at home to care for a family member and an Income Tax Relief Program for graduating students with high debt loads. Similarly, a commitment has been made to revisit the issue of indexation at some point going forward. Once the fiscal health of Nova Scotia is restored, the province views the new TONI system as an opportunity to increase the sensitivity of the tax system to the specific needs of the province with more precision and more ease.

PROSPECTS FOR PIT REFORM IN ONTARIO

Tom Sweeting

My topic is "Prospects for PIT Reform in Ontario". I'd like to begin by establishing some context for my remarks."Prospects" invites speculation about what might happen. While I'm not going to speculate, I will talk about some of the key public policy considerations that I believe are relevant to tax policy development in Ontario. "Reform" is a relatively common word in tax policy but what exactly does it mean. To some extent, it is reform if you say it is, but let us look a little more at this.

The dictionary defines reform as, "an improvement, especially one made by removing faults or abuses, a change that will improve conditions." It does not put a size on it and also does not put a time frame on it. Does it have to be a big move to be "reform"? My answer is "no", but it helps. Reform tends to be associated with dramatic changes. In part, if a change is significant and dramatic, that often is enough to qualify it as reform. Certainly the federal sales tax being replaced by the GST is universally seen as a reform. Ontario's changes to its property tax is also accepted as reform.

Does reform happen as a revolution, or can it be evolutionary? I think change is more likely to be thought of as reform if it occurs rapidly, but it can be something that happens gradually over a longer period of time. In this context, it is my view that PIT reform has already happened in Ontario on two fronts.

Between 1985 and 1995 Ontarians had experienced significant PIT increases at the provincial level, as rates rose from 45% to 58% of the basic federal tax and surtaxes were extended and increased. Starting in 1996, Ontario took steps to dramatically cut its personal income taxes. Today the rate is well below 40% expressed as tax on tax. Significant cuts have occurred across all income ranges. The "fault" of high and growing personal income taxes has been removed by the government's tax cut plan.

As well as removing the "fault" of high and growing income taxes, the provincial government argues that Ontario's personal income tax cut plan has "improved conditions". The 2000 budget noted that economic growth was 50% higher in 1999 than had been predicted by the private sector. Since 1995 there had been 700,000+ jobs created in Ontario -- over 50% of the job growth in Canada. Tax revenues grew by $11.7 billion, despite the fact that personal income tax rates were dramatically slashed. Increases in real disposable income are estimated at 4.3% for 2000 and 3.6% for 2001.

Moreover, Ontario's tax cut plan involved significant and dramatic change. In 1995 a program of across the board personal income tax cuts was a radical and a "dramatic" shift from the status quo in Canada. No other government had envisioned such a reversing of the long term trend of escalating personal income tax increases. In fact, it was years before other governments adopted sustained income tax cuts as a fiscal strategy and none have come close to matching the speed and extent of Ontario's plan. Indeed, at the federal level, many analysts have identified a consistently rising trend in federal PIT burden and only recently has there been action to reverse that trend.

New Brunswick could be said to have a plan in a sense that they began a PIT rate reduction in 1997, although their plan was extended beyond the original time frame and the change was about 10%. At that point in time, Alberta had relatively low taxes compared to Ontario's so perhaps they didn't have to cut so dramatically. You have heard that the province of Saskatchewan is adopting a plan for tax cuts. But Ontario's plan in 1995 was at the time, and still is, a unique situation.

So given the government's efforts to remove faults and improve conditions through a dramatic change in the status quo, my contention is that tax reform has already happened in Ontario as a result of the implementation of a massive income tax cut plan.

That is not the only example of Ontario leadership in tax reform. Previous speakers have addressed how such changes in the setting and collecting of incomes taxes are taking place right across the country, through the implementation of provincial tax on income.

Many provinces have argued for years that the old tax collection agreement was an anachronism, imposing unnecessary constraints on a province's determination of a tax structure relevant to provincial interests. Certainly, in past years the reaction of some to the concept indicated that provincial tax on income meant entering a brave new world. However, to me it is a simple approach that allows provinces to better tailor their own tax systems to their own particular circumstances. It's a reflection of the evolution of the federation, rather than a revolution in the relationship.

Some observers credit the federal turnabout on provincial flexibility to the 1997 Ontario budget. In response to the roadblocks Ontario had faced in making changes to the PIT, the Ontario Minister of Finance, Ernie Eves, called for a real partnership with the federal government. He noted that "unless the federal government is prepared to address these inequities, Ontario will have to seriously consider withdrawing from the current arrangements".

Background papers prepared in 1997 indicate that the "rules and provisions established in 1962 largely define the current partnership. These rules are no longer working". These examples – situations where the federal government rejected Ontario's request – do not define an income tax system that reflects Ontario's present and future needs.

The reform of tax arrangements between the federal and provincial governments would not have been implemented without Ontario, with half of the taxpayers administered by the current Canadian Customs and Revenue Agency (CCRA) - making the federal/provincial partnership a clear priority. Tax on income can be said to be a second example of Ontario tax reform that has already taken place.

Turning to Ontario's specific changes, the new tax on income system features three brackets. There are lower relative rates on the first bracket than the federal system, and the middle and the upper income rates parallel federal rates. High income surtaxes as well as the Ontario tax reduction for low income people have been retained. The new system also features indexation– including indexing of certain tax credits not indexed by the federal government.

Many observers see Alberta's move to a flat tax system as a dramatic example of provincial reform. Saskatchewan proposals, in particular the introduction of much larger brackets, are also a dramatic use of the new tool. Compared to these, Ontario's announced tax on income moves are not as dramatic. However, the 2000 Ontario budget proposals for a made-for- Ontario tax system involve lowering the rate of inclusion for capital gains from 66-2/3% to 62% for the year 2001 and calls for the introduction of a stock option deduction and a deduction for flow through shares.

With these proposals the Ontario Minister of Finance has reaffirmed the principle that Ontario believes a real partnership will respect the decisions that provincial governments make to address the particular needs of their people and businesses. According to the federal guidelines, these proposals are outside the tax collection agreement. Ontario's view expressed in the 2000 budget paper is that these proposals have no meaningful administrative impediments to their implementation by the Canada Customs Revenue Agency.

What is key to this discussion is that these proposals are a dramatic change from the status quo, clearly based on an expectation of positive economic results. In fact, time may show this "reform" by Ontario to be the most significant of any reform proposals contained in any provincial budget.

Given the extent of reform that has already taken place in Ontario, a look to the future means considering the prospects for further reform. I started off by indicating an unwillingness to predict the future. But I can certainly reiterate the commitments that the government has made.

There is a proposal for another 20% cut in personal income tax, on top of the 30% cut delivered in the first mandate. The Minister of Finance predicts this additional 20% cut will be completed next year. The Budget promised elimination of Ontario's high income surtaxes which, given the flexibility of the new tax on income system, could involve folding the surtaxes into a new rate structure or getting rid of surtaxes entirely. Another commitment is the continued reduction in the capital gains inclusion rate to achieve 50% capital gains inclusion by 2004.

Any additional steps will be guided by several public policy realities that Ontario faces. I'd like to concentrate on four of these, recognizing that other considerations will be relevant as well.

The first reality is Ontario's outward orientation. Ontario's economic focus has been changing over time. It's certainly well documented how the role of exports has been growing strongly. Importantly for tax policy considerations, the destination for exports is increasingly beyond Canada's border. In 1985 interprovincial exports were 23.9% of GDP and international exports were 34.7%. Currently our exports to other provinces are 19% and international exports are 61.6%.

I'm going to spend a moment on an aside here because one of the things that has been occurring in Ontario is the debate around whether tax cuts work. There are some who would argue that Ontario's exports boom is mostly responsible for the dramatic economic growth in recent years in Ontario's fiscal policy. While there's certainly no arguing the vital role that exports play in Ontario's economy, international imports have also been growing quite strongly. The Ontario Ministry of Finance looks at net exports, exports minus imports -- which have been estimated to account for only 16% of Ontario's growth since 1995. On the other hand, new domestic and consumer spending, augmented by personal income tax cuts, accounts for nearly half of the growth.

Having said that, from the standpoint of a small open economy trading around the world, being competitive is critical to continued economic growth and taking advantage of opportunities for globalization. A budget paper attached to the 2000 Ontario Budget cites various examples from around the world such as Ireland as evidence of the power of competitive taxes to support the success of small open economies.

The second reality for Ontario is the rise of the e-conomy. Economic success increasingly has to reflect the impact of rapidly changing technology on the way economies are operating. Many different studies, like that of Ontario's Job and Investment Board, are pointing to the role that innovation and adaptation are playing in economic growth. And these studies are recognizing the importance that developing technology places on the human ability to generate ideas and improvements. Comparative advantages are increasingly coming from the brain power of the workers.

This has important implications for PIT policy. People are mobile, certainly more mobile than the physical resources around which economies could be built in the past. In addition to mobility, the e-conomy requires large capital investment opportunities to develop its potential. Yet the relatively low marginal cost in producing the products of the e-conomy means that there's a fair gap between average cost and marginal cost. Access to early stage capital is vital to support the continued idea development to stay in front of the curve in order to earn enough return to pay investors. Boston Consulting has cited tax and regulatory hurdles, including high capital gains taxes, as "roadblocks" to e-commerce.

A third reality is Ontario's approach to income tax independence. This reflects a number of historical factors. I'm not going to get into them all. Many different reasons have been advanced, not just by Ontario but by the provinces in general, for the reinvigorated resistance to being controlled at national levels.

For one thing, the constitution places considerable powers in the hands of the provinces. One also has to consider the size of Ontario as an economy - Ontario's economy is larger than Sweden and Austria and the same size as Belgium. There are basic maturation forces in play that are leading us to what I see as an evolution of federalism. At the same time Ontario's ability to compete effectively with the US economy cannot be assumed to be a federal priority.

Now, Ontario is not saying that it has to administer its own income taxes. The 2000 Budget says that Ontario's reforms to promote economic growth can be administered within the existing TCA system. But the Budget also indicates that the Province is willing to administer these measures itself if that's the end result of the federal position.

With the unanimous provincial rejection of federal spending priorities evident in the health financing debate, and the brand new world of surpluses, Ontario's position on federal-provincial tax arrangements has the potential to have a significant influence on federalism.

The fourth reality in looking at possible future PIT changes in Ontario is the fact that Ontario's cuts thus far have been significant. Information in the 2000 Ontario Budget indicates that on average personal income taxes in Ontario have already been reduced by 50%. This is significantly more than the planned federal cuts and well in excess of the cuts that have taken place or are planned to take place in any of the other provinces.

A recent press article illustrates this point. The article wanted to argue that while one would have thought that there would have been a big drop in taxes given all the rhetoric in Ontario, there in fact has been little difference between Alberta and Ontario in terms of tax changes. To support this the article compared 1990 and 2000 taxes in Alberta and Ontario, citing the case of a $100,000 per year salary and a $50,000 per year salary. It noted in the case of a $100,000 year salary that the tax change was about the same, $1500 less provincial tax in each province. However, that missed the fact that between 1990 and 1995 Ontario's taxes increased by $2800 on that income level. So as a result, the actual changes between 1995 and 2000 in Ontario, the cutting that's been done amounts to three times the size of the changes in Alberta. In 1995 the Ontario share of the tax burden for a $60,000 a year family was 37.6%. In 2000 it will be 27.3%.

While the extent to which PIT has already been cut will be a consideration, the PIT burden in Ontario still will be higher than that in many key US states, particularly for upper-middle and high-income people. And Ontario, of course, now has to take into its policy considerations the drop in the top marginal rate inherent in the Alberta single tax proposal.

To summarize, in looking at the "prospects" for PIT reform in Ontario, it needs to be acknowledged that substantial reform has already taken place. Ontario tax burdens have been reduced dramatically and the nature of how tax is applied has been altered. Looking ahead, more reductions are promised and there could be more structural changes as a result of the commitment to eliminate surtaxes. Ontario has undertaken to further modernize its historical role in tax setting by committing to alter the definition of taxable income for Ontario purposes. What else could happen is speculation. But four key factors exist -- Ontario's outward orientation, e-conomy realities, evolving tax collection arrangements, and the size of changes to date -- which have the potential to influence how much personal income tax is collected, on what it is collected, and how it is collected.

SESSION 1 DISCUSSION

Al O'Brien (Former Deputy-Treasurer, Government of Alberta)

- Al O'Brien outlined three positive developments that will likely come from provincial personal income tax reform.

  (1.) Simplification of the personal income tax system at the provincial level will create greater transparency and make it easier for provincial tax payers to understand the system. This is particularly the case with respect to the provinces' role in taxation and the nature of those taxes.

  (2.) Higher tax rates at the low end of the income distribution in less affluent provinces (particularly within Atlantic Canada) may have an interesting effect on labour mobility. The Employment Insurance program, with its regionally differentiated benefits, discourages labour mobility. Perhaps the new system provides an incentive for the unemployed to move to low tax, more affluent jurisdictions.

  (3.) Ontario's tax cutting agenda will likely create a new set of pressures on intergovernmental relations in the federation. Given the provinces' growing responsibilities, provincial tax revenues should be growing. Conversely, given recent federal divestiture of responsibility, the federal government should be reducing taxes. The opposite is in fact taking place, at least in provinces like Ontario and Alberta. This will likely have two effects:

  (i.) Ontario's tax cuts will likely put competitive pressure on less affluent provinces to reduce income taxes. The federal government may have to play a greater role with respect to off-set this, either through the CHST or through equalization.

  (ii.) As Ontario reduces revenues, it reduces relative equalization payments to "have-not" provinces. This, too, will introduce a new set of intergovernmental pressures.

Points of Discussion from the Floor:

- Alberta's main thrust has been on reforming the perceived fairness of the tax system, especially for one versus two income families.
- On progressivity, it was the big increase in the personal exemption in Alberta that made a single rate feasible politically.
- Is the broadening of the sales tax rate in Saskatchewan too modest?
- Which of the tax on income changes in Ontario are outside the Tax Collection Agreements (TCAs)? Likely the new capital gains inclusion rate? Ontario may be perceived as "pushing the envelope" on this issue. The capital gains change is being driven from outside the province's borders, i.e., from the south. Ontario invites the federal government to match its policy moves on investment income so that tax policy may be harmonized.
- Are other provinces pushing the bounds of the TCAs? Nova Scotia thinks a consistent tax base is important and has made no plans to change it. Saskatchewan seeks a cooperative solution.
- Why make capital gains concessions to large private firms?

QUEBEC'S TAX ON INCOME : EVOLUTION, STATUS AND EVALUATION*

Renaud Lachance
and
François Vaillancourt

INTRODUCTION

The purpose of this paper is to present the experience of the Quebec tax on personal income (QTONPI) since its inception in 1954. This is of interest for two reasons. First, since 1999, changes in the federal-provincial tax collection agreement (TCA) means that the other nine Canadian provinces can now move from a tax on tax to a tax on federal taxable income (TONPI) collected by the federal government with or without a payment by the provinces, depending on the structure (base, credits, etc.) of a provincial TONPI. Second, both Ontario and Saskatchewan have indicated that they wish to tax capital gains in such a way (Ontario using an inclusion rate in income lower than the federal one, Saskatchewan moving to a schedular system with a tax rate on farm/small business capital gains lower than on other types of income) as to raise questions with regard to the future of the TCA. The paper is divided into three parts. The first one traces the evolution of QTONPI from its inception in 1954 to 1999. The second presents the current QTONPI, contrasting it with the federal personal income tax (FPIT). The third evaluates the QTONPI.

*This is a revised version of a paper presented at the June 2000 "Tax Competition and the Fiscal Union" Conference, Institute of Intergovernmental Relations, Queen's University. The authors thank conference participants for useful comments.

THE EVOLUTION OF QTONPI

The introduction

Quebec first introduced a personal income tax in 1940 to be levied on 1939 federal income tax at a rate of 15%. This was modified in 1941 to a graduated tax on income with rates ranging from 0.4 to 12%.

This tax disappeared with the wartime tax rental agreements. Quebec reintroduced the current QTONPI on January 14, 1954. This was a graduated tax on income, with rates ranging from 2.3 to 12%. It was deemed equivalent to a 10% tax, while the federal tax credit at that time was 5% for any provincial PIT.

The introduction of a QTONPI was supported by a vast segment of Quebec's intelligentsia as evidenced by a review (Moore 1954) of the briefs to the Royal Commission of Inquiry on Constitutional problems (Tremblay Commission). The latter saw a Quebec PIT as a necessary expression of autonomy. It was also clearly seen as a major change in the field of taxation in Canada and not necessarily a welcome one. Thus, Perry (1956) writes that "the immediate reason for the launching of a discussion of federal-provincial finances...was the "crisis" that arose with Quebec..." (p. 5). One of the reasons for this was that the preamble of the QTONPI bill stated that "the constitution concedes to provinces priority in the field of direct taxation" (Smith, 1998, p. 57). Another reason is that "this tax is applied to rates under which many provincial taxpayers are unable to obtain full credit against federal income tax.... [One] hopes that the discussion recently initiated ... will result in the removal of the present situation" (Watt, 1955, p. 8).

By early 1955, a change has been agreed to. The federal government would provide an abatement of 10% of federal tax in lieu of the existing 5% credit, available to all provinces, while Quebec would modify the preamble removing the assertion of priority of provinces in this field.

It is not clear why Quebec chose a progressive tax on income collected by the Quebec civil service as opposed to a flat tax on tax collected by the federal government. The progressivity which was more pronounced than the federal one may well have resulted from a desire to facilitate selling the tax to the vast majority of Quebec residents, particularly the rural supporters of the "Union Nationale". The two other choices must be seen in the light of a desire for greater autonomy by Quebec in fiscal matters, as evidenced by both its choice to remain outside the tax rental agreements for the corporate income tax (CIT) while Ontario rejoined them in 1952, and by official statements on the undesirability of subsidies in lieu of taxes (Smith, 1998, p. 11).

Evolution : 1954-1999

Table 1 presents a variety of indicators on the structure and importance of QTONPI over the 1954-1999 period for ten years, separated by a five-year interval. These indicators were influenced by various factors presented in Table 2. Before turning to the tables, one should note that, as early as 1956, the existence of unintended differences between QTONPI and the federal PIT is due to missing regulations, references to now-changed sections of the federal law by the provincial one and differences in phraseology (Bélanger, 1957). The second issue was expressly addressed in late 1960, "...by updating the references to the federal act in the Quebec legislation from January 1st, 1954 to December 1960..." (Robertson, 1961, p. 51).

Table 1 shows that QTONPI was different from its inception from the FPIT in being more progressive as a result of both larger exemptions and a greater degree of rate progressivity while covering a smaller number of taxpayers. Examining each indicator in turn over the 1954-1999 period, we find that :

- (1-3) the QTONPI is always more progressive than the FPIT (Ontario). The degree of progresivity varies over time reflecting factors such as the more or less social democrat ideology of the governing parties (Union Nationale : 1954-1960, 1966-1970; Liberals : 1960-1966, 1970-1976, 1985-1994; Parti Québécois : 1976-1985, 1994-);
- (1-3) personal, married and children deductions are equal only one year (1964). Differences are particularly important in the treatment of children due, in part, to the integration of tax/transfer schemes, as detailed in Table 2;
- (4) the importance of QTONPI first increases as a share of all PIT collected in Quebec as the abatements increase. Note, in particular, the increases from 1964 to 1969 due to the 1965 opting-out (see Table 2). After 1979 it stabilizes in the 48-52% range, i.e., QTONPI and FPIT collected in Quebec are roughly equal;
- (5) the number of FPIT tax returns is always above the QTONPI numbers. One notes a drop in the number of taxable returns from 1989-1994 for QTONPI while it increases for FPIT;
- (6) it is difficult to establish the importance of administrative costs with respect to QTONPI since the budget of Revenu Quebec is not broken down by taxes collected. We thus report two ratios : the first is the Revenu Quebec budget / QTONPI and the second, the Revenu Quebec budget / All Taxes. The proper ratio is contained within these two bounds and is thus similar – between 1 and 2% of QTONPI collected.

Missing from the tables are contextual events that influenced tax policy. The key ones are :

- the "Revolution Tranquille" in Quebec embodied in the two mandates of the Lesage government (1960-1962 and 1962-1966). The second mandate, in particular, was rich in initiatives in areas such as education, natural resources, and so on. In the tax field, it manifested itself by a quest for new resources through the introduction of a provincial sales tax, the creation of the Quebec Pension Plan (payroll tax) and repeated demands for a greater and distinct access to tax fields;
- the Carter Commission Report (1968) and the ensuing debate (1967-1971). Belanger (1968) summarizes the report by indicating that the Commission recommended a leading role for the federal government in the fields of PIT and CIT and a leading role for the provinces in the field of sales taxes;
- the increasing diversity of the provincial tax systems. This began with the introduction in 1972 of a property tax credit by Ontario. By 1995, these provincial tax credits numbered 48, according to Courchene (1999).

Thus, by the year 2000, the QTONPI has evolved from a slightly more progressive tax on the same basis as the FPIT to a system that treats taxpayers in an overall similar way as the federal one gets with key differences in some details. We therefore present the existing system.

THE CURRENT STATUS OF QTONPI IN 2000

We have regrouped the differences between QTONPI and the FPIT under five headings.

Treatment of taxpayers

QTONPI and the FPIT differ in many ways. Perhaps the difference that effects the greatest number is that for all taxpayers there is :

- a choice for QTONPI between a flat deduction of $2,430 or the use of itemized deductions. This approach is similar to the one used in the U.S.;
- in addition, single-parent families are entitled to an additional deduction of $1,300 converted in a tax credit ($299);
- one-person dwellers are entitled to an additional deduction of $1,050, converted in a tax credit ($242). This provision is in line with welfare payments that take into account whether or not recipients share an abode;
- nonresidents moving to Quebec to work in scientific research or international financial transactions enjoy a 5-year tax holiday;
- high income taxpayers must carry out a different computation for the Alternative Minimum Tax (AMT) of Quebec's tax shelters and face different thresholds for the application of the AMT (Quebec : $25,000, federal : $40,000).

Treatment of income

The most important difference is in the computation of employment income : employer's payment for private health plans are included in taxable wages and salaries. They are part of medical expenses used to calculate the medical expense credit in the QTONPI but not in the FPIT. This is an important difference since it taxes a major fringe benefit. Other differences are :

- expenses that can be claimed by salespeople against commission income are reduced by $750 since the abolition of the employment income deduction of the same amount in 1993. This measure was introduced to enhance horizontal equity;
- non-wage income such as pension, business and capital income above an exemption of $5,000 are subject to a tax of 1% (maximum $1,000) paid into an unearmarked health services fund. This is seen as a complement

to the payroll tax levied on payrolls at a rate varying in 2000 from 2.7% (payroll less than 1 million) to 4.26% (payroll above 5 million).

Integration of transfers and taxes

Various points are interesting here. The one that best reflects the desire of integration is that identical income thresholds are often used for income tax credit and transfer payments in two cases, i.e., the property tax credit and the transfer for earned low income (APPORT). Also of interest is that welfare payments are included in net income but deducted from taxable income like the net federal supplement. Childcare expenses are not a deduction in calculating net income but a credit with a rate between 26% and 75%, decreasing with income. However, payments to daycare centers offering $5 a day are not deductible. One should note here that the decision to offer subsidized daycare rates rather than to subsidize the use of daycares through the tax system reduces the deduction that can be claimed in the computation of their FPIT by Quebec parents.

Economic development objectives

The Quebec Stock Savings Plan (QSSP) first introduced in 1979 is still in place, although it is now less generous than at its inception (maximum deduction reduced from 20 to 10% of income) and targeted towards smaller issues. Other measures include the favourable treatment of various investments, such as R&D, multimedia, etc.

Collection mechanism

The QTONPI process is used for collecting the premiums for the Quebec public drug insurance plan that are compulsory for taxpayers who are not covered by a private plan. It is also used to collect alimony payments.

EVALUATION

Clearly, we cannot conduct a cost-benefit analysis of the QTONPI system since neither item is easily if at all quantifiable. We will, however, use a summary version of the framework put forward by the Ontario Economic Council in 1983 and reproduced in Courchene (1999), Table 3. One should note the following points :

- the fact that Quebec's labour force is 80% francophone and 50% unilingual French means that some of the issues raised by Courchene with respect to mobility are attenuated. Thus, income distribution is more easily provincial in Quebec than in Ontario or a fortiori Saskatchewan;
- stabilization issues are even less salient in 2000 than in 1983;
- under political aspects, Courchene neglects to note one major advantage, which is the province's freedom to act without requesting the permission of Ottawa. One should also note that, while Quebec residents grumble about high taxes, they do not debate tax shares;
- with respect to administrative and compliance costs, our calculations are made up of the following three items:
    - in 1997-1998, Revenu Quebec has a 350 M $ budget : in our opinion, 3/4 is attributable to QTONPI, yielding 265 M $, rounded to 270 M $ to account for overhead costs;
    - our estimates of higher tax compliance costs for Quebec's taxpayers are based on a $6 difference in 1986 in tax-preparer costs between Quebec and Ontario (Vaillancourt, 1989). Adjusting for inflation and increasing complexity, we use a figure of $25 per taxpayer for 1997 which, multiplied by 5.4 millions of taxpayers, yields an amount of $135 million;

   - finally, employers and financial institutions incur higher compliance costs. This amount is estimated using data from Vaillancourt (1989) to be 125 million;
- thus, administrative and compliance costs are 530 M $ which, given QTONPI collections of 15.2 MM $, are 3.5% of taxes collected;
- Quebec's QTONPI has a larger impact on the distribution of income than the combined FPIT (Ontario). Gagné and Vaillancourt (1999) report the following Gini coefficients for 1996:

Gini	Ontario	Quebec
Post-transfer income, pre-tax	0.398	0.406
Post transfer income, post-tax	0.359	0.356
Change	0.039	0.050

- as shown in Table 1, reported values of the main element of taxable income, wages and salaries are very similar under both federal PIT and QTONPI. Lachance and Vaillancourt (1999) who examined the budgetary process in Quebec argue that three factors guide this budgetary process : political impact, pragmatic aspects and economic thinking. The second explains the similarity of both the definitions of taxable income (FPIT/QTONPI) and of taxable transactions (GST/QST).

CONCLUSION

QTONPI is now almost 1/2 century old. Its autonomous existence is not questioned by any major political party but rather is seen as an essential aspect of Quebec's autonomy. Given the formal powers of provinces to levy a personal income tax as they see fit, what is perhaps most remarkable is how little QTONPI differs from the federal PIT. There are two main areas of differences. The first is the integration of taxes and transfers to attain a more appropriate treatment of low-income families and children. The treatment of children can be seen as the use of tax/transfer tools by a small francophone minority in North America to ensure its demographic future by preserving its numbers. The second is the explicit use of fiscal instruments in conjunction with lending/subsidies tools to reach socio-economic policy goals. This helps attract capital to increase employment for a relatively immobile labour pool. This is not done by reducing pre-tax wages, which would be difficult given pan-Canadian collective agreements and implicit comparables, but by reducing post-tax income and using the tax proceeds to subsidize mobile capital through joint investment and tax holidays. These are reasonable uses of a distinct tax system, given the goals of Quebec society.

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TABLE 1

KEY INDICATORS OF THE QUEBEC/ONTARIO-FEDERAL PIT, 1954-1999

	1954	1959	1964	1969	1974	1979	1984	1989	1994	1997/1999
Progressivity										
Personal (single/married) (1)										
Exemption - Quebec	1500/3000	1500/3000	1000/2000	2000/4000	2600/5200	4050/7090	5280/8240	5450/10560	5900/11800	5900/11800*
$ - federal	1000/2000	1000/2000	1000/2000	1000/2000	1706/3198	2650/4970	3960/7430	6066/11121	6456/11836	6794/12512*
Children - Quebec/federal	150/150	250/250	300/300	0/300	0/320	0/500	0/710	2330/392	2600/0	2600/0*
Marginal rates (lowest/highest) (2)										
(fed. & prov.) - Quebec	15.8/87.6	11.9/84.2	11.52/80	15.13/84.8	23.68/63.72	13/68.91	13/61.39	15.05/50.54	11.9/52.9	16.4/51.7*
- federal (Ontario)	15/84	11/83	11/80	14.3/82.4	3.66/61.34	24.48/61.92	23.68/51,14	17.85/48.23	22/53.2	16.3/48.3*
Tax paid (lowest/highest) (3)										
- Quebec	34/130758	38/126797	35/118430	27/126093	25/116112	86/120393	-360/106245	-1570/90290	-3163/92531	-4128/90274*
- Federal (Ontario)	34/125564	44/123252	33/118430	44/122317	103/110887	597/105130	238/89191	-1570/84816	-3241/91377	-3871/82210*
Importance										
PIT collected in Quebec (4)										
- Quebec $ 000	25273	47773	170191	814888	2354000	4637000	7212900	10641400	12447100	14379000
- Quebec's QTONPI as a % of QTONPI + FPIT	10.0	13.2	35.1	44.5	54.8	57.8	52.1	48.0	48.4	48.8
Taxpayers										
# of returns (total/taxable) (5)										
in Quebec - Quebec	n/a	n/a	n/a	n/a	2870851/2236739	3323649/2582899	3858364/2769269	4228129/3084679	4769000/2967000	5188000/3146000
- Federal	1188430/798490	1424164/1020975	1761628/1376496	2236245/1855589	2864702/2038284	3649588/2309345	3882906/2580404	4584740/3293410	5031370/3343940	5135940/3447500
Income										
Collection costs (6)										
- Revenu Quebec : budget (000$)	4081	7447	11251	24941	64357	129149	167000	262000	278000	343000
- Revenu Quebec's budget as a % of QTONPI or / All Tax Revenues	16.1/1.7	15.6/1.9	6.6/1.3	3.1/1.2	2.7/1.4	2.8/1.5	2.3/1.2	2.5/1.2	2.2/1.1	2.4/1.2

Notes : * Items are for 1999; others in that column are for 1997.
n/a : not available.

Source : (1) *The National Finances*, various years, Toronto, Canadian Tax Foundation, as follows : 1954 : *1955-56*, p. 18-19; 1959 : *1959-1960*, p. 16-20; 1964 : *1964-1965*, p. 28-32; 1969 : *1969-1970*, p. 35-38; 1974 : *1974-1975*, p. 67-73; 1979 : *1979-1980*, p. 64-70; 1984 : *1984-1985*, p. 82-91; 1989 : *1990*, p. 7:6, 7:15; 1994 : *1994*, p. 7:8, 7:16; 1999 : *1999*, p. 3:1-3:16.

(2) *The National Finances*, various years, Toronto, Canadian Tax Foundation, as follows : 1954 : *1955-1956*, p. 19; 1959 : *1959-1960*, p. 17; 1964: *1964-1965*, p. 33; 1969 : *1969-1970*, p. 43; 1974 : *1974-1975*, p. 79; 1979 : *1979-1980*, p. 74; 1984 : *1984-1985*, p. 98-99; 1989 : *1990*, p. 7:20; 1994 : *1994*, p. 7:21; 1999 : *1999*, p. 3:20.

(3) *The National Finances*, various years, Toronto Canadian Tax Foundation, as follows : 1954 : *1955-1956*, Table 14, p. 20 (incomes : $2500 and $200000); 1959 : *1959-1960*, Table 11, p. 19-21 ($3000 and $200000); 1964 : *1964-1965*, Table 20, p. 34 ($3000 and $200000); 1969 : *1969-1970*, Table 28, p. 44 ($3000 and $200000), 1974 : *1974-1975*, Tables 5-8, p. 82-83 ($5000 and $200000); 1979 : *1979-1980*, Tables 4-12, p. 78 ($5000 and $200000); 1984 : *1984-1985*, Tables 7-15, p. 107 ($5000 and $200000); 1989 : *1990*, Table 7.17, p. 7:24 ($5000 and $200000); 1994 : *1994*, Table 7.21, p. 7:29 ($5000 and $200000); 1999 : *1999*, p. 3:28, Table 3.19 ($5000 and $200000).

(4) Quebec PIT is from 1959-1969 : Financial Statistics of Provincial Governments, Statistics Canada (68-207), 1954, p. 25; 1959, p. 23; 1964, p. 21; 1969, p. 32; 1974-1997 : Special Tabulation, Quebec's Department of Finance, Federal PIT is from Taxation Statistics, see (5) for details.

(5) Federal returns are from *Taxation Statistics*, various years, Department of National Revenue / Revenue Canada, as follows (tax information for year t is provided in publication year t + 2) : 1956 : Table 1, p. 27; 1961 : Table 1, p. 31; 1966 : Table 1, p. 13; 1971 : Table 1, p. 17; 1976 : Table 1, p. 17; 1981 : Table 1, p. 35; 1986 : Table 1, p. 73; 1991 : Table 1, p. 89; 1996 : Table 1, p. 47; 1999 : data for 1997, Interim Statistics. Quebec returns for 1974-1997 are from Statistiques fiscales des particuliers as follows : 1974 : p. 18, 1979 : p. 12-13; 1984 : p. 52; 1989 : p. 5/39; 1994 : p. 7; 1999, p. 7.

(6) All figures on Revenu Quebec are from the Public Accounts of Quebec as follows : 1954-1955 : p. 12; 1959-1960 : p. 33; 1964-1965 : p. 461; 1969-1970 : p. 431; 1974-1975 : p. 1-299; 1979-1980 : p. 1-162; 1984-1985 : p. 1-199; 1989-1990 : p. 2-308; 1994-1995 : p. 2-270; 1997-1998 : p. 2-224. Items for the first two years are for the Revenue Board of Finance since Revenu Quebec was created in 1961. Items are operational costs. We exclude costs of tax reimbursements, alimony collection and GST (1991-). QTONPI is from line (4). All taxes is from the same sources as line (4).

TABLE 2

QUEBEC'S TAX ON PERSONAL INCOME

A CHRONOLOGY OF KEY EVENTS, 1954-1999

Date	Event	Commentary
1954	QTONPI introduced	Key distinction with FPIT is greater progressivity through higher deductions and marginal tax rates.
1962	TCA offered. Collection to be costless to provinces.	Quebec refuses; suggests compensation for own collection costs.
1965	Opting/Contracting out of health/welfare programs offered to all provinces. Cash transfers to be replaced by tax room transfers.	Quebec is the only province to take up offer. Thus, Ontario abatement is 21% and Quebec is 44%. Hence, the impact of a distinct QTONPI is double that of Ontario PIT.
1967	Quebec abolishes deduction for children receiving family allowances from the federal government. It creates a supplementary provincial family allowance program.	Quebec trades off a tax for a direct expenditure in the field of income support thus showing an integrated approach.
1972	The use of abatement by the federal government to create tax room for the provinces is replaced by tax room created by reduced federal rates.	There is thus no longer a standard provincial tax share. Provinces must levy taxes to collect revenues.
1974	• While the federal government indexes exemptions and brackets to inflation, Quebec does not (indexing of exemptions introduced in 1980 ministerial discretion used, not CPI). • Family allowances, federal and provincial, taxable in ROC and not taxable in Quebec (federally and provincially).	• This automatically increases the absolute and relative size of QTONPI. • Quebec tax/transfer system is reflected in federal treatment of its family allowance.
1975	Divergence in employment income treatment. Maximum deduction is $150 for FPIT and $300 for QTONPI (3% inclusion rate). Similarity restored in 1974.	This results in a different treatment of labour income.
1977	Established Programs Financing (EPF) formula leads to a reduced federal PIT, leaving more tax room to the provinces; Quebec abatement becomes 16.5%.	This is the last major shift in tax room between the federal government and the provinces.
1979	Quebec introduces Quebec Stock Savings Plan deductions.	This results in a different treatment of savings in stocks, according to the location (Quebec or not) of the issuer.
1981	Introduction of availability allowances (1 child : $400; 2 children : $600; 3+ children : $100 per child) in lieu of childcare deductions as a refundable tax credit, at the option of the taxpayer.	Another example of integration of family and tax policy.
1985-1988	Period of tax reform in both Quebec (Livre blanc sur la fiscalité) and Ottawa (Wilson reforms).	Systems in flux in both jurisdictions.
1989	New systems in place in both jurisdictions. Key differences are : • Greater use of credits by FPIT than by QTONPI where deductions remain (charitable contributions, UI and C/QPP premiums are examples); • Employment income deduction — Federal $0 — QTONPI 6% max.; $750 • Interest dividend Income exemption — Federal $0 — QTONPI 20% max; $200 (for retirees) • Differences in childcare deduction.	Differences in computation of taxable income accentuated through a different mix of deduction and credits.
1993	• Child tax credit abolished in FPIT (replaced by targeted child tax benefit), TONPI child tax credit maintained (still in place in 2000). • Employment income deduction abolished. • QTONPI now uses credit for charitable deduction, UI and C/QPP contributions. • Introduction of Health Services Fund Levy on nonwage income (OAS exempt).	Different vision of the role of the state in helping families with child-related expenses.
1994	Childcare deduction replaced by refundable tax credit.	Different from federal PIT.
1998	QTONPI introduced a flat deduction in lieu of itemized items.	A new difference with American roots.

Source : Compilation by the authors.

TABLE 3

EVALUATION FRAMEWORK OF THE BENEFITS AND COSTS OF QTONPI

Areas of Interest (Courchene, 1999 Tables 3 and 4)	Possible Tools (Our Summary)	QTONPI Measures (Our Interpretation)
Benefits		
Growth/efficiency	Influence labour supply (quantity/quality) savings.	QSSP, LSVCF, RD tax credits.
Stabilization	Unclear.	Not used.
Income distribution	• Rate structure. • Exemptions.	Used extensively since 1954.
Socio-economic integration	Various programs.	Used since 1963 in family support field. Generalized after 1988.
Federal-provincial implications	• Better account of specific provincial economy. • Influence on federal system.	Used in recent years to help RD, which is of interest to new sectors (aerospace, pharmaceuticals).
Political aspects	• Expertise. • Greater accountability.	• Expertise by francophones has been developed. • There is greater accountability.
Costs		
Administrative/Compliance cost	Will be higher.	Our estimate for 1998/1999 is 3.5% of QTONPI (collections : 15 M $) : 1/2 administrative and 1/2 compliance.
Growth/efficiency	Risk of retaliation by other provinces.	Some tax measures have been imitated (film).
Stabilization policy	Weaken federal role.	Yes.
Income distribution	Loss of federal dominance.	Yes. Appropriate for francophone labour market (immobility).
Socio-economic integration	1/3 PIT is too small.	OTONPI is 1/2 PIT in Quebec.
Federal provincial	Possible interprovincial barrier.	QTONPI has done this for some capital flows (QSSP, etc.).
Political aspect	Greater visibility/Special interest groups will emerge.	Yes./Yes, artists for example.
Other	Reduced willingness to comply/ Increased uncertainty.	Revenu Quebec carries out specific anti-tax avoidance activities./Yes (two decisions).

Source : Courchene (1999) and authors.

PIT HARMONIZATION: AN ECONOMIST'S VIEW

Robin Boadway

INTRODUCTION

Like most economists, I take a rather sanguine view of the Tax on Income system as agreed to by the federal government and the provinces. It releases considerable pressure that had built up in the previous system. The tax competition over the rate structure it gives rise to among the provinces is not unhealthy. It need not compromise either tax harmonization objectives or the ability of the federal government to carry out their major tax policy objectives, which are increasingly indistinguishable from social policy objectives.

The system is:

- Good on administrative grounds;
- Good on grounds of devolving legitimate fiscal responsibility to the provinces;
- Mostly benign in terms of compromising national economic objectives.

Provided the integrity of the agreement – especially the maintenance of a common base – is respected, the system is a considerable improvement over the one it replaced.

OBJECTIVES OF TAX HARMONIZATION

The objective of a harmonized tax system can be stated as follows: to enable both levels of government to pursue their own independent income tax policies in a way that allows for effective exercise of fiscal responsibility while at the same time maintaining the integrity of the internal economic union and the administrative simplicity of the income tax system.

One is tempted to ask a more fundamental question of what sort of arrangement would best lead to a good income tax system. However I will resist that temptation because there is no broad consensus about what constitutes a good tax system – either base or rate structure – and the PIT harmonization must allow for legitimate differences in opinion about that.

A good tax system is simply what the governments would choose to apply, to the extent that they do not compromise the efficiency of the internal economic union.

CONTEXT OF PIT HARMONIZATION: THE BROADER FISCAL ARRANGEMENTS

The tax harmonization system is one component of the fiscal arrangements that together facilitate effective decentralization of fiscal decision-making, by deterring some of its adverse consequences for the national economy.

The main components of those arrangements are:

- Equalization
- Conditional Grants/Spending Power
- Tax Harmonization (TCAs, HST)
- Other federal-provincial agreements: Agreement on Internal Trade, National Child Benefit, etc.
- Tax harmonization differs in some fundamental ways from the transfer components, and this should affect the way we judge it. There are two dimensions to this difference:

Federal Prerogative *versus* Voluntary Compliance

Equalization and the spending power can be viewed as instruments *primarily* at the disposal of the federal government for achieving legitimate national objectives (or shared national objectives with the government). The federal government is ultimately responsible for implementing them because they involve spending – a legislative responsibility. In other words, they are *federal prerogatives*. (Of course, consultation is important.)

Tax harmonization and other federal-provincial agreements are *mutual agreements* that do not rely on federal prerogative: they necessarily involve the connivance of provinces. Income taxation in particular is a shared legislative responsibility. Both levels of government have legitimate objectives to be delivered by the income tax system. Thus, income tax harmonization must be based on *voluntary compliance* rather than on federal prerogative. I would argue that this is the way it should be, and need not detract from the federal government's achievement of its objectives or the provinces of theirs.

Objectives of Transfers *versus* Harmonization

Equalization and the use of spending power are federal instruments used to achieve national objectives: Equalization exists to achieve fiscal/horizontal equity and fiscal/horizontal efficiency. Both objectives are nicely captured in Section 36(2) of the *Constitution Act, 1982* which depicts equalization as a federal responsibility. Indeed, it must be a federal responsibility since it involves inter-provincial redistribution.

The spending power is slightly more problematic than equalization since it imposes conditions on programs of provincial legislative responsibility. But, it is not any less legitimate. The spending power is the only instrument the federal government has to address national social policy objectives. Its legitimacy rests on those objectives, and is recognized by the statement of Section 36(1) of the *Constitution Act, 1982,* which stresses that these are shared objectives with the provinces.

Contrary to the spending programs, the objectives of tax harmonization are not spelled out in the Constitution. Instead, we must rely on an interpretation of tax policy objectives informed by economic and political argument. I take the primary objective of tax harmonization to be to enable the federal government and the provinces to pursue legitimate tax policy objectives in a way that:

(1) does not compromise either government's legitimate objectives and responsibilities;
(2) does not distort the internal economic union unnecessarily;
(3) achieves administrative simplicity and low collection and compliance costs; and
(4) minimizes spillovers/fiscal externalities between jurisdictions, both horizontally and vertically.

There is an important caveat to be stated. Provinces may well choose to shoot themselves in the foot (e.g., drive out capital to protect local business). This can be viewed as a legitimate and acceptable exercise of provincial responsibility to the extent that it does not discriminate against other provinces.

These broad principles leave a lot of room for interpretation, and do not confine the set of acceptable agreements in any restrictive way.

POSSIBLE FEATURES OF PIT HARMONIZATION

In my view the following constitute the optimal features of PIT harmonization in Canada.

- A single tax administration for minimization of collection and compliance costs
- Some provision for non-discrimination based on province of residence – the analogue of *national treatment.*
- Containment/minimization of opportunities for tax policies that distort the internal economic union. In this regard, it should be stressed that equalization is a critical complement to PIT harmonization – probably more important that harmonization agreements per se – since it enables provinces in principle to pursue tax policies that do not distort the internal economic union.

- Preserves the ability of provinces to pursue their own legitimate objectives, including redistributive ones.
- Enables the federal government to implement their PIT policy objectives regardless of what the provinces do. This objective, I would argue, includes overall responsibility for redistribution delivered by the tax system. There are some issues with respect to the redistributive role of the PIT to highlight here:

1) the PIT is but only one policy instrument that is important for redistributive equity, and may not be the most important one;
2) it is the rate structure, including tax credits (especially refundable ones), that is most important for vertical equity: the base is really of more concern for horizontal equity;
3) the division of PIT tax room is the critical element: this division determines the relative importance of the federal government is using the PIT for policy objectives.

- Minimizes the spillover effects of tax changes.

- Manages disagreements over the base. This can be done by either of:
  1) a system of joint decision-making, which is extremely cumbersome;
  2) maintenance of federal dominance in the PIT tax room division.

ASSESSMENT OF THE PIT AGREEMENT

In conclusion, in my view one cannot be categorical about recent changes to PIT (unlike with equalization, say).

The recent reforms effectively remove two major problems of the Tax on Tax system:

1) direct spillovers of federal tax changes on provincial revenues; and
2) constraints on provincial PIT policy which were inconsistent with the tax room allocation, which were unsustainable, and which led to excessive use of credits and other special provincial measures.

The reforms retain a common base, albeit under federal control. This undoubtedly contributes to administrative simplicity, and probably does not constrain the provinces unduly. In fact, it might remove a potential source of inefficiency in the economic union.

It allows the federal government to pursue national redistributive objectives regardless of what the provinces do. The provinces might compete away their rate structures, while the federal government can maintain whatever degree of progressivity it wants. To the extent that this happens, it effectively turns over to the federal government redistributive policy delivered through the tax system. Thus, the race to the bottom on provincial PIT policy may turn out to be a virtue.

Moreover, the feds continue to be able to pursue social policy via the PIT in an unfettered way: their most effective redistribution program is arguably the set of refundable tax credits.

On the other hand disagreement over the base is not fully managed. The federal government must maintain sufficient PIT tax room to be able to maintain the integrity of the common base – and to pursue their own redistributive policy.

There is no component of the Tax on Income policy agreement that even states the principle of non-discrimination/non-distortion, or more generally the principle of efficiency in the internal economic union. This is a pity because it seems to be the main motive behind PIT harmonization in the first place – even if it was adhered to mainly in the breach.

SESSION 2 DISCUSSION

Giles Gherson (Southam News)

- Giles Gherson's discussion looked at the lessons learned by the presenters using a "balance sheet" approach, while emphasizing the interconnection between big politics and income tax trends.

- On the plus side, Quebec has had a lot of flexibility, particularly to pursue progressivity. There is a gratifying level of harmonization between Quebec and Canada, despite the lack of federal controls. Yet this was added with a word of caution that "politicians like to do things," the implication being that future harmonization in the economic union is not guaranteed.

- Boadway stresses the importance of the federal government maintaining a degree of dominance in the tax system in order to ensure harmonization. However, this dominance cannot be taken for granted.

- The emerging provincial tax on income system provides several benefits including: fast tax relief, revenue flexibility, greater progressivity at the low end, greater simplicity with respect to the number of tax brackets, and the ability to stimulate economic growth. However, the prospects for a "tax jungle" threaten to fracture and balkanize the economic union. This will depend ultimately on the approach taken by the federal government in office after the next election. The Canadian Alliance party, for example, has tax reform proposals similar to Alberta's.

Points of Discussion from the Floor

- If other provinces wished to have the same sort of tax/ transfer (fiscal/social) policy congruence as Quebec enjoys, would they also need to have the same degree of tax point abatement (i.e. about 50 percent of total PIT yield compared with the about 33 percent the other nine provinces have now)?

- Several commentators disagreed that the increasing complexity of two separate systems would be of major public concern. The costs of that development would have to be balanced against the increased simplicity/ transparency of the new rate structures in some provinces.

- If the Canadian Customs and Revenue Agency (CCRA) has to collect and administer 14 or more separate PIT regimes, it would lose any comparative advantage it has for doing the job. If the terms of the TCAs are breached, the federal government would no longer "bribe" the provinces by absorbing the collection costs.

- Tax on investment income could very likely develop into a "race to zero". The provinces might be better off abandoning the field.

BUSINESS TAXATION AND THE PROVINCES: CURRENT REALITIES, NORTH AMERICAN COMPETITION AND "A MODEST PROPOSAL"

Kenneth J. McKenzie

I INTRODUCTION

The purpose of this paper is to examine the nature of the "competitive" pressures on business taxation from a provincial perspective. A key aspect of the analysis is the idea that the mobility of factors of production across borders and tax competition between jurisdictions for mobile tax bases, particularly capital, imposes certain constraints on tax policy. It is argued that competitive pressures are more intense, and therefore that these constraints bind tighter, at the provincial than the federal level, which suggests certain priorities both for tax reductions and the restructuring of taxes for provincial governments. The following section provides some context, including a brief discussion of some of the relevant insights from the tax competition literature. Section III documents current realities from both a national and international perspective, with an emphasis on the corporate income tax rate reductions recently announced by both the federal government and the government of Ontario. Section IV briefly discusses some of the implications of being "non-competitive" on the business tax front. Section V discusses the resulting priorities for business tax reform at the provincial level, including a brief analysis of a "modest proposal" by Richard Bird and Jack Mintz that involves an alternative approach to provincial business taxation.[1]

1. Richard Bird and Jack Mintz (2000), "Tax Assignment in Canada: A Modest Proposal", mimeo.

II BUSINESS TAX COMPETITION: DO BORDERS MATTER AND DOES IT MATTER WHETHER THEY MATTER?

Policy discussions related to business taxation at both the national and provincial level inevitably emphasize the need to assess the international "competitiveness" of our business tax regime. This emphasis on "competitiveness" is no doubt motivated by a number of concerns and considerations, but John McCallum points out two factors that likely play an important role in this regard[2]:

1) The border-eroding impact of new technology and the apparently increasing mobility of capital, skilled labour, goods and services across national borders; and
2) The drawing power and strong economic growth of the United States over the last decade, particularly relative to Canada.

Regarding the second factor, the fact that Canada has performed rather dismally from an economic perspective over the past twenty years has brought fiscal policy in general, and tax policy in particular, under increasing scrutiny. In the 1990's the rate of growth in real per capita GDP in Canada was among the lowest in the OECD. The relative slippage in the Canadian standard of living appears even more acute when compared to the U.S. As reported by Pierre Fortin, in 1970 the purchasing power of real per capita private disposable income in Canada relative to the U.S. was about 65%.[3] Thus, an "average" Canadian could purchase about two-thirds of the goods and services that could be purchased by an "average" American. Canada gained steadily on the U.S. in this

2. John McCallum (2000), "Will Canada Matter in 2020?", Royal Bank of Canada, Economics Department, *Current Analysis*, February.

3. Pierre Fortin, *The Canadian Standard of Living: Is There a Way Up?*, C.D. Howe Benefactors Lecture, 1999.

regard throughout the 1970's, with the purchasing power of real private disposable income in Canada relative to the U.S. rising to 78% by 1980. Thus, while in terms of disposable income, Americans were still better off than Canadians at the start of the eighties, we seemed to be catching up. Unfortunately, 1980 was to be the high water mark of the Canadian living standard relative to the U.S. Over the past twenty years, virtually all of the gains in the relative living standard achieved throughout 1970's have disappeared, with the purchasing power of real per capita disposable income in Canada relative to the U.S. slipping back to 66% by 1998. The gap between Canada and the U.S. in real per capita disposable income in 1999 purchasing power parity adjusted Canadian dollars currently stands at almost $6,000, or $24,000 per family of four.

The reasons for the decline in the relative standard of living in Canada have been the subject of considerable discussion and debate. Once again Fortin, and the references there in, provides a summary of the issues.[4] Some attention has been devoted to the role that fiscal policy may play in this regard. Most of this discussion has focused on the policies of the federal government. While federal government policies are obviously important, with about half of government taxes and expenditures occurring at the provincial level it is equally important to consider the role that provincial fiscal policy may play in improving the standard of living of Canadians.

The first factor identified above often falls under the general heading of "globalization." While the term "globalization" means different things to different people, in general terms it simply refers to an increasing tendency towards the free movement of labour, capital, goods and services across national borders. However, the word typically invokes more emotional responses than this rather banal definition might suggest. A mere uttering of the word almost inevitably raises images of governments, as with companies, in bitter "competition" with each other, "racing to the bottom" in tax policy, sacrificing social programs, and abandoning all compassion in order to attract the eye of heartless and fickle multinational corporations who increasingly dominate the world economy. This view has taken on the aura of "the conventional wisdom", ironically uniting those who oppose the forces of globalization, those who embrace it, and those who see us having no choice in the matter, as governments are inevitably helpless pawns in a game dominated by vaguely defined "corporate" interests.

While this view is often dismissed as extreme by some economic commentators - the much-maligned "Seattle Man" comes to mind - and it no doubt is, it turns out that it is not completely without foundation. In a recent review of theories of tax competition, John Wilson presents what he calls the "basic tax competition model." This model does indeed suggest that if capital is mobile between regions, competition over the capital tax base can lead to an inefficiently low tax rate on capital and a correspondingly low level of public goods provision.[5] The intuition behind this result is straightforward. Say there are two regions and the total amount of capital that can be allocated between both regions is fixed but mobile between regions; in this case an outflow of capital from one region is an inflow of capital to the other. In this simple world an increase in the tax on capital in one region creates a positive externality in the other region. This is because an increase in the tax rate on capital to finance an increase in public goods in one region causes capital to flow out of its region and into the

4. Ibid.

5. John Wilson (1999), "Theories of Tax Competition", *National Tax Journal* LII(2), June, 269-304.

other, which benefits the residents of the other region. If each region's government is concerned only with the welfare of its own residents, and therefore does not take account of this external effect when setting its tax rates, then we have a classic Nash equilibrium in the presence of an externality where regions set their tax rates and level of public good provision inefficiently low.

While the basic tax competition model, and its consequences, is unquestionably an extreme oversimplification, it turns out that the basic results are quite robust and tend to hold up under more general settings. However, recent research has emphasized that competition between governments is more complicated and less straightforward than suggested by the basic model and its extensions.

One issue of obvious relevance is the extent to which capital and other factors are in fact mobile across borders. This raises the issue of the "degree of mobility" of goods, services, labour and capital. To perhaps oversimplify, the greater the "degree of mobility", the greater are the competitive pressures and the larger are the efficiency losses associated with taxation. While the old adage that "it is difficult to tax what won't stand still" has no doubt taken on new meaning in a global economy, the fact remains that some things move slower than others, and that relative "speeds" have changed over time. On the output side, an example of the latter is the conventional wisdom that goods are more mobile than services; indeed, services are often characterized as being 'non-tradable.' Recent technological advances suggest that this characterization is no longer completely appropriate, as international trade in services is growing at a very fast rate. Indeed, the technology associated with the much-touted "borderless economy" is more applicable to services than goods. This suggests that the conventional wisdom that the service sector may be taxed at a higher rate than the non-service sector without substantial competitive repercussions is no longer true, at least to the same degree. Of course in terms of factors of production, it is commonly held that capital is more mobile than labour, and that skilled labour is in turn more mobile than unskilled labour.

The degree of mobility of various tax bases across jurisdictional borders is ultimately an empirical question. Two Canadian economists, John McCallum and John Helliwell, have been at the forefront of research asking whether or not the presence of a border helps explain the flow of goods, services, capital and people between different regions. Their research shows that national borders have a surprisingly large impact on trade and capital flows, and labour migration.[6] For example, the intensity of movement of goods, services, capital and people within Canada is, all else equal, an order of magnitude greater than the intensity of movement between Canada and the U.S. For some reason - and it is important to point out that this research does not explicitly address the reasons *why* borders matter - and all else being equal, Canadians are much more likely to invest their savings in Canadian companies, to trade and purchase goods and services from Canadian suppliers, and to move to Canadian cities, than they are to engage in similar transactions and activities in the U.S. While there is evidence that these border effects are weakening to some extent - for example, Helliwell documents a substantial decrease in the magnitude of the border effect in trade flows following the Free Trade Agreement - they remain remarkably strong even in today's "global" economic system.[7]

Particularly relevant for our purposes is the presence of a border effect in capital markets.

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6. See John McCallum, "National Borders Matter: Canada-US Regional Trade Patterns", *American Economic Review* 85 (June), 615-23; and John Helliwell, *How Much do National Borders Matter?*, Brookings Institution, Washington, 1998.

7. Ibid.

John Helliwell and Ross McKitrick investigate this issue in a recent article.[8] They argue that if capital in Canada was perfectly mobile across borders then there would be no correlation between national savings and investment rates, and the so-called "savings retention rate" should be close to zero. However, empirical investigations of OECD countries, including Canada, consistently uncover a strong *positive* correlation between domestic saving and investment. Helliwell and McKitrick, for example, estimate a national savings retention rate of around 0.60, which is significantly different from both zero and one (the former would be the case for perfect capital mobility, the latter for perfectly immobile capital in a closed economy, where savings must equal investment). This suggests that Canadian savings do tend to manifest themselves in domestic investment, at least to some extent, and that at the *international level* competitive pressures on capital taxation, though high, may not be as intense as presumed in most models of capital tax competition.

However, and this is particularly important for our purposes, Helliwell and McKitrick also show that capital mobility seems to be much higher at the provincial level. In particular, the savings retention rate, or correlation between savings and investment, for individual provinces in Canada is statistically indistinguishable from zero. This suggests that capital mobility across provincial borders is very high, and that capital tax competition, and its efficiency implications, may be more important at the provincial level than the national level. The very important implication for provincial business tax policy is that although national borders may be quite "thick", provincial borders are very "thin."

Aside from the question of whether or not capital is mobile across borders, recent research on tax competition has questioned the conclusions of the basic tax competition model: that capital tax rates and public good provision will be inefficiently low. An important implication of the basic tax competition model is that if it is possible to impose lump sum taxes the equilibrium tax rate on capital is zero and the resulting outcome is fully efficient. Thus, the cards are stacked against tax competition in the basic model because the externality associated with tax competition is the only potential source of inefficiency; this, of course, makes it relatively easy to make tax competition a bad thing. Recently, researchers have considered the implications of introducing other sources of inefficiency into tax competition models. For those familiar with the "second best" policy literature, the results are not surprising - the presence of other sources of inefficiency may create an efficiency-enhancing role for tax competition.

This research has considered several alternative sources of inefficiency; I will discuss just two here.[9] The first relates to the commitment or hold-up problem. This problem arises because firms or capital become partly immobile once a location or investment decision is made. For various reasons governments may find it difficult to commit to forgoing confiscatory taxes on firm profits generated from sunk investments. Firms recognize the government's incentive in this regard and therefore undertake less investment in the first place. Thus, the commitment problem generates an inefficiently low level of capital investment. Tax competition amongst competing jurisdictions can help solve, or alleviate, the commitment problem. If firms have the ability to allocate at least some output between locations after their capital is sunk, tax competition between jurisdictions can keep tax rates low and

8. John Helliwell and Ross McKitrick, "Comparing Capital Mobility Across Provincial and National Borders", *Canadian Journal of Economics* 32(5), November 1999, 1164-1173.

9. See Wilson, supra footnote 5.

help overcome the inefficiencies arising from the commitment problem. Thus, commitment problems may provide an efficiency-enhancing role for tax competition.[10]

Another efficiency-enhancing role for tax competition may arise due to inefficiencies in political markets. These inefficiencies arise if the welfare of politicians and bureaucrats are not perfectly aligned with the welfare of the citizenry. Scores of public choice models in the tradition of Niskanen's bureaucracy model and Brennan and Buchanan's Leviathan model argue that governments will be inefficiently large as politicians and bureaucrats exploit their effective monopoly position.[11] While periodic elections can moderate these inefficiencies to some extent, effectively forcing politicians to retain some degree of "benevolence", information asymmetries between the electorate and politicians, and politicians and the bureaucracy, suggest that this moderation will be less than complete. Thus, asymmetric information and the effective monopoly position of politicians and bureaucrats create failures in the political marketplace that are manifested in inefficiencies in the economic marketplace. In these models, tax competition between governments may improve welfare because the size of government would be excessive in the absence of this competition.

This very brief overview of some of the research relating to tax competition perhaps raises more questions than it answers. Depending upon the model and the underlying assumptions, tax competition will or will not tax place, and may be either a good thing or a bad thing. While much work remains to be done on the theoretical side, there is also a good deal of scope for empirical investigation. While the state of our theoretical and empirical understanding is probably not advanced enough to undertake an empirical investigation of the welfare implications of tax competition, we can set our sights on more modest and attainable goals that may shed some light on the issues. The Helliwell and McCallum borders research discussed previously is an example of this type of research, another example is research regarding the extent to which tax competition actually takes place. In terms of business taxation, an important empirical question is simply whether or not jurisdictions compete on business tax rates as suggested, or perhaps assumed is a better word, by the tax competition models. Anecdotal evidence - just looking around - suggests that if they do it may be in more subtle ways than suggested by the models. In Canada, as will be discussed shortly, neither the country as a whole, nor the provinces individually, seem to have been involved in any sort of "race to the bottom"; in fact we don't even seem to be at the starting line! The provinces for example, have maintained very high corporate income tax rates for some time; the bottom seems to be higher than we might think.

However, appearances can be misleading. In a recent paper that is particularly relevant for our purposes, Masayoshi Hayashi and Robin Boadway investigate the presence of horizontal tax competition in business taxation among

10. Patrick Kehoe (1989), "Policy Cooperation Among Benevolent Governments May Be Undesirable", *Review of Economic Studies* 56, 289-296; and Eckhard Janeba (1998), "Tax Competition When Governments Lack Commitment: Excess Capacity as a Countervailing Threat", Department of Economics, Indiana University, mimeo.

11. See William Niskanen (1971), *Bureaucracy and Representative Government*, Aldine Authorton, Chicago; and Geoffrey Brennan and James Buchanan (1980), *The Power to Tax: Analytical Foundations of Fiscal Constitution*, Cambridge University Press, New York.

Canadian provinces.[12] They find evidence of significant horizontal tax externalities. In particular, there is a general tendency for provincial business tax rates to be positively related to those of other provinces. Thus, provinces react to an increase in the business tax rate in another province by increasing their own business tax rate, which is consistent with the presence of a positive externality, as described above. However, there is considerable heterogeneity in provincial responses. For example, Ontario's business tax rate is not affected by the tax rates in any of the other provinces, while Ontario's tax rate has a positive effect on all other provinces. Hayashi and Boadway point out that Ontario is by far the largest and most populous province with the largest business tax base and suggest that its major competitor for capital may well be the U.S. rather than the rest of the country. This is an extremely interesting result, which I will return to below.

III CURRENT REALITIES

The International Picture

Regardless of one's views on the extent and welfare implications of tax competition, it seems clear that policy makers in Canada must increasingly take the international tax environment into account when determining business tax policy. In this regard, Jack Mintz has argued that Canada is falling dangerously behind other countries in terms of the statutory corporate income tax rate.[13] As shown in Table I, the basic (non-manufacturing) combined federal-provincial corporate tax in Canada is currently very high relative to other OECD countries, and the manufacturing rate is slightly higher. Moreover, most of the other countries have either decreased or plan to decrease their corporate tax rates even more. Mintz has thus argued for significant corporate tax rate reductions at the federal level in order to make Canada's corporate tax regime more competitive internationally. These tax rate cuts could be funded in part by an expansion of the CIT base, by adjusting write-off rates and credits more in line with economic parameters, and by a modest revenue reduction. In view of the fact that provincial corporate taxes currently add from 8.9 to 17 percentage points to the overall basic income tax rate facing Canadian corporations, for a weighted average of about 14 percentage points, the provinces can play an important role in enhancing Canada's competitive position internationally by reducing their corporate tax rates.

Two recent developments are noteworthy in this regard. The first is the announcement in the most recent federal budget of the federal government's intention to *slowly* reduce the basic federal corporate income tax rate by 7 percentage points over the next five years, equalizing it with the manufacturing rate of 21% by 2005. The other is the announcement by the government of Ontario in their most recent budget of their intention to lower both the basic and the manufacturing rate at the provincial level from the current levels of 15.5% and 13.5% respectively, to 8% by 2006. As indicated in the last column of Table I, by 2006 the weighted average combined federal/provincial corporate income tax rate in Canada will be about 33% for all corporations.

12. Masayoshi Hayashi and Robin Boadway (2000), "An Empirical Analysis of Intergovernmental Tax Interaction: The Case of Business Income Tax in Canada", Department of Economics, Queen's University, Working Paper.

13. Jack Mintz, *Why Canada Must Undertake Business Tax Reform Soon* (C.D. Howe Institute Backgrounder), November, 1999.

While certainly "more competitive" in the international environment, three points are worth making. First, the 33% rate will not be fully in place until 2006, which is a long time horizon given the nature of political decisions - it is unlikely that that other industrialized countries will leave their CIT rates unchanged throughout this period. Particularly relevant here is the U.S., which has not changed its CIT rate for several years and is currently enjoying large fiscal surpluses. Second, even if the other countries do not lower their tax rates further, by 2006 Canada's corporate tax rate will still be only roughly in line with most OECD countries - more competitive to be sure, but certainly not enough so to generate a distinct "Canadian Advantage" in the international environment. Third, with Ontario's announcement, the variance in CIT rates across provinces will increase significantly, barring a response from the other provinces. I return to this issue shortly.

The statutory CIT rate is, of course, only one part of the determination of the competitiveness of the corporate tax system. Equally important is the tax base, which is determined by the various rules and regulations that govern the rate and nature of various deductions and write-offs against corporate revenue. There may also be tax credits associated with certain types of investments (e.g., research and development) that further reduce corporate tax liability. Generous write-offs and credits can negate the impact of a high statutory tax rate. Moreover, many countries levy other taxes on capital, such as property taxes and explicit capital taxes, that are not taken into account in a simple comparison of statutory CIT rates. One way of taking all of this into account, and therefore of determining the overall competitiveness of the business tax regime, is to calculate and compare the *marginal effective tax rate* (METR) on capital for various countries. This not only helps us compare the business tax systems across jurisdictions, taking account of differences in the tax rates as well as the various deductions and credits, but also provides some insight into the incentive effects of the business tax regime. At this point, I will focus on the former, returning to the incentive effects below.

The idea behind METRs is conceptually quite simple. It employs the notion of the *hurdle rate of return*, which can be thought of as the after corporate tax rate of return required by investors in a corporation. Investors have many opportunities for investment, and in order to attract their savings corporations must generate an expected rate of return that at least compensates those investors for their forgone investment opportunities - the hurdle rate of return is the minimum expected rate of return required to just compensate investors for these forgone investment opportunities. Corporate taxes impinge upon that rate of return by lowering the income available to shareholders. For example, say that the after corporate tax hurdle rate of return is 5%. This is to say that after the payment of corporate income taxes, shareholders require an expected rate of return of at least 5% in order to entice them to invest in the corporation. Now say that after taking account of the various write-offs, deductions and credits allowed under the CIT, and paying taxes at the relevant statutory CIT rate, and paying other taxes on the capital, in order to generate a rate of return of 5% *after* the payment of corporate taxes, corporations need to generate a rate of return of 10% *before* the payment of corporate taxes. The METR in this case is 50%, calculated as (10%-5%)/10%. The METR is a measure of the tax wedge driven between the before- and after-business tax rate of return on a marginal investment in the corporation, where a marginal investment is simply an investment that just earns the required hurdle rate of return after the payment of corporate taxes. A high METR in and of itself reflects a disincentive to invest in capital; a high METR relative to other jurisdictions is indicative of a non-competitive tax regime.

While conceptually simple, the calculation of METRs on corporate capital is quite involved, reflecting the complexity of most corporate tax regimes. Table II presents METR calculations for the G7 countries. Calculations are presented for the corporate tax systems in 1996, 1999, 2000, and for the announced intentions out to 2006. Looking first at the calculations for manufacturing, recall that the federal government's announced CIT rate reduction will apply only to the basic tax rate and not to manufacturing while Ontario's announced rate reduction will apply to both the basic and manufacturing rates. Thus, Canada's manufacturing METR falls only slightly from 2000 to 2006. It is evident that while Canadian manufacturing METRs are not wildly out of line with other G7 countries, even after the announced CIT rate cuts take effect Canada will still have the second highest METR in the G7, second only to the U.S. As mentioned above, it is quite unlikely that the U.S. will maintain the status quo in terms of their CIT rate, as many analysts expect some sort of reduction in corporate taxes given the presence of sizable surplus in the U.S.

The announced rate cuts in Canada will go some way toward addressing Canada's lack of competitiveness in the service sector, as the service METR will drop by 7 percentage points from 2000 to 2006 if the rate cuts are implemented. Yet, even with this substantial decline, the service sector in Canada will still face the highest METR in the G7. As discussed above, border-eroding developments in technology have been particularly acute in the service sector, which means that it can no longer be viewed as 'non-tradable.' This suggests that it would have been difficult for Canada to maintain its historically high METR in the service sector in light of international pressures. As above, the calculations assume no rate cuts in the other countries.

The National Picture

Tables I and II reflect a weighted average of provincial CIT rates combined with the federal rate. The Ontario tax rate obviously looms large in these calculations, as about 37% corporate taxable income earned in Canada is allocated to Ontario. As discussed above, the evidence suggests that capital is even more mobile between the provinces than internationally - provincial borders are "thinner" than the national border. This suggests that the competitiveness of provincial CIT regimes *intra*-nationally is at least as important as it is *inter*-nationally. Table III presents current CIT rates at the provincial level, as well as announced intentions in the case of Ontario.

With the exception of Quebec, which currently levies a low CIT rate of 8.9% across the board, the other provinces have tended to "cluster" around basic CIT rates between 14%-17%. Manufacturing rates are somewhat more variable, with Quebec, Newfoundland and P.E.I levying relatively low rates in the 5.0%-8.9% range, with the rates in the rest of the provinces ranging from 13.5% in Ontario to 17.0% in Saskatchewan and Manitoba. Small business rates, which are applied to income below $200,000 earned by Canadian controlled private companies (CCPC's), are much lower, ranging from 5.0% in Nova Scotia and Newfoundland to 9.0% in Manitoba.[14]

As discussed above, Ontario has recently announced a major reduction in CIT rates to 8% (4% for small businesses) by 2006. When that rate is fully phased-in, Quebec and Ontario, which jointly account for about 64% of corporate taxable income in Canada, will both have basic and manufacturing CIT rates under

14. Small business rates are phased-out for CCPCs earning income greater than $200,000. Corporations earning income greater than $400,000 are not eligible for the lower rate.

9%, with the rest of the provinces with rates in excess of 14%. By 2006, the basic *combined* federal/provincial CIT rate in Ontario will be 29.84%; in Quebec it will be 30.74%. Barring intervening changes, the rest of the provinces will have rates from 6 to 9 percentage points higher than Ontario and Quebec.

Table IV presents combined federal/provincial METR calculations for Alberta, Ontario, Quebec and British Columbia for 2000 and 2006 intentions. The calculations confirm that Quebec currently, and Ontario given its announced intentions, have a significant competitive advantage over the other provinces in terms of the effective rate of taxation on capital imposed by the corporate tax system.

IV THE COSTS OF NON-COMPETITIVENESS: IMPLICATIONS FOR INVESTMENT, GROWTH, ETC.

A key insight from the above discussion is that from a provincial tax policy perspective provincial taxes on capital, such as the corporate income tax, may be costly to impose due to the high degree of international and intra-national mobility of the corporate tax base. Canadian provinces face significant national and international pressures on their corporate tax regimes. Although the federal government has recently made some changes to the corporate income tax system that will, eventually and on average, make our national tax system "more competitive" internationally, even after the rate reductions are fully implemented effective tax rates in Canada will just draw roughly even with our major competitors. From the perspective of the other provinces, the recently announced rate reductions in Ontario are of particular interest. By 2006 both Ontario and Quebec's basic CIT rate will be about 7 percentage points lower than in most of the rest of the country.

An important empirical question from a policy point of view is what are the implications of operating a "non-competitive" business tax regime. Most calculations suggest that from one-third to one-half of the increase in per capita GDP over the past decade has been due to increases in the capital stock; the rest has come from unspecified technological innovations. Moreover, many economists argue that technological innovations tend to be embodied in new capital.[15] This suggests that new investment increases productivity and growth over and above any increase due to the mere expansion of the capital stock. Although early empirical studies tended to show that business fixed investment was relatively unaffected by corporate taxation, most of these studies were based upon aggregate, industry level data. More recent evidence based upon firm level data finds that corporate taxes do have a significant impact on investment. For example, a recent study by Chrinko, Fazzari and Meyer based on U.S. firm level data suggests that a one percent increase in the tax adjusted *user cost of capital*, a concept closely related to the marginal effective tax rate discussed above, leads to a 0.25% reduction in the capital stock.[16] In a multi-country study,

15. See Jason Cummins, "Taxation and the Sources of Growth: Estimates from United States Multinational Corporations", NBER Working Paper No. W6533, April 1998.

16. Robert Chirinko, Steven Fazzari and Andrew Meyer (1999), "How Responsive Is Business Capital Formation to Its User Cost? An Exploration with Micro Data", *Journal of Public Economics* 74(1), October 1999, pages 53-80. Also see Robert Chirinko and Andrew Meyer, "The User Cost of Capital and Investment Spending: Implications for Canadian Firms", in P. Halpern, ed., *Financing Growth in Canada* (University of Calgary Press), 1997; Michael Wasylenko, "Taxation and Economic Development: The State of the Economic Literature", *New England Economic Review*, March/April 1997, 49-52; Rosanne Altshuler and Jason Cummins, "Tax Policy and Dynamic Demand for Domestic and Foreign Capital by Multinational Corporations",

(continued...)

which included Canada, Cummins, Hasset and Hubbard find that a 1% increase in the cost of capital can lead to a decrease in investment in machinery and equipment by as much as 1%.[17] Thus, there is, I think, good evidence that high rates of tax on capital do tend to depress investment, at least to some extent.

There is also some evidence that business taxes affect firm location decisions for multinationals. For example, Michael Devereux and Rachel Griffith examine the location decisions of U.S. based corporations that undertake foreign direct investment in various European countries, and find that country effective tax rates are an important determinant of the location of the investment.[18] A similar study of U.S. states finds that state tax differentials help explain differences in manufacturing firm start-ups across states. In particular, after controlling for state and industry specific effects, a high state marginal effective tax rate reduced the number of new firm "births" in over half of the industries examined.[19]

The relationship between economic growth and taxation is murky at best. Several factors potentially affect economic growth, the tax system being just one of them, and it is difficult to uncover systematic relationships. However, some recent studies have uncovered some important regularities. One influential study suggests that it is not so much the *level* of taxation that affects economic growth, but rather the *structure*, or composition, of the tax system.[20] For example, countries that rely heavily on personal and corporate income taxes exhibit lower growth rates than countries that rely more on consumption and sales taxes. Some anecdotal evidence seems to back up this view, as the recent success of the Irish economy is attributed, at least in part, to a sizable reduction in the corporate income tax rate levied on foreign corporations, however overall Irish taxes as a percentage of GDP are quite high due to the presence of a high VAT rate. Similarly, Sweden imposes relatively high taxes on consumption via a VAT but relatively low taxes on corporate capital via the corporate income tax, and has displayed growth comparable to the U.S. over the past decade.

Although it is advisable to keep in mind the malleability of economic data in the hands of competent econometricians, my reading of the evidence is that corporate taxes on capital do dampen investment, growth and living standards, at least to some extent.

Accepting the notion that taxing capital at the corporate level distorts investment decisions, and lowers the capital stock, an important question concerns the magnitude of the costs imposed on society as a result of these distortions. Distortions in the capital stock

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Technical Committee on Business Taxation Working Paper 97-4 (Department of Finance Canada).

17. Jason Cummins, Kevin Hassett and Glenn Hubbard, "Tax Reforms and Investment: A Cross-Country Comparison", *Journal of Public Economics* 62(1-2), 237-73.

18. Michael Devereux and Rachel Griffith, "Taxes and Location of Production: Evidence from a Panel of US Multinationals", *Journal of Public Economics* 68, 1998, 335-367.

19. L.E. Papke, "Interstate Business Tax Differentials and New Firm Location", *Journal of Public Economics* 45(01), 1991.

20. See Richard Kneller, Michael Bleaney and Norman Gemmell, "Fiscal Policy and Growth: Evidence from OECD Countries", *Journal of Public Economics* 74, 1999, 171-190; Eric Engen and Jonathan Skinner, *Taxation and Economic Growth*, National Tax Journal 49(4), December, 1996; William Robson, Jack Mintz and Finn Poshmann (1999), *Budgeting for Growth: Promoting Prosperity with Smart Fiscal Policy,* C.D. Howe Institute Backgrounder.

caused by taxation generate efficiency costs by reallocating resources from productive uses to less productive uses. The efficiency cost of capital taxes is a measure of the value of the output that is effectively lost when taxes divert capital from its best uses. By measuring the efficiency cost of capital taxes we can gauge the potential impact of taxes on society and the economy in terms of the output lost due to the resulting distortions.

While efficiency cost calculations associated with capital taxes can be very complicated, I undertake some very simple "back of the envelope" calculations that act as a rough estimate and serve to illustrate some of these concepts. Consider, for example, the recently announced reduction in CIT rates by the federal government and the government of Ontario. Table V presents some rough calculations of the efficiency cost of corporate taxes on capital in Ontario and Alberta as a percentage of GDP. As indicated above, the efficiency cost of capital taxes can be thought of as the effective loss in output due to the distortions caused by the taxes.

Consider first the current (2000) CIT system, before the tax cut announced by the federal government and the government of Ontario. The calculations suggest that the effective loss of output due to capital taxes is just under 0.50% of GDP in both Alberta and Ontario. While this may not seem like a very large number, it is important to realize that the output losses persist year after year, so in present value terms the efficiency losses are quite large. For example, in Alberta the loss of output amounts to about $720 per family per year, forever (1999 dollars). The federal CIT cuts to be phased in over the next five years will reduce the output losses due to corporate income taxes by about 30%, however in Alberta the costs remain relatively high, at about $500 per family per year. In Ontario, on the other hand, the combined impact of the federal and provincial rate cut will reduce the efficiency costs of capital taxes by almost 60%, lowering the costs to $250 per family per year, half of the costs borne by Albertans.

It is important to note that these calculations are very simple and do not take account of several important factors and interactions. For example, they do not take distortions in relative factor prices caused by the corporate tax system into account. Effective tax rates on different types of capital can vary widely, which also generates efficiency costs. Also, the calculations do not take account of one of the very important messages of this note - that capital tax differentials across jurisdictions can cause capital to flow across borders. The resulting interactions between the tax systems in Ontario and Alberta are not incorporated into the above calculations. Finally, the calculations do not take account of increased economic growth due to the technological innovations embodied in new investment. As such, the efficiency cost estimates should be considered a (very) lower bound.

V PRIORITIES FOR BUSINESS TAX REFORM AT THE PROVINCIAL LEVEL

With the above background in hand, an obvious and important question is what does all of this imply for business tax reform at the provincial level? In my view the case is rather compelling for a significant reduction in the effective tax rate on capital at both the national and provincial level.

Jack Mintz has been one of the most vocal proponents of capital tax reductions at the national level. As discussed above, recent steps taken by the federal government will, eventually and if other countries do nothing, make Canada's corporate tax system "more competitive" in the sense of drawing it closer to our major competitors for capital. However, Mintz argues that Canadian tax policy should be, needs to be, better than the average - we need to develop a "Canadian Advantage" in order to compete internationally with countries that have other advantages in attracting, and retaining, capital investment. Canada's location next to the biggest and most productive economy in the world looms large in this regard. Mintz has argued for even deeper CIT rate cuts than those that were announced in the last federal budget, which could be financed from a base broadening that would have the added benefit of reducing inter-sectoral and inter-asset distortions, generating a "more level" playing field.[21]

With the provinces currently adding up to 17 percentage points to the basic corporate income tax rate at the national level, provincial tax policy has an obvious role to play in terms of making Canada's business tax regime more competitively internationally. However, as discussed above, the provinces face another set of internal pressures due to the high degree of mobility of capital across provincial borders. While the provinces have been able to maintain perhaps surprisingly high corporate income tax rates in light of these pressures, Ontario has now thrown the gauntlet down with the announcement of substantial rate cuts to be phased in over the next six years. As discussed above, by 2006, barring any changes in the interim, the two provinces that account for almost two-thirds of corporate activity in Canada, Ontario and Quebec, will have basic corporate income tax rates of 8% and 8.9% respectively, from 6 to 9 percentage points lower than the other provinces. It is extremely difficult to imagine the other provinces maintaining provincial CIT rates in the 14% to 17% range in light of these developments.

The empirical analysis of Hayashi and Boadway discussed above looms large in this regard.[22] Recall that they conclude that while Ontario tends to ignore other provinces when setting its business tax rates, the other provinces react to Ontario - increasing their business tax rates when Ontario increases theirs or, more relevant given the current circumstances, lowering their rates when Ontario lowers theirs. Hayashi and Boadway conjecture that one of the reasons that Ontario might tend to "go it alone" on the business tax policy front is that its major competitor for capital is the U.S. rather than the rest of Canada. If we are to believe the political rhetoric in the Ontario budget, this perception is also held by provincial policy makers as international pressures, in particular the business tax environment of U.S. states in close proximity to Ontario, provided much of the justification for the corporate tax cut in the budget papers. Thus, we have the intriguing situation where Ontario reacts to international competitive pressures, which in turn leaks out to the rest of the country as they react to Ontario. Although it pains this Albertan greatly to say so, it would appear that provincial business tax policy in Canada runs through Ontario.

How much the other provinces will reduce corporate income taxes in response to Ontario remains an open question. The cuts required to match Ontario are deep and won't come cheap. For example, calculations based on public data suggest that, *ignoring behavioral changes and supply side effects*, if Alberta were to match the Ontario rates it would cost about $850 million in terms of forgone revenue (1999 dollars). This, of course, is not the whole picture, as the real, and more difficult, question (which I don't answer) is what are the costs of *not* matching the Ontario cuts?

Many analysts of the fiscal federalism of tax assignment have argued for removing the provinces from the corporate tax field altogether due to potential inefficiencies associated with

21. Jack Mintz, "Reforming the Tax Cut Agenda", Canadian Tax Journal, forthcoming.

22. See Hayashi and Boadway, supra footnote 12.

business tax competition, some of which were outlined above.[23] Does the recent move by Ontario to significantly cut its corporate tax rate signal a watershed in provincial tax policy in terms of a *de facto* withdrawal of the provinces from the corporate tax field? Has the race for the bottom finally begun at the provincial level? I don't think so. Whatever mechanism has allowed the provinces to cluster at fairly high corporate tax rates in the 14% to 17% range will probably allow them to cluster in the 8% to 10% range. While rate reductions of this magnitude will go a long way towards increasing the competitiveness of Canada as a place to do business on the international scene, they do not, in my view, represent the beginning of a complete withdrawal from the corporate tax field by the provinces.

23. See Paul Boothe and Derek Hermanutz (1997) "Paying for ACCESS: Financing Government in a Decentralized Canada", in Tom Courchene ed., *The Nation State in a Global/Information Era: Policy Challenges*, The Bell Canada Papers on Economic and Public Policy 5, John Deutsch Institute for the Study of Economic Policy, Queen's University, Kingston, Ontario; Ken McKenzie (1997), "Some Reflections on the Tax Assignment of ACCESS", in Tom Courchene ed., *The Nation State in a Global/Information Era: Policy Challenges*, The Bell Canada Papers on Economic and Public Policy 5, John Deutsch Institute for the Study of Economic Policy, Queen's University, Kingston, Ontario; Joe Ruggeri, Bob Howard and Don Van Wart (1993), "Structural Imbalances in the Canadian Fiscal System", *Canadian Tax Journal* 41, 454-472; Bev Dahlby (1992), "Taxation Under Alternative Constitutional Arrangements", in Paul Boothe ed., *Alberta and the Economics of Constitutional Change*, Western Centre for Economic Research, University of Alberta, Edmonton, Alberta; and Jack Mintz and Tom Wilson (1991), "The Allocation of Tax Authority in the Canadian Federation", in Robin Boadway, Tom Courchene and Doug Purvis eds., *Economic Dimensions of Constitutional Change*, John Deutsch Institute for the Study of Economic Policy, Queen's University, Kingston, Ontario.

Although the rate cuts by the Ontario government are not insignificant, and go a long way towards increasing the competitiveness of Canada's business tax regime internationally, there are alternative ways to reduce the tax burden on capital at the provincial level without resorting to sizable CIT rate cuts. In a recent study Michael Porter and Roger Martin argue that ". . . international competitiveness results from firm level choices that produce *distinctiveness*, not from *replicating* the choices of other firms, regions or nations" (emphasis added).[24] Applying the Porter and Martin logic to public policy suggests that competitive pressures on the tax policy front need not be responded to by replicating rate reductions, but rather through bold, distinct policy innovations. This, in my view, is where the provinces should be looking for a competitive advantage in business tax policy. One possible alternative is discussed next.

Bird and Mintz's "Modest Proposal"

The corporate income tax can be viewed in many ways. Although economics is sometimes viewed as the art of taking something simple and making it complicated (a reputation that is, I might add, quite undeserved!), the most obvious way to view the corporate income tax is that it is simply that - a tax on income, or profits, earned at the corporate level. In order to apply the tax to income it is important to measure that income appropriately. This involves the deduction of all appropriate costs. From an economic perspective the appropriate tax base for an income tax is *economic income*, which requires the deduction from revenues of the opportunity

24. Michael Porter and Roger Martin (2000), *Canadian Competitiveness: Nine Years after the Crossroads*, University of Toronto, Faculty of Management. See also Michael Porter and Roger Martin (1991), *Canada at the Crossroads*. Thanks again to John McCallum for these references, supra footnote 2.

cost of all of the inputs used in production. In its simplest form this requires the deduction of all current expenses, including labour, as well as interest associated with debt, the opportunity cost of equity finance, and economic depreciation. If the appropriate deductions, based on opportunity costs, were made, and the corporate tax was levied on a base consisting of economic income, the marginal effective tax rates on corporate capital would be zero. As indicated above, METRs on corporate capital are not in fact zero; rather they are positive, and quite high at that. This is because as it is currently structured the corporate income tax is not in fact a tax on economic income at all, but rather an implicit tax on equity capital (this is not to mention the fact that tax depreciation deductions differ from economic depreciation, as well as the myriad of other bells and whistles associated with the corporate income that cause the tax base to deviate from economic income). As discussed above in connection with the calculation of METRs on corporate capital, the opportunity cost of equity finance arises from the fact that investors in corporations have the opportunity to invest their funds, and earn a rate of return, elsewhere. The need to generate a return that is high enough to compensate shareholders for this forgone return is no less a cost of doing business than is the need to generate a return high enough to pay the interest on debt. The key point is that by allowing a deduction for the interest cost of debt finance, but not allowing a deduction for the opportunity cost of equity finance, the corporate income tax is in fact not an income tax at all but rather an implicit tax on the return to equity financed corporate capital.

The difficulties and implications of taxing corporate capital at the provincial level have been the focus of much of this note. Another problem with relying so heavily on an implicit tax on corporate capital is that it imposes a tax on a particular factor of production financed in a particular way, equity financed capital, while not taxing other factors of production, such as labour. This introduces inefficiencies by changing the relative prices of labour and capital. Moving to a business tax base that did not discriminate against capital relative to labour would not only generate benefits associated with lower taxes on capital described above, but would reduce the inefficiencies associated with taxing labour and capital at widely divergent rates. Moreover, the CIT imposes a tax on the most mobile of factor inputs - capital - leaving less mobile inputs, such as labour, untaxed (though labour is, of course, taxed under other parts of the tax system, such as the personal income tax and payroll taxes).

As mentioned above, many economists recommend the complete removal of the provinces from the corporate income tax field because of the presence of the horizontal externalities. This advice has been ignored in the past and is likely to be ignored in the future, for reasons too subtle for economists to understand. If we accept the reality that provinces will continue to tax business capital in the future, for whatever reason, then the policy challenge becomes how to do so in a sensible and efficient a manner. Richard Bird and Jack Mintz took up this challenge in a recent paper.[25] They present a proposal that would keep the provinces in the business tax field, but would do so in a more efficient manner. With apologies to Jonathon Swift, they present a "modest proposal" that explicitly retains a role for the provinces in the capital tax field and could be implemented within the context of the existing structure of the corporate income tax.[26]

25.See Bird and Mintz, supra footnote 1.

26.Bird and Mintz argue that a provincial presence in the business tax field may be justified on benefit grounds.

Bird and Mintz propose that the provinces move to a *business value added tax*, or what they call a *business value tax* (BVT). Businesses add value by combining labour and capital with other purchased inputs. The value added by labour is the cost of labour (wages and salaries) while the value added by capital is the cost of capital (both debt and equity). The BVT base proposed by Bird and Mintz thus consists of revenues, less purchases of current inputs except labour, less depreciation allowances, less royalties paid to the crown. From an administrative perspective, the tax base could be calculated in two ways: first by simply "adding back" the appropriate amounts for interest and wages to the CIT base as it is currently calculated; second by eliminating the provincial corporate income tax altogether and levying a payroll tax on wages and salaries and explicit capital tax on capital (explicit capital taxes levied at low rates already exist in many provinces on top of the existing corporate income tax).

The Bird and Mintz proposal may be "modest" in form but not in function. While the BVT *explicitly* imposes a tax on (debt and equity financed) corporate capital, rather than doing so implicitly via the corporate income tax, it does so in a much more efficient and sensible manner. By including the value added by labour in the tax base along with capital it allows for a reduction in the effective tax rate on capital. Moreover, by eliminating interest deductibility it taxes equity capital at the same rate as debt capital, reducing yet another distortion caused by the corporate income tax.[27]

Bird and Mintz determine revenue neutral BVT rates for all of the provinces. For example, in the case of Alberta they calculate that a BVT rate of 2.6% would generate the same revenues as the existing Alberta CIT (this is based upon the existing formula used to allocate corporate income across the provinces - one half of the share of payroll and sales). Table VI presents METR on capital calculations under the projected federal CIT as of 2006 and the current Alberta CIT, and its replacement with a revenue neutral BVT; similar calculations could be made for the other provinces. The table also provides

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27. As discussed above, the taxation of capital under the corporate income tax arises in part because of the non-deductibility of the opportunity cost of equity finance. Bird and Mintz's "modest proposal" deals with this by disallowing the deduction of the costs associated with *all* types of finance, debt and equity, and thereby explicitly maintaining a tax on capital. An alternative approach would be to go the other direction and remove the tax on capital altogether. This could be accomplished in two ways. The first would be to somehow allow a deduction for the cost of equity finance under the existing income tax. While possible in theory, this is very difficult to do in practice due to the obvious measurement problems, and is likely to generate other distortions (this has not stopped some countries, such as Croatia, from attempting it nonetheless). Still another approach is to disallow deductions for the cost of both debt and equity as under the BVAT proposal, but allow for the immediate deduction of capital expenditures, rather than depreciating them over time. This cash flow tax would also remove the tax on capital. While a cash flow tax is a simple way of eliminating the tax on business capital, it has been recommended many times before in other contexts, and, as far as I am aware, has not been adopted in any jurisdiction.

METRs by broad asset classes as well as the aggregate total.

Several aspects of the calculations are noteworthy. First, note the very significant reduction in METRs on capital associated with the move to a BVT. The total METR on capital in Alberta declines by 5.6 percentage points to 19.6% in Manufacturing and by 6.7 percentage points to 21.7% in Services. This is a substantial reduction. For comparison purposes the total capital METRs for Ontario in 2006, when both the Ontario and federal tax cuts will be in full force, are included in the table. The METRs on capital in Alberta under the BVT are very close, and indeed even lower than, the METRs on capital in Ontario in 2006. However, note well that *the BVT is revenue neutral*, with the rate set so as to raise the same amount of revenue as the existing Alberta corporate income tax. As mentioned above, to replicate the Ontario METRs via a corporate income tax rate cut in Alberta would involve a tax cut in the order of $850 million. Also evident from the table is the fact that the inter-asset variation in METRs across different types of assets is lower under the BVT than the existing provincial corporate tax.

The flip side of the BVT coin is that while it decreases the tax on corporate capital it increases the tax on labour. Of course since labour is less mobile than capital across borders this in and of itself is a sensible change in the tax mix in light of the competitive pressures discussed above. However, an issue that may be of concern with the implementation of an origin-based tax such as the BVT is the impact of such a tax on the cost of doing business, which has implications for the competitiveness of exports. As indicated, the BVT increases the tax on one factor input, labour, while lowering the tax rate on another factor input, capital. Using an approach developed by Ken McKenzie, Jack Mintz and Kim Scharf, the effective tax rates on the various inputs into the production process may be aggregated into a single measure called the METR on production costs.[28] The METR on production costs measures the effective excise tax rate levied on the marginal cost of production suggested by the taxation of the various inputs into the production process.

Table VII presents METR on cost calculations for Alberta under the corporate income tax and a revenue neutral BVT. *The calculations presume that the entire burden of the higher tax on labour is borne by businesses.* Even in this extreme case it is evident that the replacement of the corporate income tax in Alberta with a BVT would have virtually no impact on marginal production costs. If we make the more reasonable assumption that a sizable portion of the burden of the tax on labour would in fact be borne by individuals through a reduction in wages then the METR on production costs would actually decline under the BVT.

In my view, Bird and Mintz's is not only a "modest proposal" but an eminently reasonable one. A tally of the benefits of this approach to business taxation would include its recognition of the reality that provinces do, and perhaps always will, tax business capital. It results in a significant reduction in the effective tax rate on capital, which lowers the intertemporal distortions caused by the taxation of corporate income. It brings the tax rate on capital and labour into closer alignment, which lowers distortions in the factor mix. It reduces the tax discrimination against equity as opposed to debt financing. If reduces the variance in effective tax rates across different types of capital. And it does all of these things without the decline in government revenues that might be expected to accompany an Ontario style CIT rate reduction.

28. Kenneth McKenzie, Jack Mintz and Kimberly Scharf (1997), "Measuring Effective Tax Rates in the Presence of Multiple Inputs", *International Tax and Public Finance* 4(3), 332-359.

The costs of moving to a BVT are more difficult to enumerate. One issue concerns the treatment of the BVT for international tax purposes. The difficulty here involves the eligibility of the BVT for foreign tax credits in the U.S. The case of Italy may provide some guidance in this regard. Italy imposes a regional tax very similar to the BVT described here, and U.S. government allows a portion of that tax to be creditable for U.S. tax purposes. Theoretically, that portion should be related to capital's contribution to the value added. I would think that a similar arrangement might be arrived at for Canada. There are no doubt several other "technical" issues that would be needed to be worked out were a move to the BVT considered seriously. However, perhaps the most significant argument against this approach to business taxation at the provincial level is not an economic one, but rather a political one - it is different.

Table I: Total Statutory Corporate Income Tax Rates, Selected OECD Countries, 1996 and 2000 (percent)

	July 31, 1996	**January 1, 2000**	**Direction of Change**	**Intentions (Year)**
Australia	36.0	36.0	no change	30.0 (2001)
Canada	***34.6/43.3***	***34.6/43.3***	***no change***	**32.5/33.0 (2006)***
Denmark	34.0	32.0	lower	
France	41.7	36.7/40.0	lower	36.7 (2000)
Germany	56.1	51.9	lower	35.0 - 38.0 (2000)
Ireland	10.0/38.0	10.0/28.0	lower	12.5 (2003)
Italy	53.2	31.3 - 41.3	lower	
Japan	52.1	48.0	lower	
Netherlands	37.0/35.0	35.0	lower	
Norway	28.0	28.0	no change	
Poland	40.0	34.0	lower	22.0 (2004)
Sweden	28.0	28.0	no change	
Switzerland	35.5	25.1	lower	
Turkey	44.0	33.0	lower	
United Kingdom	33.0	30.0	lower	
United States	39.2	39.2	no change	

Source: Mintz (1999) and author calculations.

Note: The first number in each box is the basic corporate tax rate and the second is the tax rate applied to manufacturing firms. The Canadian figures assume a weighted average provincial corporate tax rate based upon the allocation of capital across the provinces.

*The federal government has announced intentions for a 7 percentage point reduction in the federal CIT to be phased in over five5 years. The government of Ontario recently announced their intention to lower their provincial CIT rate from a general rate of 15.5% and manufacturing rate of 13.5% to 8% over a six year period. The figures in this box include the CIT reductions announced by both the federal government and Ontario.

Table II: Marginal Effective Tax Rates on Capital (percent)

	Canada	United States	United Kingdom	Germany	France	Italy	Japan
Manufacturing							
1996	24.1	23.8	19.4	36.2	25.3	31.6	31.6
1999	24.1	23.6	17.2	19.8	24.4	24.5	28.0
2000	24.1	23.6	17.2	19.8	22.7	18.1	22.6
2006*	22.8	23.6	17.2	19.8	22.7	18.1	22.6
Services							
1996	32.6	25.0	19.2	35.6	27.9	31.6	33.1
1999	32.6	24.8	17.2	31.6	27.0	24.5	29.5
2000	32.6	24.8	17.2	15.6	25.3	18.1	24.0
2006*	25.7	24.8	17.2	15.6	25.3	18.1	24.0

*Based on intentions announced in 2000 federal and Ontario budgets.

Table III: Provincial CIT rates (percent)

	Current			Intentions		
	Small	Basic	Manufact.	Small	Basic	Manufact.
Alberta	6.0	15.5	14.5			
British Columbia	8.5	16.5	16.5			
Saskatchewan	8.0	17.0	17.0			
Manitoba	9.0	17.0	17.0			
Ontario	8.5	15.5	13.5	4.0 (2006)	8.0 (2006)	8.0 (2006)
Quebec	8.9	8.9	8.9			
New Brunswick	6.0	17.0	17.0			
Nova Scotia	5.0	16.0	16.0			
Newfoundland	5.0	14.0	5.0			
Prince Edward Island	7.5	14.0	7.5			

Table IV: METR's for Alberta, British Columbia, Quebec and Ontario

	Alberta	British Columbia	Ontario	Quebec
Manufacturing				
2000	25.2	26.5	24.5	21.8
2006	25.2	26.5	21.3	21.8
Services				
2000	33.6	34.4	33.6	28.9
2006	28.4	29.1	23.7	24.2

Table V: Output Losses Due to Business Capital Taxes

	2000	2006
Alberta		
Percent of GDP	0.46%	0.31%
Per family	$720	$500
Ontario		
Percent of GDP	0.45%	0.19%
Per family	$600	$250

Table VI METR's on Capital: 2006 CIT and BVT, Alberta (per cent)

	Manufacturing		Services	
	CIT	BVT	CIT	BVT
Structures	25.6	20.1	24.7	19.0
Machinery	11.5	9.5	29.4	22.3
Inventories	35.0	27.4	35.5	27.2
Land	25.0	19.5	25.4	19.8
Total Alberta	25.2	19.6	28.4	21.7
Total Ontario	21.3		23.7	

Table VII METRs on Production Costs, Alberta, percent

	CIT	BVT
Manufacturing	14.2	13.9
Services	13.9	14.1

ENVIRONMENTAL TAXATION IN CANADA: RACE TO THE TOP, RACE TO THE BOTTOM, OR NO RACE AT ALL?

Nancy Olewiler

INTRODUCTION

In recent years, many countries have contemplated or undertaken reforms of their federal and local tax systems. There are many rationales for tax reform. These include:

- Realignment of government revenues and expenditures;
- Improving the efficiency of the tax system;
- Making the tax system more equitable;
- Broad economic and social policy objectives such as promoting job creation, economic growth, and international competitiveness.

Although rarely discussed in Canadian policy, many countries, especially those in Europe, have added improvements in environmental quality as a target of tax reform. In Canada, some provincial and local governments have contemplated "environmental tax reform", but the federal government has not broached this topic since the early 1990s as part of the discussion emanating from Canada's *Green Plan* (1990).[1] The answer to the question posed in the title of this paper is that there is no race at all in Canada. Canada is far from a world leader in promoting market-based measures to improve environmental quality. While the environment surfaces every decade since the 1960s as a topical policy issue, there have been virtually no environmental tax initiatives coming from the federal government and a bit of tinkering by some of the provinces. The 'good news' is that there is no evidence that governments are keen to 'race to the bottom' by cutting taxes that encourage polluting activities. While our combined federal-provincial business tax rates favour industries that are relatively more pollution intensive, marginal effective tax rates are higher in Canada than many other OECD countries.

The outline of the paper is as follows. An overview of the state of the environment for Canada is briefly reviewed. Those sectors of the economy that are relatively more pollution intensive than others are identified. Environmental information for Canada is then linked with indicators of the country's changing industrial structure over the past 10 years. The purpose is to see which sectors of the economy are growing and generating more jobs. The growing sectors of the Canadian economy tend to be less pollution-intensive than the stagnant or declining sectors. An examination of the corporate tax treatment of different sectors of the Canadian economy shows that a number of the pollution-intensive sectors have received very favourable tax treatment over time in the form of low effective marginal tax rates due to tax incentives and lower corporate tax rates.

The next section of the paper looks at the potential for tax reform that can accomplish the dual objectives of promoting economic activity

[1]The Green Plan was an effort by the federal government to improve environmental quality primarily through regulatory reform and harmonization of policy across the country. Fiscal instruments were discussed in a working paper, *Economic Instruments for Environmental Protection* (Canada, Environment Canada, 1992). Harmonization of environmental policy was to be guided by the Canadian Council of Ministers of the Environment (CCME). The CCME issued various reports during the early 1990s, but little in the way of substantive policy (and no tax instruments) emerged. Several provincial ministries took up the initiative on the tax side with more studies, for example, the Ontario, Fair Tax Commission's *Final Report – Environment and Taxation* (1992). But again, there was little in the way of environmental tax policy implemented. The Green Plan was quietly abandoned by the federal government in 1995. See Fafard and Harrison (2000) for discussion of the intergovernmental aspects of Canadian environmental policy.

while providing incentives to improve environmental quality. To help improve environmental quality, taxes can be preferable to regulatory policies especially when introduced as a package of revenue neutral policies. This is called environmental tax shifting. The potential for using environmental taxes in Canada is considered by examining general policies such as corporate tax reform, a specific tax shifting example involving the federal fuel excise tax, and examples of possible environmental taxes on products or pollutants. Comments on challenges for the design and implementation of environmental taxes conclude the paper.

ENVIRONMENTAL INDICATORS, POLLUTION INTENSITY AND EFFECTIVE TAX RATES FOR CANADIAN INDUSTRIES

Environmental Indicators[2]

Natural resources, including environmental resources – land, air and water – are integral to a country's development and the well being of its residents. When environmental resources are degraded, living standards and the productive capacity of the economy are impaired, as greater effort must be devoted to mitigating damages and adapting to changing environmental quality, rather than to producing goods and services.

Over the past 25 years, indicators of environmental quality in Canada indicate a mixed performance. Air and water quality are defined by a number of different measures. Eutrophication in the Great Lakes has declined since the 1970s, as has acid precipitation in central and eastern Canada (due in part to reductions of sulphur dioxide emissions from the United States). However, the quality of our drinking water has declined in some regions due to contamination by bacteria, viruses, and other toxins. Air quality remains a concern in central Canada and greater Vancouver due to ground-level ozone and particulates. Soils are contaminated with salts from irrigation and toxic compounds borne by the atmosphere and water. Global concerns include the reduction in stratospheric ozone and rising emissions of carbon dioxide and other greenhouse gases.

Figure 1 illustrates the emissions of major air pollutants (sulphur and nitrogen oxides and carbon dioxide) from OECD countries in the early 1990s as a ratio of their gross domestic product (GDP), expressed in US dollars. Canada's ratio of emissions to GDP was the highest among the countries surveyed. It is however important to remember that the size of the Canadian economy is smaller than many of the OECD countries sampled. Therefore, aggregate emissions from Canada are less than emissions from some other OECD countries.

Figure 2 provides information on aggregate Canadian emissions air pollutants: sulphur and nitrogen oxides, total suspended particulates, and greenhouse gases over the period 1970-95. Sulphur oxides and total suspended particulates show a consistent downward trend, while greenhouse gas emissions and nitrogen oxides have increased over the period. These pollutants come from a variety of industries and as a by-product of consumption. Data by industry and sector for each of these pollutants is not available. Table 1 illustrates two proxies for the environmental impact of industrial sectors on air quality. The first column gives the carbon dioxide emissions – a key greenhouse gas. The second column provides the energy intensity by sector. The more energy intensive the sector, the greater the possible emissions of these air pollutants as they are by-products of energy consumption (as well as other industrial processes). Table 1 indicates that the air-pollution intensive sources are: agriculture, crude petroleum and natural gas, paper and allied products, primary metals, non-metallic minerals, refined petroleum and coal, chemicals, transportation, and electric power and utilities.

[2] Parts of this section draw from the *Technical Committee on Business Taxation* (1998).

Total primary resources plus manufacturing make up 36% of total carbon dioxide emissions, transportation and utilities 29%, while the total service sector only contributes 9% of the total releases.

Another significant threat to the environment and the health of a country's inhabitants comes from the emissions of a variety of toxic substances.[3] The National Pollutant Release Inventory (NPRI) is a comprehensive database on releases of toxic contaminants to air, water or land, collected by Environment Canada.[4] The United States has a similar annual inventory of toxic releases. The NPRI compiles data on 230 substances of varying toxicity. The industries that use and release toxic compounds are concentrated in certain primary sectors (mining, crude petroleum and natural gas) and some manufacturing industries. The other sectors of the economy: -- construction, communication, transportation, trade, utilities, and services -- may release small amounts of the toxics, but not in amounts large enough to report them to the NPRI. As noted above, two of these non-manufacturing sectors, utilities and transportation, release significant amounts of carbon dioxide and are energy intensive relative to other industries.

Olewiler and Dawson (1998) have calculated a number of indicators of the toxic intensity of Canadian production using NPRI data and Statistics Canada industry data. These indicators measure emissions, or estimate relative toxic impacts, expressed as a ratio to either the number of production workers or the value of output for each industry. These indicators illustrate potential risks to the environment or human health from each sector.

Table 2 provides three measures of the toxic releases from Canadian industries. The volume of emissions per employee or per dollar of output are commonly reported measures, but they do not provide an indication of the degree of public exposure or environmental impact, as the emissions data is not weighted according to toxicity of the substance released. The toxic index uses scientific information about the toxic effects of each compound released to estimate each industry's environmental burden.[5] Impacts also depend on population densities in affected areas, environmental conditions and pre-existing concentrations of toxic materials.

Pollution Intensity

The information presented in Table 2 indicates that the quantities of emissions and their toxic intensities vary widely among different industries.[6] Four industry sectors have consistently very high toxicity rankings by any measure: refined petroleum and coal, chemicals, mining, and primary metals. Industries of medium toxicity include crude petroleum and

[3] Under the Canadian Environmental Protection Act, substances are deemed toxic if they are harmful, posing a threat to human health or ecological processes; or if they are highly resistant to chemical and biological breakdown by natural processes, and thus persist in ecosystems after release; or if they accumulate in the food chain, causing adverse effects at higher levels [Canada, Environment Canada and Health and Welfare Canada (1993)].

[4] All facilities with 10 or more full-time employees which "manufacture, process, or otherwise use any of the NPRI substances in concentrations greater than one percent and in quantities equal to or greater than 10 tonnes" must file a report with Environment Canada, and report any releases or transfers of wastes. [Canada, Environment Canada, 1996b].

[5] Further information on how the toxicity index is derived is detailed in Olewiler and Dawson (1998).

[6] These calculations are based on industry aggregated releases. Businesses within an industry may be releasing compounds with differing degrees of toxicity.

natural gas, paper and allied products, non-metallic minerals, rubbers, plastics and transportation equipment. Manufacturing industries with consistently low values include food, beverage, machinery, leather, electrical and electronics, and of course, all the sectors whose releases are too small to report to the NPRI.

Table 3 offers a relative ranking of industries by their pollution intensity into three categories. This ranking is based on releases of air pollutants, toxic compounds, and a "guesstimate" of their contribution to water pollution (as I am aware of no sector-specific estimates of water pollutants not included in the toxics inventory). A "high" ranking is due to a high toxicity rank (a toxic index of over 150), and high air or water emissions. "Medium" is assigned to industries with a toxic index between 35 and 150 and significant emissions of air or water pollutants, while "low" industries have a toxic index of less than 35 and few emissions of other pollutants. The most pollution-intensive industries are: chemicals, crude petroleum and natural gas, mining, primary and non-metallic metals, plastics, rubber, and refined petroleum and coal. The least pollution-intensive industries include a number of manufacturing industries (food and beverage, machinery, leather, electrical/electronics, textiles, furniture, etc.), the service and trade sectors, and communication.

We now look at the contribution of Canadian industries to employment and income growth over the past 10 years. This information will be linked with the environmental data presented above to examine employment and output growth of pollution-intensive industries over the past 20 years compared to industries that are not as pollution-intensive.

Table 4 shows total employment in 1986 and 1995 and the compound average annual change for the decade for industries grouped by their pollution intensity. The table indicates that growth in employment is negatively correlated with pollution intensity. The most pollution-intensive industries have the smallest total levels of employment (675,000 in 1995) and their overall employment has declined by 3.3 percent over the period 1986 to 1995. The annual growth rates for all but mineral fuels and paper and allied products are zero or negative for the ten-year period from 1986-1995. Industries that are in the middle category have the next highest total employment (1.71 million), and grew in aggregate over the period by 1.5 percent. The least pollution-intensive industries provide the most jobs in Canada (10.9 million in 1995) and have the highest growth rate in employment over the period (over 14 percent).

Table 4 also has one estimate of the average annual growth in GDP by industry for the five-year period, 1996-2000. These figures do not suggest a clear relationship between pollution intensity and growth in output. While a number of industries in the least pollution intensive sectors have some of the highest predicted rates of output growth, all sectors have several industries with forecast growth greater than the projected annual growth rate for the economy of 2.7 percent. In Canada, over the past 10 years, growth in output has not necessarily translated into growth in employment.

Effective Tax Rates on Marginal Investments

Table 5 presents the effective tax rates on marginal investments by large and small industries in Canada.[7] As the table indicates, certain sectors of the economy and small business in general face lower effective tax rates than large businesses. We see that the pollution-intensive industries generally receive the most favourable tax treatment, while the least

[7] It is beyond the scope of this paper to go into detail on the individual taxes that go into the computation of the effective tax rate.

pollution-intensive industries are faced with the highest effective rates. This means that the existing federal and provincial business taxes do not encourage environmentally friendly economic activity relative to pollution-intensive production. The question is, can tax reform assist both the environment and the economy.

THE USE OF TAXES TO ADDRESS ENVIRONMENTAL PROBLEMS

Pollution is a by-product of production, consumption, and the transport of goods and people. The degradation of environmental and natural resources that results from pollution and our economic activities is a cost to society. These social costs are rarely incorporated into the prices of inputs and outputs. Economists have long advocated the use of tax instruments as a policy to assist in meeting environmental targets.[8] Imposing taxes on polluting activities is an application of the user pay principle. The user pay principle argues that economic efficiency and fairness are enhanced when agents are required to pay for the costs they impose on society. As noted above, Canada has depended primarily on the direct regulation of polluting substances and activities in the form of emission guidelines and standards and technology-based requirements instead of taxation. Recently, there has been a flurry of discussion in Canada about market-based instruments, especially tradeable discharge permits, but so far, little in the way of action.[9]

In theory, taxes are more cost-effective than direct regulation of pollutants, polluting activities, or pollution abatement technologies. This is because they are a cost-minimizing policy compared to most types of standards.[10] Taxes raise revenue; standards and guidelines do not. Environmental taxes may also be levied and collected by existing government agencies, rather than requiring new bureaucratic infrastructure.

The theoretical principle of environmental taxation is to set the tax equal to the difference between the private and social marginal costs of producing and using a good. In practice, it is difficult to quantify these social costs. The rates for existing environmental taxes around the world are based on a mix of environmental considerations, revenue objectives, and political factors. Table 6 lists the types of environmental taxes currently existing in OECD countries.

A major advantage of environmental taxes over other environmental regulatory policies is that they have the potential to correct market distortions resulting from existing taxes. If a government introduces an environmental tax that is designed to account for the social costs from pollution (as noted above), and uses the tax revenue obtained to replace an existing distortionary tax, the efficiency of the tax system as a whole may increase. Reducing the use of distortionary taxes such as income, capital, and payroll taxes may act as an incentive to investment, labour supply, and job creation, and thereby lead to greater social well being. This is the "double dividend" proposition – a topic of considerable debate in the

[8] See Dales (1968) for a Canadian example.

[9] The federal government is in the process of examining a host of market-based initiatives for greenhouse gas emissions as part of a major consultative exercise called Canada's National Climate Change Process (NCCP). Reports are being released and pilot studies for tradeable pollution permits may soon be underway. See the NCCP web page at: www.nccp.ca.

[10] There is an extensive policy and theoretical literature on the cost-effectiveness of market-based policies in comparison to regulatory policies. See the discussion in Organization for Economic Co-operation and Development (1989), Canada, Environment Canada (1992), United States, Environmental Protection Agency (1991), United States, Environmental Protection Agency (1992), Ontario, Fair Tax Commission (1992a).

theoretical economics literature.[11] The other term for a revenue neutral tax reform that substitutes an environmental tax for an existing distortionary tax is 'environmental tax shifting' (ETS).[12] ETS allows governments to be 'environmentally friendly' with no net change in the total tax share of the economy. There will be a redistribution on tax impact across sectors of the economy (and perhaps across income levels), but the differential sectoral impact may be efficiency and employment enhancing. A rebalancing of taxation through ETS may be easier for society to accept if governments are engaged in net tax cutting exercises at the same time. Examples of potential ETS policies – taken up next in this paper – help illustrate these points.

THE POTENTIAL FOR USING ENVIRONMENTAL TAXES IN CANADA

The federal and provincial governments share the responsibility for environmental protection. Each level of government has introduced a few environmentally-related taxes and fees. These include provincial vehicle efficiency taxes, excise taxes on heavy vehicles, taxes at the provincial level on tires, lead acid batteries, and disposable diapers. Some provinces also operate deposit-refund systems (a tax and rebate when the product is returned) for beverages and other containers. Each level of government provides some incentives to improve environmental quality through the tax system in the form of corporate income tax incentives (write-offs for renewable energy and energy-conservation and efficiency investments, water and air pollution control). But the list is modest. There is no comprehensive policy at either the federal or provincial level.

Potential environmental taxes are illustrated in this section. These include two examples of ETS policies and a list of possible environmental taxes that could be implemented at different levels of government. The two ETS examples are a reduction in federal/provincial corporate income tax rates accompanied by a broadening of the tax base, and a restructuring of the federal and provincial excise taxes on motive fuels. A full assessment of these reforms should take into account implementation details and tax harmonization issues between federal and provincial governments.[13]

Base Broadening and Rate Reduction

A key recommendation of the Technical Committee on Business Taxation was to broaden the corporate income tax base and lower its rates. This was seen as the best way to encourage growth in output and employment in an open economy and to ensure that all businesses share in the cost of providing government services. In addition to the general economic benefits received, these tax reforms can also help to improve environmental quality. The tax base could be broadened by reducing or eliminating preferential tax treatment of industries facing the lowest marginal effective tax rates. As shown in Table 5, many of these industries are among the most pollution intensive in Canada. Reducing their preferential tax treatment would raise the effective tax rates on their marginal investments relative to those of less pollution intensive industries. This, combined with a reduction in corporate income tax rates, would lead to a more neutral tax

[11] See Bovenberg and de Mooij (1994), Goulder (1995), Parry (1995), Parry and Bento (2000), and Schöb (1997) for an overview of the debate over the size and sign of the double dividend.

[12] See Taylor, Jaccard, and Olewiler (1999) for a discussion of the potential for environmental tax shifting at the provincial and local government levels.

[13] See *Technical Committee on Business Taxation* (1998) for discussion of these possible environmental fiscal initiatives. This section of the paper draws heavily from that report.

system with regard to industries. It would reduce the implicit subsidy to pollution-intensive industries, while taxing those that are less pollution intensive at lower rates than currently is the case. Tax reform that broadens the base and reduces tax rates will also be consistent with reducing disincentives created by high taxes to those sectors creating the most jobs and having among the highest growth rates.[14] Industries such as the service and trade sectors, communications, public utilities, transportation, and construction would see their marginal effective tax rates fall, while those of mining, oil and gas production, and manufacturing would rise.

Figure 3 illustrates the impact of base broadening and a rate reduction on marginal effective tax rates of different sectors. Figure 3 is taken from the *Report of the Technical Committee on Business Taxation* and illustrates the impact of its recommended base broadening and rate reduction reforms. The reform is revenue neutral and therefore consistent with the ETS concept. Clearly, this is not an environmental tax shift in the pure form, but an illustration of how a general tax reform may improve environmental quality by removing the preferential tax treatment previously given to the most pollution-intensive sectors of the Canadian economy.

Excise Taxes on Motive Fuels

Federal and provincial excise taxes on motive fuels – gasoline, diesel, and jet fuel – were not initially introduced as environmental taxes. The federal fuel excise tax was imposed in 1975 during the 'energy crisis' as part of a package of measures intended to raise revenue and curb reliance on imported oil. Some provincial motive fuel excise taxes were introduced to help fund highway construction and maintenance. In most cases, fuel excise tax revenue goes into general revenues; it is not earmarked for specific expenditures. Federal and provincial governments thus depend on fuel taxes as general revenue sources; not as taxes designed to change behaviour or make polluters pay. Fuel excise taxes could be structured as emissions taxes if the tax base were changed because combustion of these fuels produces a number of air pollutants (sulphur and nitrogen oxides, carbon monoxide, carbon dioxide, particulates). The current base is oil products used for transportation. If these taxes were restructured to include all fossil fuels or even all energy sources as their base and the tax rates were made a function of pollution characteristics of the fuel, these taxes would become environmental taxes. Both economic efficiency and equity would be improved because all fuels would be taxed at rates that reflect environmental damages. The proposal from the Technical Committee was

> "to rebalance the excise taxes on fuels to broaden their base to include the domestic consumption of all fuels and other major energy sources, including oil, natural gas, coal, biofuels and electricity. Tax rates would be set to reflect the environmental damage associated with energy sources. The government might consider basing the tax rates on an index of the relative damage of environmental pollutants – carbon dioxide, sulphur and nitrogen oxides, particulates, and volatile organic compounds – and energy content as a proxy for other environmental damage. The tax should be levied on domestic consumption of fuels and other energy. Thus, imports of fuels and electricity should be taxed as part of domestic consumption, and exports should not be taxed."

In the Report of the Technical Committee, the proposal focuses on the federal fuel excise tax and makes the reform revenue neutral so that rates would be set to raise approximately the

[14] See *Technical Committee on Business Taxation* (1998) for a complete discussion of general proposals for base broadening and rate reduction.

same revenue as the existing federal fuel excise tax.[15] The proposal would lower the federal rate on motive fuels, and would raise taxes on other energy sources that are currently untaxed at the federal level. A similar tax reform could apply to provincial fuel taxes. The proposal is also not a pure ETS example because the tax revenues from the fuel taxes are not used to reduce other taxes in Canada. However, fuel excise taxes could be used for an ETS. In the current climate of tax cutting, the revenues raised could be used to lower tax rates elsewhere.[16]

Environmental Taxes on Products and Emissions

A number of products are candidates for taxes that could be based on their pollution content (from production and/or use). These include: fertilizers, pesticides, household chemicals, batteries, tires, paint, and motor vehicles, to name a few. Each of these products releases known pollutants either when used or when discarded as solid waste. If the tax is levied at the point of sale, it could relatively easily be combined with existing excise taxation such as the GST at the federal level and PST at the provincial level.

Taxes on the emissions of pollutants are generally viewed as superior to taxing inputs and outputs based on their pollution characteristics. This is especially so when the input or output has multiple characteristics and pollution is only one of these. A product tax is a less direct instrument because producers and consumers may value other characteristics of the inputs or products highly and thus be less likely to alter their purchases because of the pollution tax on the good. The automobile is an obvious example. An environmental tax then becomes more of a revenue source than an instrument to alter behaviour. This is, however, still consistent with the polluter pay principle and may be seen as equitable. Taxing emissions gets around this problem because it provides a much stronger incentive for producers or consumers of the product to substitute to less polluting alternatives (if available). The fuel excise tax proposed above is a 'better' environmental tax than is a tax on motor vehicles because it would be more closely linked to emissions. Fuel buyers would look for substitutes with lower taxes (hence relatively lower prices) that provide the same output or service. For example, natural gas could be substituted for oil.

A key difficulty with emission taxes is that it may be hard to measure emissions (think of monitoring each automobile's tailpipe emissions or the agricultural effluent from pesticides and fertilizers). Monitoring technology is changing rapidly, so that this obstacle may diminish over time. Some pollutants are also much easier to measure, for example, municipal sewage, solid waste, and toxic compounds in industrial use. In these cases, a tax on the actual pollutants emitted is potentially feasible.

CHALLENGES FOR IMPLEMENTING ENVIRONMENTAL TAXES AND ENVIRONMENTAL TAX SHIFTING

While there is considerable potential for the introduction of environmental taxes in Canada, a number of challenges exist. These challenges help to explain why there is currently 'no race at all' to introduce environmental taxes. This section of the paper presents these challenges

[15] Non-energy uses of fuels, such as the use of petrochemical feedstocks, would not be taxed.

[16] One suggestion has been for the federal government to rebalance its motive fuel tax along the lines suggested by the Technical Committee, then rebate a share of the tax revenues to the provinces to use for environmental initiatives such as public transit.

and provides some suggestions for meeting and overcoming them.[17]

Adjustment Costs and Sector Specific Impacts

The introduction of any new tax, even in a tax shift setting, will change costs for certain businesses and affect prices for consumers. While taxes create incentives to alter behaviour, firms and consumers often have made previous investments in capital and technologies that are more pollution intensive. It will thus take time to replace this capital. The tax may speed up the replacement of equipment. These are adjustment costs. Sectors of the economy will be affected differently. Pollution-intensive sectors will see their taxes rise, while those having less of an adverse impact on the environment will see their taxes fall. If environmental taxes rise costs significantly, firms may want to migrate to less-taxed jurisdictions. Governments can acknowledge these adjustment costs by implementing environmental taxes gradually and by providing information about the taxes well in advance of the date they are to take effect. Tax rates can start at a modest level and rise over time until they reach the level commensurate with environmental damages. Governments may consider assistance as long as it doesn't alter the price incentives of the environmental tax. For example, the revenue from the environmental tax might be recycled to the most affected sectors.

Regressivity

The distributional impacts of environmental taxes are not well studied. We do not know if an environmental tax shift would be regressive, progressive, or proportional. Regressivity is more likely when pollution-intensive expenditures represent a high proportion of low income people's budget, they own pollution-intensive capital (old refrigerators, furnaces, and cars), and they face sizeable credit constraints in replacing their capital with newer, less pollution-intensive durables. An ETS, depending on what taxes are reduced, could neutralize or reverse potential regressive impacts. Tax rebates (in lump sums) can also be returned to low income people (analogous to the GST rebate) to offset potential regressivity and ease in the adjustment to less pollution intensive consumption.

Tax Skepticism

No one likes taxes. The public and industry will be skeptical about an environmental tax shift, not necessarily trusting that government will deliver on the tax cutting part of the plan. While people generally favour government protection of the environment, they will need to see a clear connection between the environmental tax and environmental targets and improvements in environmental quality. If revenue recycling with an ETS is visible and governments clearly show that other taxes are cut, this may greatly assist in alleviating skepticism.

Uncertainty about Tax Revenues and Environmental Improvements

Canadian governments have little experience with environmental taxes. Although models can estimate the likely impact of a tax, until it is implemented and in operation for some time, we will not know exactly what impact the tax will have on behaviour and hence, environmental quality. If an environmental tax shift is in place, there is a greater need to accurately forecast tax revenue, so that other taxes can be reduced accordingly. The uncertainty in this process may be considerable, especially with the introduction of new taxes. However, there would likely be far less uncertainty with a tax shift such as the

[17] Further details can be found in Taylor, Jaccard, and Olewiler (1999).

rebalancing of the fuel excise tax; governments have considerable data on the price elasticity of demand for fuels and hence, the revenue elasticity with respect to the tax rate.

When uncertainty is great, governments may face a dilemma with respect to environmental tax revenues. If the tax significantly reduces polluting activities, little tax revenue is collected. While a reduction in pollution is obviously the target, low revenues mean that there can be less tax recycling. If the response to the environmental tax is weak, the revenues generated will be larger and possibly more predictable, allowing more recycling. Environmental quality gains won't be as large. The greater the uncertainty in tax revenue elasticity, the more difficult it will be to effectively plan an efficient ETS.

What can be done about tax revenue uncertainty in an ETS policy? Again, more gradual implementation of taxes and tax rates will be required the greater the degree of uncertainty. This will allow governments to adjust tax rates in response to revenues and environmental targets. If the tax has absolutely no effect on environmental quality, that is, there is no behavioural response, governments may still wish to levy it on the grounds of equity (the polluter still pays), but augment its tax policy with other environmental regulations such as emission or technology standards.

Jurisdictional Constraints and Harmonization

In our federal system, all levels of government – federal, provincial, and municipal, have some jurisdiction over the environment, with powers that range from concurrent and therefore potentially overlapping, to exclusive. Under the Canadian constitution, the federal government can levy any type of tax. It has jurisdiction over national and international environmental problems. Provinces have the authority to protect and manage their provincial natural and environmental resources using whatever form of taxation they wish. Otherwise, they are restricted to levying direct taxes. This gives rise to a host of potential challenges and could lead to a race to the bottom or the top. For example, if environmental taxes are implemented, who is the taxing authority? Will there be tax competition in the form of high or low environmental taxes if the jurisdiction is provincial and/or local and tax agreements do not cover these taxes? Does the level of government with the responsibility for an environmental resource have taxation authority?[18] Overlap of powers, taxes paid to multiple levels of government for the same environmental problem, and inefficiency in matching the tax to the jurisdiction can all result.

Harmonization of environmental taxes across the country would reduce some of these potential problems. In the past 25 years, governments have often worked together to design harmonized environmental regulations. However, because so few of these regulations are in the form of actual statues that bind polluters to specific targets, we do not have a good test of the efficacy of the existing cooperative agreements.

Successful environmental tax policy also requires the cooperation of key ministries at each level of government. Ministries of the environment have considerable expertise in the science required to determine the impact of pollutants on the ecosystem and health, and have been responsible for monitoring and

[18] An example of this problem occurs at the municipal level. In recent year, municipal governments have had responsibility for funding environmental services downloaded to them, but have very limited taxation authority (e.g., some control over property taxes and user charges). This mismatch between responsibility and taxation authority may severely hamper their ability to reach environmental quality targets, especially for water quality.

enforcement. Policy analysis is done in environmental ministries, but ministries of finance are required to model and implement an environmental tax policy. Both ministries must thus work together if environmental tax policy is to be introduced in Canada in more than a token way.

The key component of successful implementation of an ETS policy is the political will to do so. The history of environmental policy in Canada is highly cyclical and characterized by few substantive policies. When public opinion is focused on environmental problems, Canadian governments announce major environmental initiatives. These generally involve studying the issues, and producing reports that recommend policies. These policies rarely get to the implementation stage. Or, guidelines are issued that are not binding constraints on polluting behaviour. Public opinion then swings to another issue and the environmental initiatives stagnate. As noted above, Canada's Green Plan is a prime example of this sort of political behaviour. We are seeing the same cycle again as a result of the contamination of the water supply and resulting deaths of people in Walkerton, Ontario. The water quality crisis has stimulated action by the Province of Ontario; the government is currently 'studying' the problem. My bet is that little in the way of substantive policy will emerge. We still have 'no race at all'.

CONCLUSION

The theme of this conference is tax competition. This paper argues that there is no race at all between the levels of government across the country with regard to environmental taxation. That is the good news. The bad news is that we have no race at all because we have little in the way of substantive environmental tax policy in Canada. Provinces and municipalities do not seem to be competing to either raise or lower taxes to encourage environmentally friendly or induce pollution-intensive industry to locate in their region. Environmental policy is characterized by a lot of talk and little substantive action; we are therefore missing an opportunity to use this policy instrument to help improve environmental quality. The 'talking' phase has returned. British Columbia is discussing environmental tax shift options; Ontario, water quality regulation. The federal government has its greenhouse gas study groups. The National Roundtable on the Economy and Environment will be looking at ecological fiscal reform. We will have to wait to see if this time, any sort of environmental taxation (and other market-based environmental policies) emerge from the discussions.

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Figure 1 Atmospheric Emissions of Air Pollutants per Unit GDP in OECD Countries, 1993

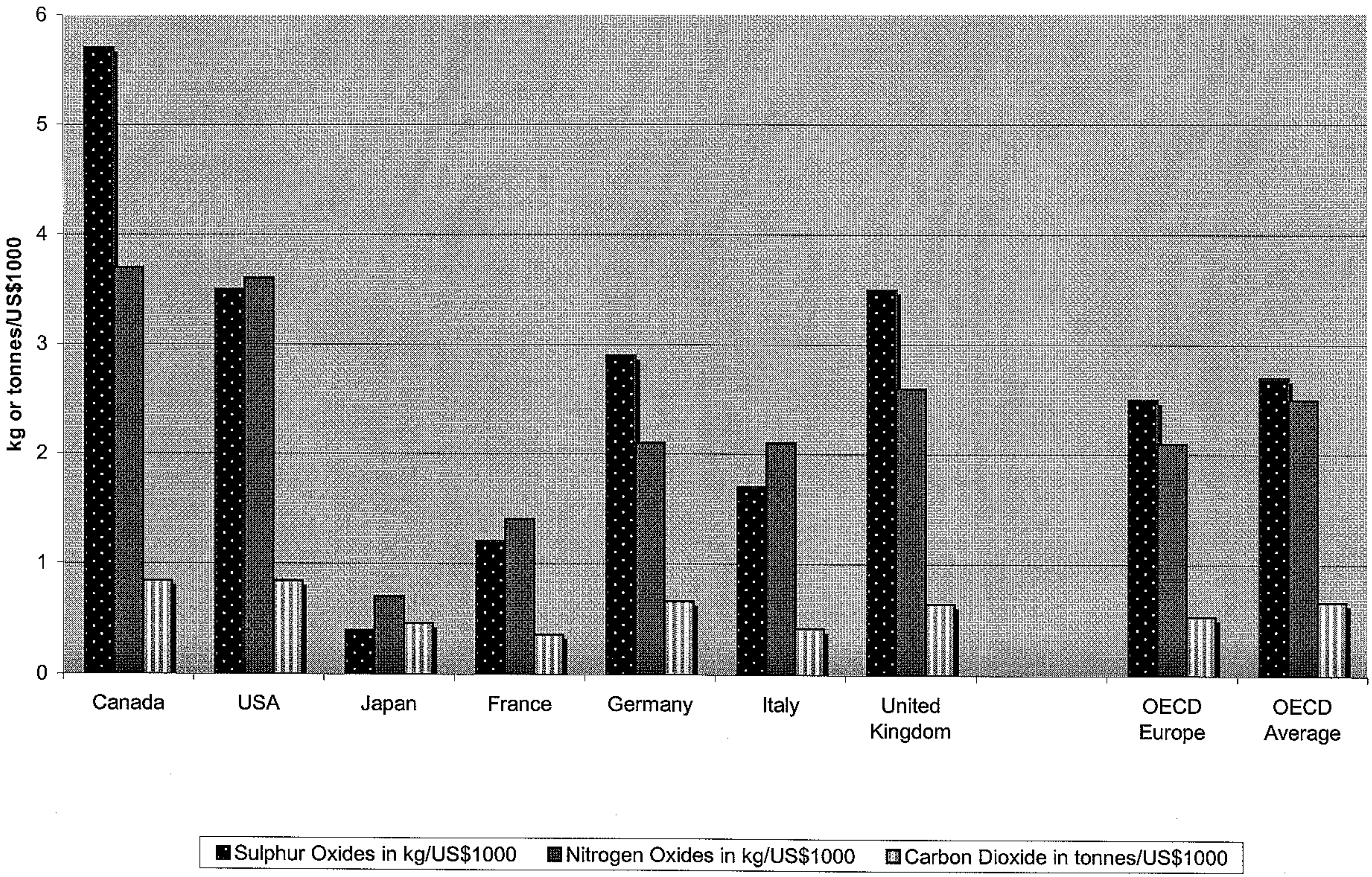
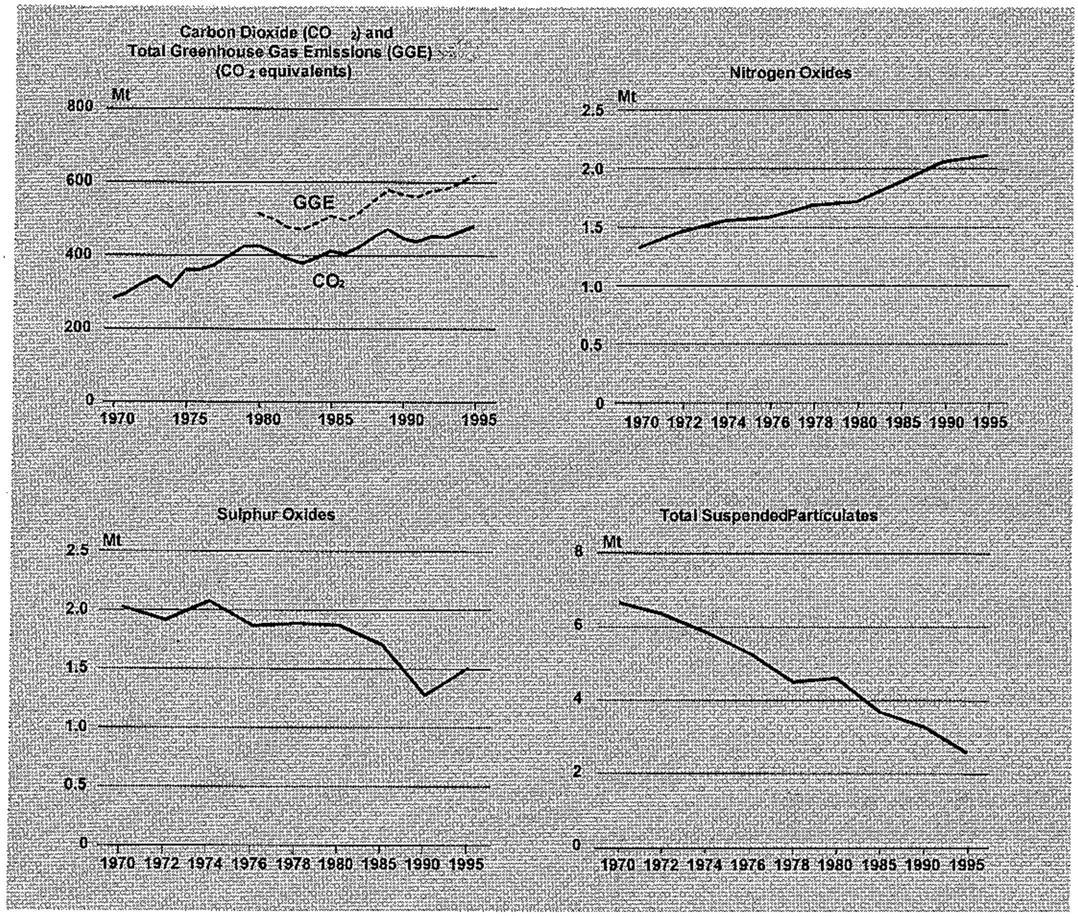


Figure 2: Canadian Emissions of Key Air Pollutants,



Notes:

- Data for carbon dioxide represent emissions from fossil fuels only, not all sources of carbon. Fossil fuels account for approximately 90 percent of all inventoried carbon dioxide emissions since 1980.
- Figures forsulphur oxides (SO_x) and nitrous oxides (NO_x) for 1970-80 are forsulphur dioxide (SO_2) and nitrogen dioxide (NO_2) respectively.
- Preliminary figures for 1995 emissions of nitrous oxidesulphur oxides and total suspendedparticulates provided by Pollution Data Branch, Environment Canada.
- Mt = milliontonnes

Sources: Deslauriers (1996), Canada, Environment Canada (1986), JacquesSpitzert andBoileau (1997) andKosteltz and Deslauriers (1990).

Table 1 Indicators of Pollution Intensity of Canadian Industries, 1990

Industry	Carbon Dioxide Emissions (kilotonnes)	Fossil Fuel Consumption (terajoules)
Agriculture	12,440	
Forestry	2,700	
Mining	6,964	
Crude Petroleum & Nat. Gas	35,241	
Total Primary Resources	*60,486*	923
Food & Beverages	4,677	
Rubbber	364	
Plastic	476	
Leather	57	
Textiles	1,228	
Wood Products	1,485	
Furniture	355	
Paper & Allied Products	14,322	
Printing & Publishing	478	
Primary Metal	21,570	
Fabricated Metal	1,861	
Machinery	699	
Transportation Equipment	2,344	
Electrical & Electronic	1,019	
Non-metallic Minerals	14,015	
Refined Petroleum & Coal	22,624	
Chemicals & Products	17,510	
Other Manufacturing	433	
Total Manufacturing	*105,791*	1387
Construction	6,545	95
Transportation	37,827	681
Pipeline Transport	6,693	
Communications	1,052	
Electric Power & Utilities	95,627	1074
Wholesale Trade	7,381	
Retail Trade	7,756	
Finance & Real Estate	10,797	
Other Services	14,168	
Total, Services	41,154	714
Total, Non-Manufacturing	*187,846*	
Total Business Sector	***354,123***	***4873***
Households	93,320	
Government Sector	13,008	
Total, Household & Govt	106,328	
Total Economy	**460,450**	

Note: Numbers may not add because not all categories are reported.

Source: Statistics Canada (1995) *Environmental Perspectives, Studies and Statistics,* Tables 8.1 and 8.2.

Table 2: Canadian Toxic Emissions and Toxic Intensity Indicators by Industry, 1994

Emissions and Impact per Employee			Emissions and Impact per Million Dollars of Output		
Industry	Emissions tonnes/job	Toxic Index	Industry	Emissions tonnes/$GDP	Toxic Index
Refined Petroleum & Coal	1.581	1165	Chemicals	2.235	756
Chemicals	1.213	823	Mining	2.073	655
Mining	0.675	428	Primary Metal	0.879	422
Crude Petroleum & Nat. Gas	0.53	304	Rubber	0.661	305
Primary Metal	0.312	300	Plastics	0.621	232
Paper & Allied Products	0.414	215	Refined Petroleum & Coal	0.619	227
Rubber	0.127	118	Non-metallic Minerals	0.373	157
Plastics	0.1	76	Crude Petroleum & NaNat. Gas	0.181	52
Non-metallic Minerals	0.077	65	Furniture & Allied Products	0.124	51
Transportation Equipment	0.047	38	Transportation Equipment	0.107	43
Printing & Publishing	0.02	15	Fabricated Metal	0.107	42
Fabricated Metal	0.017	13	Printing & Publishing	0.104	39
Furniture & Allied Products	0.014	12	Textile Products	0.093	39
Textile Products	0.013	11	Paper & Allied Products	0.126	33
Primary Textiles	0.012	10	Other Manufacturing	0.073	31
Other Manufacturing	0.01	9	Primary Textiles	0.058	23
Wood	0.007	8	Leather	0.062	19
Electrical & Electronic	0.006	5	Wood	0.031	17
Leather	0.006	3	Electrical & Electronic	0.02	9
Machinery	0.002	1	Machinery	0.011	3
Food & Beverage	0.001	1	Food & Beverage	0.001	1
Weighted Average	0.144	100	Weighted Average	0.288	100

Notes: The employment numbers measure production workers only. Output is value of shipments of own manufacture
Source: A12 Adapted from Table 9.2 of the *Report of the Technical Committee on Business Taxation* (1998).

Table 3 Pollution Intensity of Canadian Industries

High	Medium	Low
Chemicals	Metal Fabricating	Financial Services
Crude Petroleum & Natural Gas	Printing and Publishing	Manufacturing (nes.)
Mining	Transportation	Services
Non-Metallic Minerals	Utilities	Wholesale/retail Trade
Paper & Allied Products	Agriculture	
Primary Metals	Forestry	
Refined Petroleum & Coal		
Rubber		
Plastics		

Note: Manufacturing (nes) indicating manufacturing industries not assigned to other categories.
Source: Data from Tables 1 and 2.

Table 4: Employment and Employment Growth by Pollution Intensity of Industries, 1986-1995

	Employment (000s)		Compound Average Annual Change (%)	
	1986	1995	1985-95	Forecast GDP*
High Pollution Intensity				
Chemicals	100	103	0.31	4
Mineral Fuels	65	61	-0.77	2.9
Mining	122	111	-1.08	4.7
Non-metallic Minerals	62	54	-1.57	2.3
Paper & Allied Products	116	128	1.15	0.7
Primary Metal	121	112	-0.82	3.9
Petroleum & Coal	22	16	-3.69	3.3
Rubber & Plastic	90	90	0	4.7
Total Employment	698	675		3.2
Medium Pollution Intensity				
Agriculture	476	430	-1.12	1.1
Metal Fabricating	162	154	-0.55	4.1
Printing & Publishing	171	183	0.74	1.2
Transportation	508	540	0.68	2.7
Transportation Equipment	247	264	0.74	4.7
Utilities	124	142	1.5	2.6
Total Employment	1688	1713		2.6
Low Pollution-Intensity Industries				
Communication	290	329	1.43	5.9
Construction	652	724	1.17	2.5
Electrical	174	150	-1.62	6.5
Financial Services	690	809	1.78	3.4
Food & Beverage	252	249	-0.13	1.2
Forestry	68	91	3.26	0.1
Furniture	62	58	-0.85	4
Leather	28	13	-7.83	0.6
Machinery	80	80	0	3
Textiles & Textile Products	199	164	-2.18	0.6
Retail Trade	1587	1699	0.76	2
Services	4763	5846	2.3	3.2
Wholesale Trade	589	608	0.34	4.8
Wood	128	150	1.79	3.3
Total Employment	9562	10,970		3.4

Note: Forecast GDP is the 5-year average annual growth as forecast for the period 1996-2000 by DRI/ McGraw-Hill.

Source: Employment data collected for the Technical Committee on Business Taxation by the Department of Finance, Ottawa.

Table 5: Effective Tax Rates on Marginal Investments, 1997
(percentages)

	Large Businesses	Small Businesses
High Pollution Intensity		
Chemicals	17.9	7.6
Mineral Fuels	17.9	7.7
Mining	8.7	-
Paper & Allied Products	17.9	7.6
Primary Metal	17.9	7.7
Petroleum	5.5	-
Coal	8.7	-
Medium Pollution Intensity		
Agriculture	-	7.9
Forestry	28.8	12.6
Manufacturing Industries	17.9	7.6
Transportation	27.9	15.7
Utilities	30.3	14.7
Low Pollution Intensity		
Communication	23.9	20.2
Construction	37	17.5
Services	27.6	10.1
Retail Trade	33.8	16.4
Wholesale Trade	32.1	15.5
Manufacturing Industries	17.9	7.6

Source: Adapted from Table 3.1 of the *Report of the Technical Committee on Business Taxation* (1998).

Table 6 **Environmentally Related Taxes in Selected OECD Countries, 1994 to 1997**

Country	Unleaded Gasoline (C$/litre)*a* 1997	Non-automotive Fossil Fuels latest avail.	Electricity latest avail.	Ozone-depleting Substances 1994	Other Goods and Services *b* 1994	Deposit-refund System *c* 1994
Australia	0.44	no	no	yes	no	yes
Canada	0.25	no	no	no	yes	yes
Denmark	0.71	yes *d*	yes	no	no	yes
Finland	0.86	yes *d*	yes	no	yes	yes
France	0.92	yes	no	no	no	yes
Germany	0.8	yes	no	no	yes	no
Japan	0.6	no	no	no	yes	no
Netherlands	0.84	yes *d*	yes	no	no	no
Norway	0.92	yes *d,e*	yes	no	yes	no
Sweden	0.79	yes *d,e*	yes	no	yes	yes
United Kingdom	0.82	yes	no	no	no	no
United States	0.14	yes *f*	no	yes	yes *f*	yes

Notes:

a Values represent all non-value added taxes imposed by all levels of government for 1997, converted to Canadian dollars using exchange rates for the first quarter of 1997.

b Tax on one or more "pollution-intensive" commodities.

c Temporary taxes in the form of refundable deposits on beverage containers and other products.

d Tax on the carbon content of the fuel.

e Tax on the sulphur content of the fuel.

f The Hazardous Substances Superfund Tax.

Source: Table 9.1 of the *Report of the Technical Committee on Business Taxation* (1998, p. 9.6).

SALES TAX HARMONIZATION ISSUES

Richard M. Bird

INTRODUCTION

Canada is a unique country in sales tax terms. We have a federal value-added tax (or VAT) – the Goods and Services Tax (or GST) – which operates throughout the country. We also have a provincial version of this VAT – the Harmonized Sales Tax (or HST) – collected by the federal government in three Atlantic provinces – and a closely-related provincial VAT – the Quebec Sales Tax (QST) – collected by the provincial government along with the federal GST in Quebec. Five other provinces operate independent retail sales taxes (RSTs) , one of which – in Prince Edward Island – includes the federal GST in the tax base. And finally, Canada's real fiscal outlier, Alberta, has no provincial sales tax at all. Nor do the three northern territories.

The issue of "harmonizing" these various and varied sales taxes has been a major concern for at least a decade, since the introduction of the GST. Considerable progress has been made in some respects. Over the last decade, the QST has moved much closer to the GST than was initially the case, although it still does not provide as complete credit for business inputs and also zero-rates some additional items. The GST/HST system is of course completely harmonized, albeit at the cost of forgoing any provincial autonomy with respect to sales taxes and also constraining federal policy autonomy to some extent. In addition, at the administrative level the federal government has increasingly moved, on a province-by-province basis, to collect provincial sales taxes on non-commercial imports at the border even for provinces that still retain separate and independent retail sales taxes. Nonetheless, there remain many issues with respect to both federal-provincial and also with respect to inter-provincial relations in the sales tax field.

Indeed, such issues arise with respect not solely to general sales taxes but also with respect to other indirect taxes such as excises on fuel and tobacco. The tobacco tax story is particularly well-known. To reduce smuggling across the international border, the federal excise tax was cut in 1994 and Ontario and the other eastern provinces (except Newfoundland) similarly decreased their own tobacco taxes, triggering further differential cuts by province in the federal tax. Although tobacco taxes have subsequently crept up a bit, both federal and provincial taxes remain markedly lower in all eastern provinces (except Newfoundland) than in the west. Moreover, in 1998, in response to cross-border shopping pressures, Newfoundland lowered its tobacco tax rates in Labrador zones bordering on Quebec to be equivalent to the Quebec rate.

My assigned topic was sales tax harmonization, and I could indeed talk about what can and should be done to make our present complex sales tax system more rational, efficient, and effective while still retaining adequate autonomy and accountability for the various governments. But I have already done this at length elsewhere (Bird and Gendron, 1998; Bird, 2000), and I do not want to repeat myself here. For those who really want to know, however, my answer is, broadly, that Quebec has it right in some key respects and that the HST approach favored by the federal government is seriously flawed.

In any case, what I would like to talk about instead is the question of tax competition through sales and excise taxes – a subject has not attracted much attention in Canada in the past but that I shall suggest is likely to become a matter of increasing concern in the future. My argument will be fairly straightforward. First, I shall state what I understand by tax competition. Then I shall explore briefly the two main channels that such competition takes with respect to indirect taxes. And finally I shall explain briefly why I think this issue is one that we in this country should begin thinking about more in the future than we seem to have done in the past.

SALES TAX COMPETITION

Much has been written and said about tax competition between subnational governments. Often, such competition has been attacked as wasteful and distorting, leading to such undesirable outcomes as "tax jungles" which impose high compliance costs on society and a "fiscal war" or "race to the bottom" as competing jurisdictions continually lower tax rates in an effort to retain tax base. Less frequently, fiscal competition between jurisdictions has been said to provide both a useful check on the propensity of governments to expand and a stimulus to more efficient use of scarce fiscal resources.

Despite the fervour with which proponents of both "harmful" and "beneficial" intergovernmental competition often state their positions, in reality neither the theoretical nor the empirical literature on this issue is conducive to such certainty (Wilson, 1999). While there is much still to be learned about intergovernmental competition between governments at the same level (horizontal competition) as well as between governments at different levels (vertical competition), what we know so far does not lend strong support to either extreme position in this debate. Neither the position that all intergovernmental competition is bad nor the position that all intergovernmental competition is good dominates. How one assesses these arguments depends upon a variety of factors that need to be specified carefully with respect to each particular setting in which the question is considered.

If all subnational taxes were levied on a strictly "benefit" basis, for example, so that the taxes imposed on residents paid for the benefits they received from public services and any taxes "exported" to non-residents were similarly offset by cost-reducing benefits to such non-residents, both horizontal and vertical spillovers would be minimized. Taxes that finance cost-reducing public infrastructure, for example, need not be distorting. In the real world, however, such perfection is not readily attained, and both horizontal and vertical spillovers are often found.

When there are horizontal spillovers between jurisdictions at the same level (states, or local governments), the result may be that taxes will be unduly high, since non-residents (= non-voters) in effect end up paying for services enjoyed by residents (=voters) to the extent "excess" business taxes are exported. The extent to which such tax exporting takes place depends upon market conditions, the relative size of jurisdictions and many other factors, but it undoubtedly does occur in Canada, though probably more at the local than the provincial level (Ballentine and Thirsk, 1982).

Alternatively, the result may be too low a level of taxation for fear of loss of tax base to other jurisdictions. Vaillancourt (1999) has recently suggested that up to now there seems to have been relatively little explicit tax competition whether for people or for business between provinces in Canada. Nonetheless, he shows that Quebec has made far more use of tax incentives to attract new industries than anyone else and correctly notes that the impending greater freedom of other provinces to play similar incentive games may change this situation in the future. At the intra provincial level, there has been much concern in recent years about tax competition for industrial and commercial tax base between local governments in such major metropolitan areas as Toronto (Locke and Tassonyi, 1996).

Vertical spillovers may arise from the interdependence of tax decisions when different levels of government tax the same base or if taxes at one level are deductible or creditable at another level. Spillovers of the first type clearly arise with respect to sales taxes in Canada. So do those of the second type to the extent that indirect taxes imposed by one level of government are deductible for purposes of calculating the income taxes imposed by another level.

Both horizontal and vertical spillovers reduce the accountability of governments. When governments can impose taxes that are, in effect, borne to some extent by other governments or nonresidents, the economic cost of taxation is lower than it should be, and the result is likely to be "excessive" government spending. On the other hand, if spillovers result in tax base moving to other jurisdictions, tax competition may make the perceived economic cost of taxation too high, thus resulting in "too little" government.

How all this works out in any particular setting depends also upon the intergovernmental transfer system. In Canada, equalization and such other components of the federal-provincial system as the tax collection agreements have in the past reduced tax competition between provinces and hence lessened horizontal spillovers. On the other hand, at the same time, it may also have resulted in a larger subnational government sector than would otherwise exist, both by reinforcing the governmental "cartel" against taxpayers and by increasing vertical spillovers since to some extent many provincial governments are able to increase taxes even at the expense of reducing their tax base because they are compensated by additional equalization payments. Care must obviously be exercised in setting up any transfer system to ensure that transfers are "inframarginal" so that subnational governments will clearly face the full tax price of the spending decisions for which they are responsible. In international perspective, our present system is good in this respect, but it is not perfect.

In any case, experience elsewhere supports the conclusion that intergovernmental tax competition exists and can in some instances constitute a real problem. Numerous empirical studies in the United States, for example, provide conflicting evidence on the extent to which differential state-local tax regimes affect competitive behavior as well as on the effectiveness of specific subnational tax incentives. With respect to the latter, given the general theme of this conference, it is perhaps useful to note that, as one recent balanced survey plausibly concluded, "studies exist to buttress almost any case about tax incentives" (Wasylenko, 1996). Recent studies have found some evidence of fiscal competition not only in the United States but also in such other federal countries as Germany (Buttner, 1999) and Switzerland (Feld and Kirschgassner, 2000).

While difficult to interpret, on the whole the evidence appears to suggest that fiscal competition is, whether for better or for worse – the jury is still out on this –, a real phenomenon, though one most likely to affect location choices within smaller areas than within larger areas. This suggests that fiscal differentials are likely to be more important factors in affecting location decisions within than between nations. More generally, competition seems likely to be more intense the greater the number of governmental units, the shorter the "economic" distance between them, and the greater their degree of autonomy with respect to business-related taxes (Grewal and Mathews, 1977).

Tax levels and tax incentives always constitute part of the "fiscal climate" which prospective investors have to take into account. There is thus always some "tax competition" between governments, whether it is explicit or implicit. With respect to sales taxes, such competition has been largely implicit to date in Canada, although it has occasionally come to the surface as with respect to the tobacco taxes mentioned earlier.

Sales tax competition may take two forms. The first, and most obvious, is the problem of "cross-border shopping." Traditionally, this has not been seen as a major problem in Canada, perhaps owing largely to the virtual absence of major population centres near provincial borders. When a problem has been perceived, it has generally been dealt with either by establishing a special regime (as in the Labrador case mentioned already or the town of Lloydminster on the Alberta-Saskatchewan border) or by maintaining provincial rates very close to each other as in the case of Ottawa and Hull. Interprovincial trade in some high-value, high-taxed items such as automobiles has been controlled by registration systems, while in other cases, such as tobacco and alcohol contiguous provinces seem to have maintained their taxes roughly in line and in still others, for example, with respect to interprovincial carriers, explicit interprovincial agreements on base allocation have been reached (Robinson, 1986).

A second, less obvious, form of sales tax competition concerns the extent to which indirect taxes fall on production, rather than consumption. As is well known, the so-called "retail" sales taxes still in place in five provinces in fact fall substantially on production inputs (Kuo, McGirr, and Poddar, 1988), as do some other provincial and local taxes such as fuel excises and property taxes. Even the QST still impacts to some extent on production. Indeed, the recent Mintz report estimated that in total as much as 25 percent of the total tax burden on Canadian business consisted of indirect taxes (including property taxes), with most being imposed at the provincial and local levels (Mintz Committee, 1997).

Such taxes may affect the profitability of different industries differently depending upon factor mix and the extent to which market conditions restrain forward shifting, and they also, of course, apply to different extents in different regions. Not only production decisions but also the very structure of business organization may be affected by such input taxes since they can of course be avoided by vertical integration with suppliers, thus eliminating the taxable transaction. Although the reduction of such inefficient production taxes was one of the main motivations for the adoption of the VAT form of sales tax, the competitive implications of these levies do not seem to have been considered much in recent Canadian discussion. Nonetheless, it is clear that industries located in Ontario, for example, are clearly disadvantaged compared to those in, say, Quebec, in terms of the marginal effective tax rate they face on production costs (McKenzie, Mintz and Scharf, 1997) because they bear higher (non-creditable) taxes on a range of business inputs.

WHAT MIGHT THE FUTURE HOLD?

The situation to date with respect to sales tax competition in Canada thus appears to be that there is clearly some implicit, if largely unrecognized, competition with respect to production and some perhaps less important, but more obvious, potential competition with respect to cross-border consumption. Both of these situations may be about to change, however, and not for the better. This prediction – which, I should perhaps emphasize, relates to the long run (say, the next few decades) rather than the immediate future -- rests on two propositions, both of which I shall simply assert here rather than argue at length.

The first is that all governments, everywhere, but especially perhaps subnational governments are likely to be driven increasingly to rely upon consumption taxation for revenues (Mintz and Chen, 2000). And the second is that it is going to become increasingly difficult to tax cross-border consumption flows (Tanzi, 1996). Should these predictions prove at all accurate, one outcome may be, somewhat paradoxically perhaps, that what are nominally taxes on consumption will in fact to some extent become taxes on production. In a worst case scenario, governments competing frantically for tax base may even introduce more and more explicitly competitive "incentives" into their indirect tax structures. While I hope this exceedingly dark vision of Canada's subnational revenue structure in the future coming more to resemble India's today does not come to pass, the dangers are, I think, there, and warrant more explicit discussion.

Consider first cross-border shopping. The only serious consideration of this issue in Canada appears to have occurred at the time of the introduction of the GST, which coincided with a relatively strong dollar, thus making a quick shopping trip to Buffalo or Bellingham an attractive option to a wide range of Canadians. As Boisvert and Thirsk (1993) demonstrated, there was indeed a perceptible surge in cross-border shopping until it was damped down by a falling dollar. One result was that to a considerable extent the GST was initially borne by producers in border regions, with perhaps as much as 60 percent of the total tax being borne by suppliers rather than consumers.

The importance of this story in the present context, however, is simply that it demonstrates that Canadians are by no means immune to the temptation of shopping where taxes are perceived to be lower. Indeed, many US studies have found that a one percent differential in sales taxes results in a shift of from one to six percent of purchases from the higher-taxed to the lower-taxed area (Due and Mikesell, 1994). On the other hand, the only apparent study of this phenomenon in Canada found little evidence of such cross-border shifts in the Ottawa-Hull area in the 1970s, when the interprovincial rate differential was 3 percent (Dufour and Vaillancourt, 1982).

More generally, as I mentioned earlier, traditionally geography has saved Canadian provinces from having to worry much about cross-border trade except in very few instances. Distance selling has always been something of a problem, however, and such sales have generally been de facto exempt. Clearly, such sales across not just provincial but international borders are likely to increase in the near future with the expansion of electronic commerce, especially for products that have high value and little weight or volume. It is easy, for example, to envisage the relocation, at least for tax purposes, of much of Canada's software industry to the Alberta sales tax haven if Canada followed the lead of the European Union and attempted to tax such sales on essentially an origin basis. Although such issues do not as yet seem to have been much discussed in this country, Canada's provincial sales taxes seem at least as vulnerable to base erosion for this reason as state sales taxes in the US (McLure, 1999).

Considerable discussion is now going on all over the world on how best to deal with the threat to tax bases potentially posed by e-commerce. It is far from clear yet how this matter will be resolved. But what can be said with some certainty is that both federal and provincial governments are going to have to do some hard thinking and, in all likelihood, to reach some explicit agreements – the nature of which are as yet far from clear -- in order to deal with the problems, and challenges, posed for sales taxation by the emerging "new" economy.

Much of the discussion of e-commerce and the sales tax has, understandably, focused on final sales to consumers. In practice, however, as already mentioned, a surprisingly large portion of indirect taxes, broadly conceived, are collected in Canada from business and hence impact directly on production and location decisions. If, as seems likely, governments in the future will be faced by the dilemma of being increasingly less able to tax business directly in the face of competitive jurisdictions while at the same time being forced by the politics of the fiscal process to continue to levy some taxes on business as a sop to voter perceptions, it may become increasingly difficult to move to the "production-efficient" VAT form of sales taxation. "Hidden" taxes on business through, for example, uncredited taxes on production inputs may find a new rationale (Mikesell, 1999). To the extent business taxation remains important, and revenues are increasingly constrained thus making it harder to subsidize desired forms of business directly, explicit "sales tax competition" for business may lie in our future – although I sincerely hope not! Of course, the HST approach to sales tax harmonization has the substantial merit of ruling out this possibility, albeit apparently at the expense of constraining further use of sales rather than income taxes at both levels of government. It is by no means clear that winning the sales tax game is worth giving up the possibility of adjusting further the tax mix candle.

In any event, to conclude on a somewhat more positive note, the key to productive governmental competition -- whether vertical or horizontal -- lies in making the relevant decision-makers accountable for their decisions. In turn, the key to effective accountability is to set out the rules clearly and to make relevant comparative information publicly available. At base, the ultimate mechanism driving "good" competition between governments is, on one hand, the ability of citizens to compare governments in terms of the services they provide and the tax-prices they charge and, on the other, their ability to affect and alter the decisions of government. What this means in the present context is simply that citizens concerned to have efficient and effective governments financed as efficiently and equitably as possible would be well-advised to pay much more attention to the detailed working of sales, excise and indirect taxes in general than has to date been the norm in Canadian fiscal – let alone political – discussion.

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SESSION 3 DISCUSSION

Points of Discussion from the Floor:

- The jurisdictional issue for green taxes is important. For extra-territorial pollutants such as greenhouse gases, a provincial tax alone would be inefficient. Better to have a federal-provincial agreement. Similarly for more restricted environments such as a watershed, one would need an agreement of all the jurisdictions involved (local/provincial).

- The idea of a "cash flow" tax was suggested as a way to get around the loss of revenue due to e-commerce. The transition to such a tax would be sharp, however, and it would not work well if the US did not also impose such a tax.

- Green taxes on high intensity polluters would come up against strongly entrenched regional interests. There has been a lot of lobbying by these industries to get the tax and other concessions they enjoy, and a lot of sunk capital (both economic and political).

- Do competing green taxes generate a race to the top as competing environmental regulation seems to do in the USA? Answer: There's not enough evidence yet to know.

TAX COORDINATION AND COMPETITION: LESSONS FROM THE US EXPERIENCE

Howell H. Zee

Thank you very much. I must confess at the outset I'm a bit puzzled by my own presence here. Not because I happen to be the only non-Canadian speaker at a conference on the subject of fiscal union matters in Canada, about which I know very little, but rather because of the fact that I've been asked to draw useful lessons for Canada from the US experience of tax competition and tax harmonization. I'm having a terrible time in figuring out what those lessons could possibly be, particularly because the political landscape and dynamics which inevitably drive a lot of developments in intergovernmental fiscal relations are so different between the two countries. But I'm not a university professor, I'm a humble international civil servant and I go where my boss tells me to, so here I am.

This morning given the limited time I have, I do not propose to review the voluminous literature on fiscal federalism in the US Nor will it be feasible for me to go into specifics of developments on a state-by-state basis in the US, because, as you know, the US has 50 states, or 51 if you are a resident of DC A couple of minutes on each state would take me more than an hour to go through. So what I plan to do is to provide you with a very brief review of what I thought to be a rather interesting summary of the relevant statistics on taxation at the federal, state and local levels in the United States, and let you draw whatever lessons you see fit.

Some of my remarks will be drawn from a paper that I have written jointly with Vito Tanzi who cannot be here today, on the impact of the EMU on the tax systems in countries of the EU, specifically in those countries which belong to the "Euroland". We prepared that paper for the European Union a year and a half ago. But today I won't talk about the EU matters, I will only talk about that part that's relevant for this conference, that is the US situation.

Any discussion of tax competition and tax harmonization in the fiscal union that is the United States cannot avoid taking note of two of its most prominent features. First is the autonomous taxing power of both the state and local governments. In the US essentially there are three levels of government -- the federal, the state, and local -- and both the state and the local governments have autonomy in setting tax policy. Second is the presence of an overarching federal government in terms of both the amount of revenue it collects and the administrative machinery it uses to collect it. Both features are important because the first feature, i.e., autonomy in setting tax policy at the state and local levels, is unmistakably conducive to tax competition. However, the second feature, the overarching presence of the federal government, limits it. The actual outcome represents to a large extent, therefore, the balancing of these two forces in a decentralized manner.

The degree to which observed tax rates (nominal and/or effective) actually vary across states reflects the extent to which the market is able to tolerate such rate differentials. This tax market operates in an environment where there is complete freedom of movement of capital and labour and goods within the country. So what you see in the United States is essentially a market outcome. Whatever tax differentials you observe essentially represent what the market will bear. Now, there is some disagreement as to whether that is an efficient outcome. There is some questioning about the efficiency and optimality of tax competition. But you will see from the statistics that while capital is mobile there is not a race to the bottom. You don't see that anywhere. Later at the end of these remarks I will say a few things about a particular aspect of tax competition in the US, which in five or ten years will be important -- i.e. the taxation of internet sales which is turning out to be a very hot topic in the US. In that area, I believe, there is a high probability that there will be a race to the bottom regarding sales tax (but not income tax) in the US

To focus the discussion let me present a few tables and charts. When I mention the overarching presence of the federal government, table 1 provides a picture of the share of tax revenue that accrues to the federal government over roughly a quarter of a century. As you can see, in terms of the total tax revenue, the federal government gets a large share. But this is not the whole picture. When you look at the individual income tax revenue the share that goes to the federal government is overwhelming. There has been some decline recently but still we are talking about an overwhelming share. This is the individual income tax. As you can see, essentially the same picture emerges on the corporate income tax, where the federal government has over 80% share, close to 85% in the latest year for which data are available. It's only in excises that the share to the federal government falls to somewhat below 50% in recent years. I don't have a table on sales tax because in the United States, as all of you know, sales tax is at the state level. The federal government does not impose sales tax. Nonetheless, Table 1 gives you an overall picture of the structure of the tax revenue of the three levels of government in the US, of the five most important taxes. As you can see, the federal government has no general sales tax and has no property tax. Of those two, the property tax is overwhelmingly at the local level and the general sales tax is overwhelmingly at the state level even though at the local level some cities and some counties also impose sales tax. Most of you would know that, for example, the sales tax in New York at the state level is only 4% but in a number of cities in New York -- such as Buffalo and New York City -- you have an additional 4%, 4.5%, 4.25% sales tax tacked on.

Now, the dominant presence of the federal government in the collection of income taxes, limits tax competition for two reasons. First, and the more obvious, is that the payoff to taxpayers from lower state and local income taxes resulting from tax competition among governments at those levels is simply not very large. As I have just mentioned, the overwhelming share of income taxes go to the federal government, so that the room that state and local governments have in terms of competing for the income tax base by using the income tax system is simply not very big. The second reason is that the relatively small share of income tax revenue that accrues to the state and local governments implies that, in most cases it is simply not cost effective for these governments to design their income taxes completely independent of the federal income tax system. Consequently, almost all states that have income taxes use the tax bases determined at the federal level as a starting point, not all, but an overwhelming number of states. So those states use the federal government's income tax return in terms of either the adjusted gross income or the federally taxable income as a starting point. From which almost every state then, fills in state-specific additions and subtractions but these are all minor variations. The bulk of the tax base, the income tax base, whether it is the corporate income tax or the individual income tax, is determined at the federal level. This implies that information on the bulk of both the individual and corporate income tax bases for local governments is readily available from the IRS. Even though there is no explicit arrangement where by the IRS fulfills a tax administration function for state and local governments, in fact every state and local government collects its own income taxes, but because information on taxpayers is readily available from a central source, it makes a difference for state tax collection.

The relative ease with which state and local governments can obtain information on taxpayers from a central source has important implications as I mentioned. It allows states, for example, to implement their individual income taxes on a residence basis quite effectively, this limit of the scope of competition for savings among states. In other words, states are less likely to use tax as an instrument to attract savings income from other states because all the states, or most of the states, implement that individual income essentially on a residence basis. So if you are a resident of Maryland, as I am, you are taxed on your investment income throughout the United States and not just on income that originates in Maryland. That's true almost everywhere. So states do not have much leeway to use tax instruments to attract what in an international context we would call portfolio investments, because the information is readily available. It's very difficult to escape the tax from that type of investment activity. This is obviously not true on the international level. In fact, when people talk about the difficulty in catching capital income in a world of globalization, people usually refer only to portfolio investments and not foreign direct investment. FDI is a lot easier to tax because the identity of taxpayers is much easier for national tax authorities to determine than portfolio investments.

As regards the corporate income tax at the state level, the fact that its base is largely determined at the federal level also implies that there is a relatively high degree of base harmonization amongst states. As I mentioned already, for both income taxes most states use the federal income tax base as the starting point. This fact in turn has greatly facilitated the adoption in most states of a formula-apportionate approach in taxing multi-jurisdictional enterprises. To be sure states still compete for corporate investments but because of the high degree of base harmonization, tax considerations in the United States are no longer a decisive factor in the location choices of corporations. There are many other factors which will come into play in a corporation's decision whether to invest in a state or not. But corporate income tax is not a decisive factor.

All of these considerations to limit competition: the relative small share of income tax revenue that go to the states; the ease with which information on taxpayers can be obtained; the effective implementation of the individual income tax on a residence basis ; and the relatively high degree of corporate income tax harmonization; all of these actually allow a high market tolerance for income tax rate differentials across states than would otherwise be the case.

To give you some idea, I think the statistics in Table 2 are very interesting, though simplistic. If we take a look at the nominal tax rates of the three major taxes in the United States over an historic 30-year period (a two point comparison here), you can see that the range of rates in each of the taxes among the states is actually quite broad. In table 2 we see that in 1970 the highest individual income tax rate was 20.1%. But if you take Vermont out, the highest rate drops to 14%.. Not only are the rate ranges of all three taxes broad, they are stable and therefore one can infer that these rates are sustainable because otherwise you would see a drastic change over a 30 year period. But what I thought is more interesting is to measure the coefficient of variation. Economic theory would predict that for the most mobile bases, the individual income tax and the corporate income tax, the degree of dispersion would drop somewhat which has in fact happened. But, of course, this is a measure of dispersion around the mean. As far as the general sales tax is concerned, the drop is a lot less. Overall, there is a lessening of the degree of dispersion in nominal tax rates over time with each of the three taxes, but not to the bottom. It's dispersion narrowing around the mean which is obviously not anywhere close to zero.

Now, these are only the nominal rates. Nominal rates can hide a lot of things. A more economically respectable way to look at tax rates, of course, is the effective rate. Marginal effective rates are even better. However, calculating marginal effective rates for all 50 states is a very intense exercise and I haven't bothered to do it for this conference. So I cheated and asked my assistant to take a cruder approach to express tax revenue as a percent of gross state product. Since the 1960s, fairly good data on gross state product have become available. I looked at a crude measure of the average effective burden of state and local taxes. In making this calculation I combined the state and local taxes because as you can see from Table 1, corporate income tax is collected and individual income tax is collected both at the state level and local level. So if you want to compare for state you have to take the local tax burden into account.

Table 3 shows the coefficient of variation of individual income tax and the corporate income tax dropping dramatically over the comparison periods. The periods are a bit different from the nominal tax rate comparison because of lack of data. But the dispersion rate of the property tax and the general sales tax and excise taxes actually increased. This conforms to our economic intuition that the less mobile tax bases tend to sustain a larger degree of dispersion.

Let me just conclude by saying a few words about internet sales. The sales tax base is apparently less mobile. However, I forgot to mention this that the sales tax base in the United States is a lot less harmonized across states than the two types of income tax. In fact, there is a lot of differences in the sales tax base across states. For example, food is a major consumer item but it's taxable in half of the states, the other half of the states do not tax food. And there are many other differences. This again is an indication of the less mobile tax base. However, I think down the road that's going to change because of the internet sales. As you know recently the US House of Representatives passed a new internet tax moratorium for another five years, over the objections of the majority of state governments and a large number of prominent economists. I think that the motivation behind this moratorium is as much political as it is economic. What is important is that if internet sales could remain untaxed, then there is a very recent empirical study that came out in the Quarterly Journal of Economics in the March 2000 issue, that shows that there is a significant relationship between the probability of consumers' purchases on the internet if they were in a high sales tax location. In fact I can tell you from my personal experience that I now make over 50% of my personal purchases on the internet. I pay very little Maryland sales tax, even though Maryland has only a 5% sales tax rate. So if internet sales continue to remain untaxed I think there's a real possibility that the sales tax base will vanish. Thus, states will start a race to the bottom that will have major consequences, because the sales tax is one of the primary sources of revenue for state governments.

Table 1. United States: Tax Revenue by Type of Tax and Level of Government, 1969/70-1994/95
(In percent of GDP) 1/

	Federal		State		Local		Total	
	1969/70	1994/95	1969/70	1994/95	1969/70	1994/95	1969/70	1994/95
Individual income tax	8.6	8.1	0.7	1.7	0.1	0.2	9.5	9.9
	(59.7)	(69.9)	(17.9)	(31.5)	(4.0)	(4.7)	(43.2)	(48.4)
Corporate income tax	3.6	2.1	0.3	0.4	--	0.0	3.9	2.6
	(25.1)	(18.6)	(7.6)	(7.3)	--	(0.9)	(17.9)	(12.5)
General sales tax	--	--	1.2	1.8	0.2	0.4	1.4	2.2
	--	--	(29.6)	(33.1)	(4.6)	(10.7)	(6.3)	(10.6)
Excises	1.5	0.8	1.1	0.9	0.1	0.2	2.8	1.8
	(10.6)	(6.6)	(27.7)	(16.2)	(2.6)	(4.8)	(12.6)	(8.8)
Property tax	--	--	0.1	0.1	2.9	2.6	3.0	2.8
	--	--	(2.4)	(2.4)	(85.3)	(74.2)	(13.8)	(13.5)
Other taxes 2/	0.7	0.6	0.6	0.5	0.1	0.2	1.4	1.3
	(4.5)	(4.9)	(14.8)	(9.5)	(3.4)	(4.7)	(6.3)	(6.1)
Total	14.4	11.5	4.1	5.5	3.4	3.6	22.0	20.6
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Sources: *Facts and Figures on Government Finance* (Washington: Tax Foundation), various issues; *Survey of Current Business* (Washington: Dept. of Commerce), various issues; and author's calculations.

1/ Figures in parentheses denote percentages of total of each level of government.
2/ Excludes social security taxes.

Table 2. United States: Rates of State Income and General Sales Taxes, 1970-2000
(In percent)

	Individual income tax 1/		Corporate income tax 1/		General sales tax 2/	
	1970	2000	1970	2000	1970	2000
Range	0.0 - 20.1	0.0 - 10.5	0.0 - 12.0	0.0 - 12.0	0.0 - 6.0	0.0 - 7.0
Median	6.0	6.0	6.0	7.0	3.0	5.0
Mean	6.2	5.6	5.2	6.7	3.3	4.7
Standard deviation	4.6	3.1	2.7	2.9	1.4	1.8
Coefficient of variation	73.4	55.9	52.2	42.9	41.3	38.3
Alabama	5.0	5.0	5.0	5.0	4.0	4.0
Alaska	11.2	--	8.6	9.4	--	--
Arizona	8.0	5.0	8.0	8.0	3.0	5.0
Arkansas	5.0	7.0	6.0	6.5	3.0	4.6
California	10.0	9.3	7.0	8.8	4.0	6.0
Colorado	8.0	5.0	5.0	4.8	3.0	3.0
Connecticut	-- 3/	4.5	8.0	7.5	5.0	6.0
Delaware	11.0	6.4	6.0	8.7	--	--
District of Columbia	10.0	9.5	6.0	10.0	4.0	5.8
Florida	--	--	--	5.5	4.0	6.0
Georgia	6.0	6.0	6.0	6.0	3.0	4.0
Hawaii	11.0	8.8	6.4	6.4	4.0	4.0
Idaho	9.0	8.2	6.0	8.0	3.0	5.0
Illinois	2.5	3.0	4.0	4.8	4.0	6.3
Indiana	2.0	3.4	2.0	3.4	2.0	5.0
Iowa	5.3	9.0	8.0	12.0	3.0	5.0
Kansas	6.5	6.5	6.8	4.0	3.0	4.9
Kentucky	6.0	6.0	7.0	8.3	5.0	6.0
Louisiana	6.0	6.0	4.0	8.0	3.0	4.0
Maine	6.0	8.5	4.0	8.9	5.0	5.5
Maryland	5.0	4.9	7.0	7.0	4.0	5.0
Massachusetts	4.0 3/	6.0 3/	7.5	9.5	3.0	5.0
Michigan	2.6	4.4	5.6	... 4/	4.0	6.0
Minnesota	12.0	8.0	10.3	9.8	3.0	6.5
Mississippi	4.0	5.0	4.0	5.0	5.0	7.0
Missouri	4.0	6.0	2.0	6.3	3.0	4.2
Montana	12.1	11.0	6.3	6.8	--	--
Nebraska	9.1	6.7	2.6	7.8	2.5	5.0
Nevada	--	--	--	--	3.0	6.5
New Hampshire	-- 3/	-- 3/	6.0	7.0	--	--
New Jersey	14.0	6.4	4.3	9.0	5.0	6.0
New Mexico	9.0	8.2	5.0	7.6	4.0	5.0
New York	14.0	6.9	7.0	9.0	3.0	4.0
North Carolina	7.0	7.8	6.0	6.9	3.0	4.0
North Dakota	11.0	5.5	6.0	10.5	4.0	5.0
Ohio	--	7.5	--	8.5	4.0	5.0
Oklahoma	6.0	6.8	4.0	6.0	2.0	4.5

Table 2. United States: Rates of State Income and General Sales Taxes, 1970-2000
(In percent)

	Individual income tax 1/		Corporate income tax 1/		General sales tax 2/	
	1970	2000	1970	2000	1970	2000
Oregon	10.0	9.0	6.0	6.6	--	--
Pennsylvania	--	2.8	12.0	10.0	6.0	6.0
Rhode Island	10.0 3/	10.5	8.0	9.0	5.0	7.0
South Carolina	7.0	7.0	6.0	5.0	4.0	5.0
South Dakota	--	--	--	--	4.0	4.0
Tennessee	-- 3/	-- 3/	6.0	6.0	3.0	6.0
Texas	--	--	--	--	3.3	6.3
Utah	6.5	7.0	6.0	5.0	4.0	4.8
Vermont	20.1	9.9	6.0	9.8	3.0	5.0
Virginia	5.0	5.8	5.0	6.0	3.0	3.5
Washington	--	--	--	--	4.5	6.5
West Virginia	7.6	6.5	6.0	9.0	3.0	6.0
Wisconsin	10.0	6.8	7.0	7.9	4.0	5.0
Wyoming	--	--	--	--	3.0	4.0

Sources: *Facts and Figures on Government Finance* (Washington: Tax Foundation), various issues; and author's calculations.

1/ Top marginal rate.
2/ Standard rate.
3/ Higher rates applied on interest, dividends, and/or capital gains.
4/ Tax assessed on an alternative basis (2.2 percent on gross receipts).

Table 3. United States: Average Effective Burden of State and Local Taxes by State and Type of Tax, 1967/68-1994/95
(In percent of GSP)

	Individual income tax		Corporate income tax		General sales tax and excises		Property tax		Total 1/	
	1967/68	1994/95	1967/68	1994/95	1967/68	1994/95	1967/68	1994/95	1967/68	1994/95
Range	0.0 - 2.2	0.0 - 6.1	0.0 - 0.6	0.0 - 5.3	1.0 - 4.9	0.0 - 2.3	1.2 - 5.7	0.0 - 3.7	4.5 - 13.0	5.0 - 12.2
Median	0.5	3.2	0.3	2.6	2.6	0.4	3.3	2.0	7.5	9.1
Mean	0.7	3.2	0.2	2.5	2.7	0.4	3.1	1.8	7.7	9.1
Standard deviation	0.5	1.1	0.2	1.1	0.8	0.3	1.1	0.7	1.4	1.3
Coefficient of variation	82.0	33.2	65.0	42.2	31.9	74.8	37.0	41.6	18.1	14.1
Alabama	0.5	3.9	0.3	1.0	4.0	0.3	1.2	1.7	6.8	7.8
Alaska	1.4	1.0	--	3.0	1.4	2.3	1.4	--	6.1	11.8
Arizona	0.5	4.4	0.2	2.8	3.8	0.4	4.3	1.5	9.3	9.5
Arkansas	0.6	4.2	0.6	1.2	3.6	0.4	1.9	2.0	7.4	8.4
California	0.6	3.2	0.5	2.5	2.6	0.6	4.5	2.0	8.8	8.9
Colorado	1.0	3.1	0.4	2.6	2.7	0.2	3.9	2.0	8.7	8.2
Connecticut	--	3.2	0.6	3.9	2.2	0.6	3.6	2.1	7.0	10.3
Delaware	2.1	0.9	0.4	1.0	1.2	0.7	1.7	2.2	7.5	7.2
District of Columbia	1.0	1.6	--	1.5	1.6	0.3	1.4	1.3	4.5	5.0
Florida	--	4.9	--	3.4	3.6	0.3	3.1	--	7.8	9.5
Georgia	0.7	3.2	0.4	2.3	3.2	0.3	2.2	2.0	6.9	8.1
Hawaii	2.0	5.2	0.3	1.7	4.9	0.1	2.0	2.6	13.0	10.0
Idaho	1.3	3.1	0.4	2.4	2.5	0.5	3.3	2.3	8.8	9.1
Illinois	--	3.1	--	3.4	2.5	0.4	3.0	1.5	6.1	8.9
Indiana	0.7	2.5	0.0	2.9	2.8	0.6	3.3	2.5	6.8	8.8
Iowa	1.0	3.1	0.1	3.5	2.3	0.3	4.2	2.3	8.3	10.0
Kansas	0.9	3.6	0.2	3.1	2.6	0.4	4.4	1.9	8.7	9.6
Kentucky	1.1	3.4	0.4	1.5	2.5	0.4	1.6	2.7	5.9	9.1
Louisiana	0.3	3.9	0.2	1.2	2.8	0.3	1.4	1.0	6.8	7.2
Maine	--	3.4	--	4.6	3.5	0.2	3.8	2.3	8.0	11.2
Maryland	1.6	2.7	0.3	2.7	2.5	0.3	3.5	3.7	8.5	10.2
Massachusetts	1.2	2.0	0.3	3.3	1.8	0.6	4.5	3.1	8.7	9.4
Michigan	0.1	3.1	--	2.7	2.6	0.9	2.9	2.4	6.7	9.5
Minnesota	1.7	3.3	0.5	3.3	1.4	0.5	4.3	2.8	8.8	10.7
Mississippi	0.2	4.7	0.4	2.1	4.6	0.4	2.3	1.3	8.2	9.0
Missouri	0.7	3.4	0.1	2.2	2.5	0.3	2.7	2.1	6.7	8.4

Table 3. United States: Average Effective Burden of State and Local Taxes by State and Type of Tax, 1967/68-1994/95
(In percent of GSP)

	Individual income tax		Corporate income tax		General sales tax and excises		Property tax		Total 1/	
	1967/68	1994/95	1967/68	1994/95	1967/68	1994/95	1967/68	1994/95	1967/68	1994/95
Montana	0.8	1.4	0.4	4.4	1.6	0.5	4.8	2.1	8.5	10.2
Nebraska	--	3.1	--	3.4	1.4	0.3	5.0	1.7	7.0	9.1
Nevada	--	5.4	--	1.7	3.3	--	3.3	--	7.9	8.3
New Hampshire	--	1.7	--	5.3	1.6	0.5	4.5	0.1	7.3	8.3
New Jersey	0.0	2.7	0.2	4.6	2.1	0.4	4.2	1.7	7.3	9.9
New Mexico	0.3	4.8	0.3	1.0	3.9	0.4	1.8	1.4	8.1	8.8
New York	2.2	3.3	0.5	3.9	2.5	0.9	3.9	3.6	9.9	12.2
North Carolina	1.1	3.0	0.6	1.8	2.6	0.5	1.8	2.5	6.6	8.3
North Dakota	0.5	4.2	--	2.8	2.5	0.5	4.5	1.0	9.0	9.9
Ohio	0.3	2.9	--	2.7	2.0	0.2	3.0	2.8	5.9	9.3
Oklahoma	0.4	4.0	0.2	1.6	2.9	0.3	2.5	2.1	7.5	9.4
Oregon	1.9	0.9	0.4	3.1	1.0	0.4	3.8	3.5	8.0	9.2
Pennsylvania	0.5	2.9	0.5	2.8	2.6	0.6	2.4	2.3	6.9	9.7
Rhode Island	--	3.1	0.6	4.6	2.9	0.3	3.4	2.1	7.8	10.6
South Carolina	0.8	3.1	0.5	2.5	3.5	0.3	1.5	2.0	6.8	8.4
South Dakota	--	3.6	--	--	3.3	0.2	5.7	--	9.5	7.7
Tennessee	--	4.3	0.3	1.6	3.4	0.4	1.9	0.1	6.6	7.1
Texas	--	3.8	--	--	2.1	--	2.7	--	6.0	7.6
Utah	1.1	3.7	0.3	2.2	2.9	0.3	3.4	2.3	8.6	8.9
Vermont	2.0	2.9	--	4.7	2.0	0.4	3.3	1.8	8.6	10.4
Virginia	0.3	2.5	0.3	2.5	2.4	0.2	2.1	2.3	7.0	8.2
Washington	--	6.1	--	--	3.6	--	1.8	--	5.9	9.9
West Virginia	--	4.0	--	1.9	3.8	0.6	1.9	1.9	6.9	9.7
Wisconsin	0.6	3.1	0.6	4.0	1.8	0.5	3.8	3.0	9.0	11.1
Wyoming	--	--	--	--	2.5	--	3.8	--	6.9	7.3

Sources: *Facts and Figures on Government Finance* (Washington: Tax Foundation), various issues; *Survey of Current Business* (Washington: Dept. of Commerce), various issues; and author's calculations.

1/ Excludes social security taxes.

COMPETING FOR HUMAN CAPITAL

Tom Courchene

My topic in the conference program is "Competing for Human Capital in Canada". There is a certain sense in which this topic is appropriate and let me start with that -- although I do not claim to know much about either taxation or human capital! There is a lot of people that do, like Jim Davies and maybe Ken McKenzie, but I don't. Yet, I have a book coming out on it so let me give you a five-point summary of the book so you won't have to buy it[1].

First, it focuses on globalization and the information revolution and what they're doing to citizens, to markets, governments, and then what's happing to the citizen, government and market interfaces. All of which are then referenced to the issue of what does this mean for policy and governance in Century 21.

The second point is that it is critical that we Canadians maximize the opportunities of globalization to enhance both economic competitiveness and social cohesion. This is not a very startling observation but along these lines has been one of the great recent institutional creations we have in this country, the Social Union Framework Agreement (SUFA), which I think has been designed exactly to enhance the social union in the context of increasing decentralization.

The third point – it becomes rather obvious if you look at this for a little bit of time — is that it's human capital that is increasingly the key to both economic advances and social cohesion. Now given that that's the case I do something rather strange for an economist. I designed in a single sentence a mission statement for Canada which reads as follows:

> *to design a sustainable, socially inclusive and internationally competitive infrastructure that ensures equality of access for all Canadians, so that they may develop, enhance and employ their skills and human capital in Canada, thereby enabling them to become full citizens in the information-era Canadian and global societies.*

Finally, I articulate what the mission statement implies about the evolution of getting policy right in all sorts of areas, including tax policies. As I pointed out I don't go very deep into tax policy. What I do go into is the following very general approach in which the starting point is that if you want to employ Canada's human capital we have to get our tax rates down to the most competitive level on the mobile factors – financial capital and human capital or talent as it's now called. I recognized that right off the bat this will mean we're making a better offer to well-endowed individuals. That means we'll have to spend some time making sure that we also address the middle and low income Canadians and make sure that we remove obstacles along the whole process of economic betterment. For example, one of the things I argue is that, with the human capital approach, in the 21st century we ought to have a bill of rights for our kids, for all Canadian kids. This is driven by the reality that we will eventually get our tax rates down to be competitive with the United States on human capital. However, it's not obvious that we're going to do the right thing on the social side. We have to move those two things along at the same time.

In any event, getting to the comments I want to make, Ottawa had a wonderful opportunity to start making progress on this front in the context

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[1] *A State of Minds: Toward a Human Capital Future for Canadians* (Montreal: IRPP, 2001).

of 2000 budget[2] because it was a five year forecast of how a $100 million surplus could be spent in various ways. But what our Finance Minister did is to introduce what I elsewhere termed the "Paul Martin Senior" budget, in the sense that he embraced much of the social cohesion dynamic but really did not focus enough on the economic competitive stuff. I mean, on the social cohesion side, it's a lovely budget. There's indexation and lowering taxes for middle income taxpayers, but there's precious little emphasis in the legislative components –for the first two years– on economic competitiveness. There's a little bit on capital gains and something on stock options, but the big corporate tax cuts are in year five, potentially, and Mr.Martin probably won't be around by that time. In any case there's already a huge opposition to using unallocated money. So that the meaningful tax cuts to corporate taxes in addressing the high income surcharges were left unaddressed. Certainly we are falling behind to the extent that these issues are being addressed on government time, when the whole economic system is now operating in real time or internet time.

By focusing on tax reform and income distribution on social cohesion issues, Ottawa explicitly invited the provinces to embark on their own tax reforms to ensure their economic efficiency or wealth creation. This is a frightening prospect in a sense. And, of course, Alberta had announced even before the budget was introduced a single tax rate at 10.5 percent. And as we heard yesterday, Ontario was well launched in the direction of the PIT rates, reducing them by 40 percent.

[2] Some of the points I make here about Paul Martin's Spring 2000 budget have been superceded by Martin's October 2000 Economic Statement. See my revised view in *A State of Minds*, cited above.

Actually I was surprised by the Ontario 2000 budget because I thought Treasurer Ernie Eves would move to reduce the top marginal rate of Ontario. He didn't do this. Perhaps the focus this time was on more mobile factors, namely the corporate side where he got rates down to 4 percent and 8 percent. And this is really going to challenge everybody else in the system. Ontario also focused on the other three highly mobile issues – the inclusion rate for capital gains, the flow through shares issues, and the $100,000 exemption for stock options. This addresses the most mobile factors.

What are the implications of Ottawa leaving competitive tax reform to the provinces? We're going to see, I think, increased regional disparities in Canada as a result because these provincial measures are going to attract economic activity to Canada. Alberta, Ontario, and Quebec on the corporate side will attract the best and the brightest in Canada so we'll get both the physical capital and the human capital. As Satya Podder noted yesterday, Alberta will also attract financial trusts so that Ontario will be only one year behind in making sure that its tax rates get down to that level as well. Alberta and Ontario do not worry about tax rates in other provinces of the Canadian federation, but on this side of the issue I think they will care about what Alberta's corporate tax rate will be. So I think this will force Ontario to get involved.

These developments are going to force Ottawa to be more interventionist on the regional front which will trigger even more wealth creation activities at the provincial level, because we're now shifting in a totally different direction than we ever have. The old "Leslie Frost" Ontario was an administrator of certain social programs while all the major economic levers were held by Ottawa. This has been changing dramatically. The social policy stuff is now shifting to Ottawa and the economic delivery and wealth creation is shifting to the provinces. I want to address later this evolution. I don't really know the answer but there are a few ideas that I want to pursue.

In any case, we have set up something that has its own dynamic. This whole vision or version of federation on the tax side is such that the tax collection agreements cannot hold. I want now to turn to a bit of history on this issue. What I'm going to do is focus on a paper that I wrote for the Ontario Economic Council back in 1983 on setting a personal income tax for Ontario. At the same time we settled on a rather boring title that I cannot now recall, but later at the time David Winch said to me, "You know, this personal income tax, the way it swings from decentralization to centralization, this whole thing is on the PIT, we need a better title for this, so let's focus on Edgar Alan Poe and call it 'The Pit and the Pendulum'." I rejected that notion then but I recently wrote a paper for Bob Young's book on the same issue called "The PIT and the Pendulum."

In this 1983 OEC document we drafted five alternatives to the PIT. The first is the status quo which is, in a sense, where we are still, or were until very recently. So we don't have to talk about that. The second option was to handle the issue through a federal-provincial committee on the structure of the shared tax base. We'd just come out of the old federal committee, Al Johnson's approach with the financial structure committee that led to equalization and so on, so collaboration was still part of our thinking. The notion was that we would have joint determination of how the basic tax parameters would be changed. Then if Ottawa wanted to make some changes they could put them below the line for the first couple of years and then bring them back eventually as a tax credit or something else, to give the provinces some time to adjust. There would be some distance between the federal change and its adoption by the provinces – Ottawa would not automatically hit the provinces with changes.

The third option at that point was tax on base, or as it is now called "the tax on income" or TONI. I don't have to go into this because it's the same thing as being currently proposed by several provinces. But then we said we could go further, having a tax on base with an extension of the credit system. Here we meant that credits would have to be regional and non-discriminatory, and they really shouldn't be allowed in this system to touch the base. Any other credit ought to be allowed, and Ottawa should administer them for free.

The fourth option is again, close to where we are now. That would be to have an extension of the base that allowed tax surcharges to change the nature of income: -- business income, property income, employment income. That's where Saskatchewan's recent reforms fit. That's also where all the three Ontario proposals fit. It's almost like a separate personal income tax system, except it would probably be done through the federal government maybe through a single tax, certainly through a single collection agency.

The fifth and final option is to go to separate PITs, after having weighed the pros and cons. As Lachance and Vaillancourt note, a lot of the benefits of Quebec is PIT were covered in this original OEC document.

So the range of options is essentially what we thought back in 1983. The problem is now the options we choose depend very much on the Canadian Customs and Revenue Agency (CCRA). It has been suggested that the CCRA wants to have an outrageous charge to collect these income taxes on behalf of Ontario. And then we get into some really quite difficult problems because we're going to have to have information sharing. Richard Bird wrote a background paper to our OEC study where he addressed problems that need fixing. He compares separate PITs across the system to what would happen on the international sphere if you have a set of tax policies internationally and the coordination problems among them.

So that is a bit of history. I've been watching the system go from option one through to five, and I've been writing about it occasionally but it's quite clear that that's where we were going over history. And just to make sure that the chair of our panel today is not left out, Fred Gorbet made the following statement, in 1994, after he left the Federal Department of Finance for the private sector. He said:

> "It would be a serious mistake to underestimate the strength of conviction on the part of western provinces and Ontario that they need and deserve more flexibility than the current tax relationship agreements permit. This is a point at which they will withdraw and collect their own taxes as Quebec does if they cannot get this flexibility within the tax collection agreements. From a federal perspective the ultimate trade-off in managing this issue is not between more or less harmonization within the agreement but rather between allowing enough flexibility to convince provincial governments that it continues to be in their interest to remain within the agreement and being so rigid that the agreement self-destructs."

Now, if we had done that in 1994 I think we'd be okay today. We didn't do that in 1994. This option is no longer enough, we've gone beyond this because the CHST was not a health issue, it's a fiscal issue. The federal government eliminated stabilization payments so that Ontario had three years of stabilization problems in the 1990's. Ottawa shut stabilization off after Alberta and B.C. collected their payments. So the CHST became a fiscal issue. And in the old days one of the arguments they used to use for why Ottawa should maintain a high proportion of the personal income tax was because it needed it for stabilization purposes. So if Ottawa is abandoning stabilization to the provinces then they might need that very flexibility of changing tax bases to handle stabilization on their own. The argument here is that whatever problems we have with the system, Ottawa did it to itself. That's no comfort, but I think its reality.

The budget 2000 was so popular that it got just one question in the House of Commons question period, after which everyone returned to the scandal at the HRDC. It's not that this wasn't a wonderful budget, but it was the wrong budget for the 21st century. It would have cost Ottawa virtually nothing to get the corporate income tax rate down to its five year target almost immediately. In fact, if Ireland is any evidence, it would have probably raised revenues. If Ottawa had done so, as Jack Mintz argued, it would have also got the first mover advantage. It would be closing the barn door after the horse is gone when you actually lose a whole bunch of corporations and then, say okay, we better reduce the personal and corporate income tax. So we're in this new reality. The tax collection agreements are going to unwind and the next year or so is going to be critical depending on just how much unwinding there is. The much preferred approach would have been for Ottawa to focus more on the international competitive issues on these questions so that the provinces will not have to take the lead in promoting and preserving their own economic bases within an integrated North American geo-economy.

Where are we going here? Well Al O'Brien's comments are relevant from yesterday. The richer provinces are decreasing taxes at the same time that they're going to need revenues for their expenditures. Now some of these tax cuts lead to increased revenues, but the decrease in revenues is extending to the poorer provinces because the equalization program is less than it otherwise would be. Now maybe Robin Boadway is right in saying that this is great news for Ottawa, because look at what Ottawa's doing here. Led by Alberta and Ontario and soon B.C. the have provinces are beginning a competitiveness race, maybe not a race to the bottom, but to choose the personal income tax base and the corporate tax base. Ottawa is sitting there with its high tax rates and getting two-thirds of any dollar that comes into Ontario. So what's happening is that there's a relative shift of revenues to the federal government as the provinces increase their competitiveness internationally. If you are a centralist you might like that. But it's not that easy, because how long will it take before other provinces will want those extra 16.5 tax points that only Quebec gets now? Al O'Brien suggests that it won't take very long. Because now all the budgets have a tax on base. Ottawa will say no, but it starts the conversation going.

So what else could Ottawa do? I don't know how Ottawa is going to spend its surplus. They could start increasing transfers, getting much more interventionist on the whole social front, but the provinces will ask to convert cash transfers into tax points. What seems to be happening now is that the provincial approach is starting to enter the Federal arena through Stockwell Day's 17 percent income tax proposal. It's going to come some way, but I don't think this is a very stable solution. So we have a powerful, revenue rich central government that's going to wield more influence in personal redistribution and the income distributional side, even to the point where they could take over some responsibilities like welfare. Now this may be a viable future distributionally and in fact it fits kind of well into my region-state concept of Ontario, in which the various regions compete for their own economic policies in North America. But as I said, I don't think it's stable and if it is, we haven't yet reached the equilibrium. I really think that we have a lot of work to do here because this is a system that's going to fragment further. Perhaps before long the whole system will realize that we have a problem here and that we're going to have to have a federal-provincial, not a federal approach, to personal income taxation in Canada and on the corporate side. Ottawa took the easy and the high road but has created a real problem for the provinces.

I started out by saying that the relative tax burden will shift away from high income mobile factors to consumption taxes and maybe payroll taxes, as mentioned by Ken McKenzie. The Bird-Mintz proposal is one approach to this issue. But there may be a problem in these solutions. I want to link onto what Howell Zee was saying about the internet, about the future of sales taxes. Why would I buy a book at Chapters when I can get it through Amazon.com without paying GST? Now, what do we do for Canadian e-commerce? Do we allow a sale at Chapters to be exempt from the tax as well? Or, what do we do? Howell Zee is not quite right. Recently, the California legislature passed a law – it's not signed yet by the Governor – to the effect that if you have a "boards and mortar" presence in California, then we're going to tax you. It's an origin based sales tax which is rather interesting, it's not a destination based sales tax. And what's happening in Europe now is that, they've told U.S. internet sellers that they're going to have to pay the VAT. Now it gives them a choice to have a virtual location. They can choose the lowest of the EU member countries, and choose to be taxed at that rate. This gets to Richard Bird's point yesterday that at some point everybody's going to be in that jurisdiction or else all taxes are going to be harmonized. But the Americans say you'll never be able to collect it and so what do we do here? Do we get Amazon.com to collect our taxes and if so how much do we have to pay for it? Or do we start interrupting Purolator and Federal Express because it's a destination-based tax? I don't know but the whole harmonization principle here is going to create problems for the retail sales side and the value added side. Unless, of course, the problem does not turn out to be very extensive, i.e., the sales are narrow. But given recent statistics indicating that the Internet accounts for 15 percent of total sales, that's a pretty good incentive for Canadians to work off the Internet to avoid these taxes. The future of tax harmonization in Canada is that our tax collection system will be either increasingly north-south, by region, i.e. Ontario-Michigan, Alberta and Texas Gulf, etc., and by sector. So that if books are sold on the internet in the U.S., they will be exempt on the internet there and in Canada too. In that sense the whole notion of an east-west comprehensive tax policy focusing on base-broadening is junk because the harmonization will have to be north-south. I don't know if that's going to happen but this is the big problem that we could be facing and is, I think, a huge issue.

TAX POLICY AND THE NEW ECONOMY

Munir A. Sheikh*

1. INTRODUCTION

Tax policy plays an important role, among other key economic policies, in shaping economic performance. Tax policy has this effect as it can change rewards for work, saving and investment.

The key question facing those who deal with tax policy issues is whether tax policy needs to change in light of major changes taking place in the economy. The major ongoing changes in the economy, that are of interest today, relate to the emergence of the "new" economy.

In order to examine this link between tax policy and the new economy, it is useful to describe the principles of tax policy. This is done in Section 2. Section 3 provides a brief description of the "new" economy, explaining what we mean when we use this term. Section 4 links the discussion in Sections 2 and 3 and examines whether there is a need to change the tax policy paradigm explained in Section 2. Section 5 draws key conclusions from the analysis.

2. PRINCIPLES OF TAX POLICY

The primary objective of the tax system is to raise revenue to finance government spending, that has a number of social and economic objectives. In raising this revenue, the tax system changes the rewards for work, saving and investment, which, in turn, has an effect on economic performance. In addition, depending upon its structure, the tax system explicitly or implicitly achieves a number of social objectives. For example, a progressive tax structure has an impact on after-tax income distribution. Tax support provided to children is another example of how the tax system can be used to achieve social objectives. Assistance for charities, education and Canadians with disabilities is another example of tax policy's role in achieving social objectives.

In short, the tax system, as well as other public policy instruments have equity and efficiency objectives. In some range of choice, the equity/efficiency objectives may be complementary, e.g. providing health care and education, ensuring equality of opportunities for all, assistance for children. However, at some level of income redistribution, a trade-off is likely to emerge between equity and efficiency. Governments, representing the society's social and economic objectives, maximize social welfare by picking up an optimal point on this equity-efficiency trade-off.

3. THE "NEW" ECONOMY

The "new" economy generally refers to two increasingly common shocks: globalization and technological change.

Globalization refers to markets becoming global. It is now much easier for goods and services to be exchanged internationally than it ever used to be in the past. Factors of production have become more mobile, including both capital and labour. Globalization increases productivity by allowing a country to pick a more efficient point on a given production function. Depending upon the nature of the shock, globalization may also shift the production possibility frontier outwards. Two factors have contributed to this rapid pace of globalization, public policy shifts and technological change.

On the public policy front, governments have increasingly come to the view that freer

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*Views expressed in this paper are personal and should not be attributed to the Department of Finance. Thanks are due to Louis Lévesque and John Lester for their many ideas in developing the arguments of this paper. The author is solely responsible for any remaining errors.

trade, meaning specialization in doing what you do best, is helpful in raising living standards. Examples of these policy developments include the setting up of the World Trade Organization, following many rounds of tariff reductions, and the North American Free Trade Agreement.

The technological revolution, the new "dotcom" economy, is a second major shock to the world economy, important not only in its own right in influencing world economic developments, but also in speeding up the pace of globalization, through reduced communication and transportation costs and the increased speed of the flow of ideas.

Technological change, reflected by the dotcom revolution, is also shifting the production possibility frontier upward, for a given supply of factors of production, enhancing productivity in the process.

4. TAX POLICY AND THE NEW ECONOMY LINKAGES: A FRAMEWORK FOR ANALYSIS

How does the "new" economy shift the tax policy paradigm expressed in Section 2 above?

Regardless of the "new" economy shocks, the principal focus of tax policy remains raising government revenues to finance government spending to, in turn, achieve economic and social objectives. This focus does not change. However, to the extent that the "new" economy may place different demands on government spending, the overall tax burden may need to change. This will have an effect on economic performance. It is unclear in which direction this change may go. If spending goes up to deal with possible increased income disparities resulting from the new economy, tax burdens may rise. If, on the other hand, absolute levels of income rise at all income levels, despite rising disparities, governments may be tempted to lower the overall tax burden.

On the tax policy front proper, for a given level of spending, going back to the paradigm of Section 2, the government would continue to achieve both its economic and social objectives. The key question of interest is: how do the "new" economy shocks disturb the optimal point on the trade-off between equity and efficiency objectives and lead to changes in tax policy?

In this context, it is of interest to examine two scenarios: first, dealing solely with the impact of the "new" economy shocks; and, second, dealing with these shocks, but factoring-in the tax policy responses of the competing jurisdictions, be they other countries or other provinces/states.

4.1. "New" Economy Shocks and Tax Policy

The two shocks under discussion, globalization and technological change, have one thing in common from a pure economic perspective: they increase productivity and thus national income. Their consequences can thus be studied jointly for tax policy.
Figure 1 provides a simplified way to trace their effect on the trade-off for equity and efficiency and hence for tax policy. In the pre-shock situation, a given level of output is produced that can be redistributed between two groups in the economy, 1 and 2, so that maximum welfare of group 1, U_1, is given by point a on the vertical axis and by point b for group 2 on the horizontal axis. The optimal social welfare point is where a social welfare function (not drawn) is tangent to the welfare frontier ab.

The "new" economy shock has two impacts on the welfare frontier ab: it shifts out, as overall productivity rises, to cd, and it is flatter than ab, as the cost of achieving the equity objective, redistribution from group 2 to group 1, increases. This happens because of the increased mobility, resulting from new economy shocks, of the high-income mobile factors.

There are two types of effects: these can be conveniently classified as "income" and "price" effects. With the pure income effects there will be a parallel shift of ab and all groups will be better off. With the price effect, group 1 will tend to lose to group 2 as cd is flatter than ab, given the increased economic cost of redistribution.

Two conceptual economic outcomes are possible: first, the government may act to ensure that all groups (individuals) are economically better off as a result of the shocks, and may in fact tilt policies to favour those with lower incomes, achieving a point like Y on cd; second, given the increasing cost of achieving the equity objective, the government may accept an outcome Z, where U_1 falls while U_2 rises – this could also be a welfare-enhancing outcome for the country as a whole, as long as the new social welfare function is tangent to cd.

The bottom line, however, is that all policy actions, regardless of income distribution consequences, could be welfare enhancing for the society as a whole as long as the outcomes are based on a social welfare function tangent to cd.

4.2 "New" Economy/Competitors' Tax Shocks and Tax Policy

A second possible scenario is where, in addition to dealing with the positive "new" economy shocks, a country/province/state has to deal as well with how its competitors react to the shocks by adjusting their tax policies.

Consider, as an example, a situation where competitors have lowered their tax rates on the most mobile factors in response to the shocks.

In terms of Figure 1, there are now two offsetting movements of the production possibility frontier ab; an outward shift because of the new economy shocks and an inward shift because of the competitors' tax policies that draw in the mobile factors.

A potential outcome is a net shift in Figure 2 from ab to ed reflecting both these competing forces. Point d is the same in Figures 1 and 2 since lower taxes on mobile factors of production at point d would offset any tax advantage competitors may have. Point e in Figure 2 is lower than point c in Figure 1 as a result of the outflow of the mobile factors in response to lower taxes introduced by the competitors.

Three key points emerge from an analysis of the second scenario: first, the option to make everyone better-off may or may not exist -- if, for example the country was on point X before the shocks, welfare cannot be increased for all, but it can be if the country was on the southwest quadrant of J on ed. Second, any effort to improve income redistribution in these circumstances may mean losses in social welfare compared to the pre-shock situation; and third, and most important, given the decreased slope of ed compared to ab and cd, there will be increasing pressure on all jurisdictions to lower taxes on the mobile factors, with the possibility that tax competition may lead to a race to the bottom on the taxation of such factors, creating an overall economic outcome that may not be optimal from anyone's perspective.

It is useful to add another important element in the setting up of tax policy in such circumstances. Given the potential that exists in Scenario 2 for an unfavourable outcome in the presence of potentially favourable shocks, a welfare-enhancing strategy may be to reduce the dead-weight cost attached to a given tax structure. If this could be done, it could shift the welfare frontier from ed to e'd' in Figure 3, with the potential to make all groups (individuals) better off.

5. CONCLUSION

The paper makes two key points: first, tax policy principles of providing a tax structure that raises revenues and achieves an optimal equity/efficiency outcome need not be adjusted in light of "new" economy shocks; and, second, these shocks would, however, necessitate changes in tax policy instruments to achieve any given social and economic objectives.

There are two elements of the shocks that may affect tax policy instruments: higher incomes resulting from positive economic shocks would create an "income" effect, potentially making everyone better off; given increased mobility of certain factors, the "price" effect would make achieving equity objectives more costly.

In the absence of factoring-in tax policy changes from competitors, these shocks would improve social welfare. However, if competitors lower their taxes on mobile factors, the potential to improve social welfare could decline substantially, leaving no option but to follow competitors' tax policies, potentially creating a tax race to the bottom for mobile factors.

This leads to two tax policy prescriptions: first, to avoid inappropriate policy outcomes, it is even more important for jurisdictions to coordinate/harmonize tax policies for the most mobile factors in the new economy; and, second, tax policies should be reviewed to reduce their dead-weight loss for the economy to achieve outcomes that increase social welfare.

SUPPLEMENTARY COMMENT:

Ontario and the Tax Collection Agreements (TCAs)

Ontario's May 2000 Budget proposes three measures that contravene both the Tax Collection Agreements (TCA's) in place since 1962 and the Tax-on-Income Agreement (TONI) of December 1997.

- The three measures relate to the capital gains inclusion rate, tax deductions for stock option gains for R&D employees, and super-deductions for flow-through shares.
- These measures change the common federal-provincial definition of taxable income, not allowed by either the TCAs or TONI.

This creates three issues:

- the status of Ontario tax collection by the federal government outside the TCA/TONI rules;
- the consequences of Ontario's actions for the Ontario taxpayer, the Canadian Customs and Revenue Agency (CCRA) and, broadly, the Canadian economic union; and
- the response of other provinces and the consequences of those reactions for the Canadian taxpayers, the CCRA and, again broadly, for the Canadian economic union.

Under existing tax collection "guidelines", the federal government will:

- continue to collect Ontario revenue, even if Ontario is outside the TCAs/TONI;
- According to the guidelines, there is no rationale for the federal government to continue to subsidize a province's tax collection outside the TCAs/TONI as there is no federal-provincial harmonization of either the tax base or the rate/credit structure.

The three proposed changes are not simple changes for the taxpayers. They would change all aspects of the standard tax form: e.g. calculation of income; calculation of tax-related benefits (Canada Child Tax Benefit, GST credit); and, carry-backs and forwards of capital gains/losses.

The proposals create a large problem for tax administration on two fronts:

- The CCRA would have to develop a new tax structure, in addition to TONI, that a number of provinces may want to use if Ontario proceeds with its proposals; and

- There would be many taxpayer queries and complaints on differences in federal/Ontario treatment of incomes, benefits and carry-backs/forward of capital gains/losses.

The proposals could have negative economic consequences for many regions of the country. Some may be forced to offset the negative tax revenue effects they may face. There is, therefore, a risk of 14 different tax systems in the country, with large complexities for taxpayers and an immense task for the CCRA to run such systems.

REFERENCE

Poddar, S., T Neubig, and M. English, "Emerging Trends and Their Implications For The Tax Mix and the Taxation of Capital", *Canadian Tax Journal,* Volume 4, Issue Number 1, 2000

Figure 1

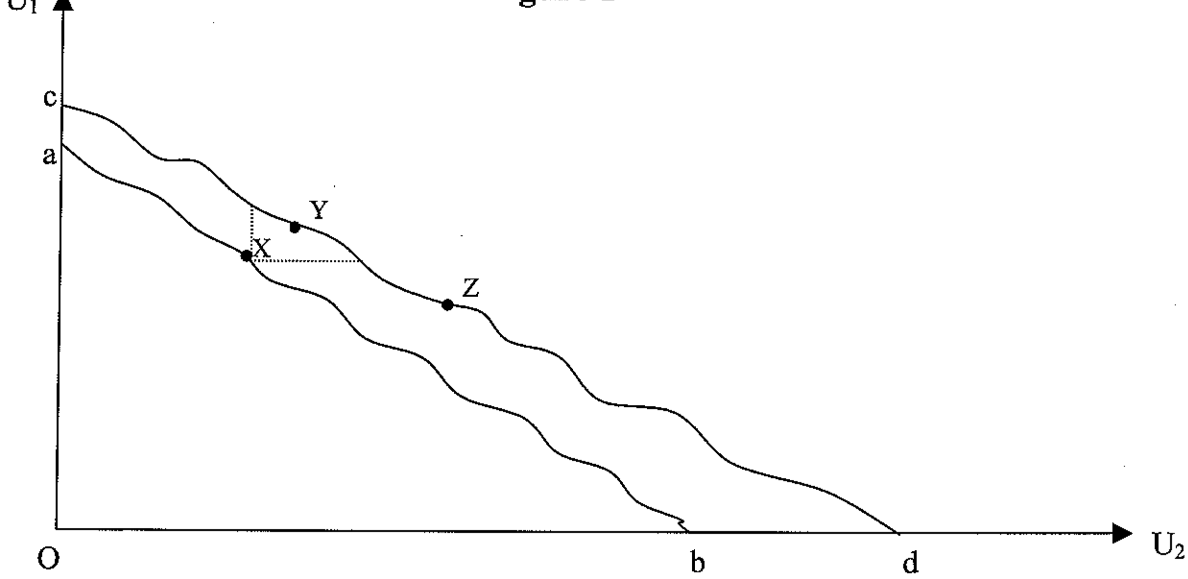


Figure 2

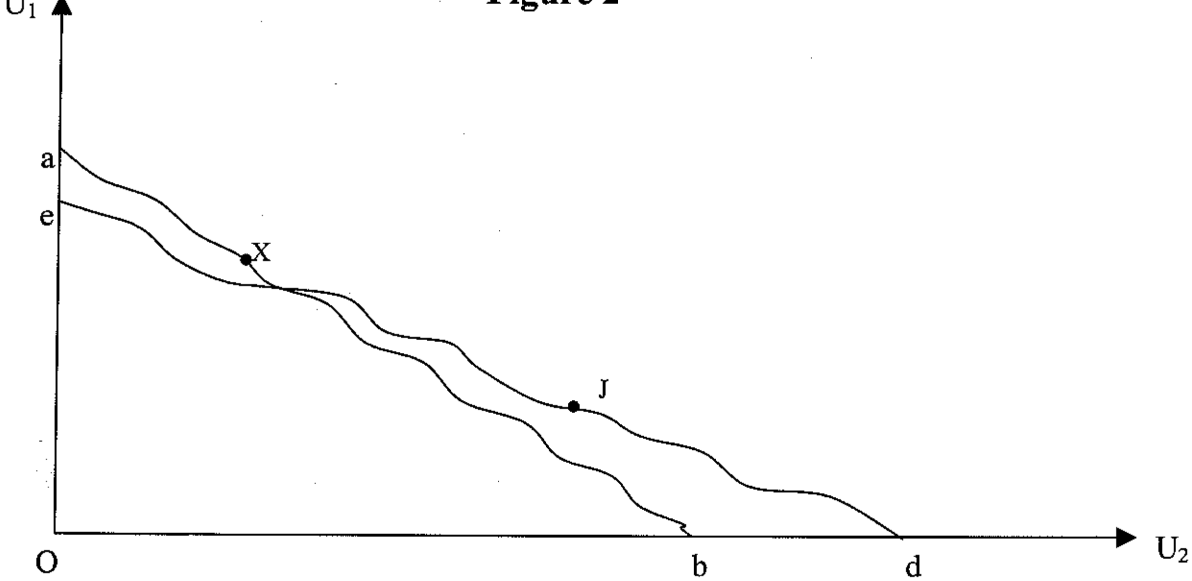
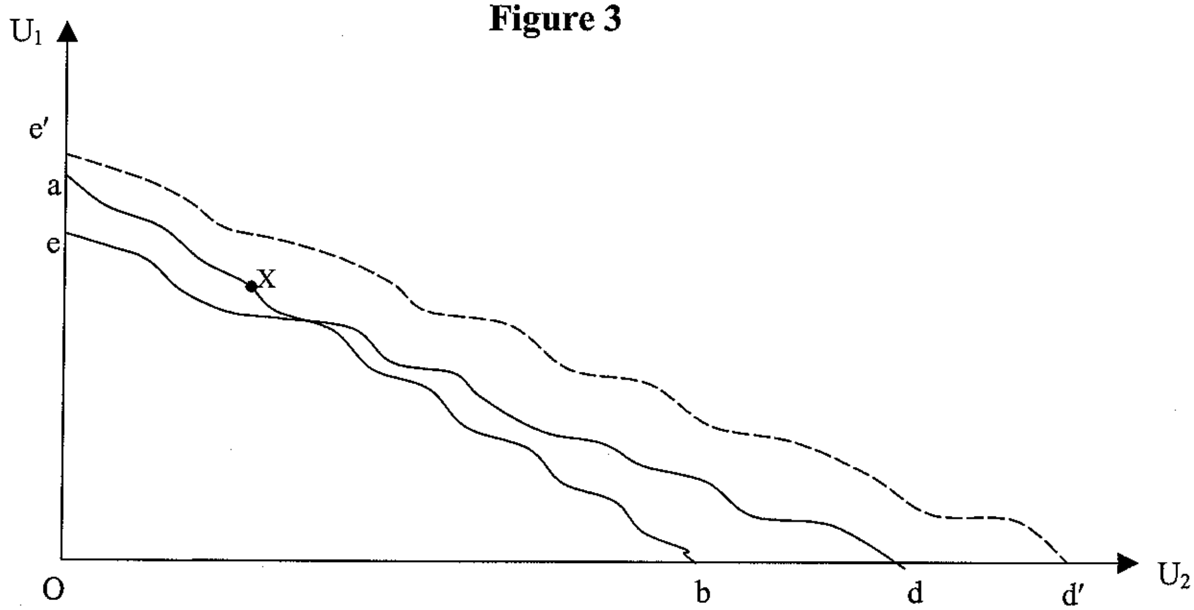


Figure 3



SESSION 4 COMMENTS

Session Chair, Fred Gorbet:

- On tax harmonization, the federal government needs to determine a bottom line to preserve the TCAs. Different definitions of the tax base is likely that bottom line. Benefits such as clarity and accountability are lost when the tax base is balkanized. He recognizes that there can be provincial level accountability gains from a simpler PIT regime, but the costs may have to be borne in wholly separate tax collection systems.

Points of Discussion from the Floor

- The PIT base should be determined by agreement between the federal and provincial governments, not by federal paternalism.

- Tax base diversity on the PIT would allow too much leakage of the mobile components of that base.

- A separation of the federal PIT from the provincial PIT systems would encourage the federal government to concentrate more on its redistributive objectives.

- In the long term it makes better sense to have the provinces occupy all of the PIT tax room, and the federal government to levy all the consumption taxes.

CONCLUDING REMARKS

Paul Boothe

At the beginning of any tax policy discussion it is important to recall that provincial governments and federal governments don't pay for anything: Canadian taxpayers do. When talking about collecting taxes, we need to remember that it is voters who give us permission to collect those taxes and to use them in ways that hopefully will meet with their approval.

My remarks are divided into two parts. In the first part I will review the papers, drawing attention to a issues that I think are particularly important. In the second part, I will draw a few general lessons that tie things together.

The conference began with papers by four provincial government officials. My colleagues did a good job of describing the changes that are taking place in their particular provinces. Next, Vaillancourt and Lachance showed how Quebec has used tax on income to integrate social tax policy. We also learned that it cost Quebec between 2 percent and 3 percent of revenue to administer the personal tax. Finally, and this is a very important point, despite the fact that Quebec has run its own system for a long time it is still largely harmonized with respect to base. This point will be key to discussions of the role played by tax collection agreements in maintaining a harmonized national tax system.

Robin Boadway talked about the interaction of tax and equalization and how equalization is an important complement to provincial tax independence. He also suggested that provinces could probably use tax credits to achieve many of their tax policy goals without the need for different (i.e. non-harmonized) tax bases. Satya Poddar gave us a new definition of simplicity: tax simplicity is something that reduces tax consultants' income! This paper also engendered a very interesting discussion on progressivity that I will return to later. Ken McKenzie talked about thick and thin borders and compared the Canadian corporate tax system to the system in the United States. He argued that Ontario seems to be a kind of a "Stackelberg" leader in terms of setting corporate tax rates. And that was very interesting to me and might be applicable later. Finally, he also briefly introduced the Bird and Mintz proposal on business VAT.

Nancy Olewiler talked about how high polluting industries have low taxes. This surprising fact is probably a case of correlation without causality. To the best of my knowledge provincial governments do not go out to find big polluters and then cut their taxes. But the point that she makes is a very important one. If we are going in the direction of using tax policy as part of environmental policy, it will be important to actually tax pollution rather than simply tax broad industry groups that in the past have had bad records on pollution. Hopefully, we will be able to create incentives for firms to improve their behaviour rather than just shutting them down altogether.

Richard Bird returned to the issue of interaction of the transfer system and the tax system and how the transfer system in Canada may well subsidize tax competition. He said some uncharacteristically gloomy things about the taxes of the future. For example, in the future there will probably be more reliance on consumption taxes and payroll taxes but that it is going to become harder and harder to tax cross border consumption flows. On the bright side, this is an area where provincial and federal governments are working together successfully. For example, Saskatchewan is currently finalizing an agreement with the CCRA (Canadian Customs and Revenue Agency) on collecting the PST as well as the GST on goods that come across borders. However, the problem of taxing e-commerce still looms. Richard also said that we needed more information on tax rates across jurisdictions. This is important and is well suited to the mission of an organization like the Canadian Tax Foundation.

Howell Zee's paper talked about the so-called race for the bottom. Despite lots of observations, he did not find evidence of a race for the bottom in the U.S. In fact, what he showed was that there has not been much change in the dispersion of state taxes over approximately 30 years. Again, this is another piece of evidence to consider when thinking about tax harmony and the role played by tax collection agreements in Canada.

Tom Courchene gave a tour of one of our possible futures. He argued that we need good decisions on the social policy side because, in his view, Canadian tax rates must be competitive with rates in the U.S. He further predicted that federal-provincial tax competition implies increased regional disparities and that Ottawa will have to be more interventionist on the social policy side in order to deal with these growing disparities.

Two points occurred to me in the course of Courchene's presentation. First, we are often strongly affected by what's currently happening around us. Today Alberta and Ontario are towers of economic strength -- but that can change. Such a change would have a profound effect on the way we look at things. What we want is a tax system that is designed to work not just when particular provinces are booming, but for the long term. Second, don't write off the other provinces. Some are doing quite well by normal standards. It was only 100 or so years ago that the big economic powerhouse was Nova Scotia and 75 years ago Saskatchewan was the third largest province. Things change, so we should be careful not to design our tax system to work only when Ontario is booming and the price of oil is $30.00 (US) a barrel.

Munir Sheikh talked about two tax policy issues. One was the need to reduce the cost of raising taxes to improve the efficiency of the tax system. He also talked about the need for lower rates and broader bases and how the federal government is moving in that direction. I would observe that with respect to consumption, base broadening is good policy, but as provincial experience has shown, it is not easy to sell to the public.

What general lessons can we draw from these papers? First, tax on income is working -- we are seeing provinces using it to tailor their taxes to their particular circumstances. For example, Saskatchewan, Alberta and Ontario are cutting and simplifying their taxes because that's appropriate to their fiscal circumstances. On the other hand, Nova Scotia is not pushing through the federal tax cuts to provincial taxes and that is completely appropriate given their fiscal situation. Prudent and responsible use of the flexibility given by tax on income is taking place.

Second, who cuts taxes first or even the most is not really important. It's not the change or the velocity that matters as much as the resulting levels of taxes in the different jurisdictions. Debates over how much we have moved are sterile. The key policy question is: Are we ending up at different levels? Related to this issue is the question Ken McKenzie raised: Is more progressivity always better? We teach freshmen economics classes that more is better, but we know that at some point (consider beer consumption) more is not better. The same may be true of progressivity. The policy question should be: Do we have the appropriate level of progressivity? Ultimately, the answer should come from a political decision, not an economic one.

Is the tax jungle coming? When we look at Quebec we see that there seems to be strong incentives to stay harmonized. Perhaps Ontario or Alberta will become a "Stackelberg" leader in provincial income tax. If so there are some profound implications for the system of federal-provincial transfers. This brings us to the tax collection agreements. It is very unfortunate to see the national tax collection system characterized as a 'benefit' accruing to the provinces. These are benefits that are paid for and accrue to Canadian taxpayers. We should try to preserve the tax collection agreements because they produce big efficiency gains to all Canadians.

What if Ontario can't be accommodated within the current tax collection agreements? Are we ready to be flexible? Ontario is determined to be competitive with neighbouring US states. Would it make sense to have a national tax collection system that excludes both Ontario and Quebec, leaving only about a third of Canadian provincial income taxes collected within the agreements? Such a situation might represent what urban economists refer to as a 'tipping equilibrium'. If Ontario leaves, the share of provincial taxes collected within the agreements falls from about 75 percent to about 35 percent. If the four western provinces were in a separate tax collection agreement, they would constitute another 30 of provincial taxes collected and if such an agreement included Ontario (the fifth 'western' province) the share would rise to about 70 percent. At some point provinces would need to look at the costs and benefits of different tax collection arrangements.

I will close by saying that setting tax policy over the next five to ten years will be very challenging and lots of clear thinking and informed debate will be needed. In addition, all governments will need to be innovative and as flexible and respectful as they can of other governments' tax policy needs. Taxpayers in all provinces deserve nothing less.

SOME CONCLUDING THOUGHTS ON THE MAIN FEDERAL-PROVINCIAL TAX ISSUES RAISED AT THE CONFERENCE

Patrick Grady

Canada has enjoyed a harmonized personal income tax system under the Tax Collection Agreement between the federal government and the provinces. The system evolved out of the highly centralized wartime tax rental agreements to become a much more decentralized, but still harmonized, system. In recent years, however, the system has come under increasing pressure. Income tax rates in Canada are much higher than in the United States. And as Tom Courchene said, they will have to narrow one way or another. Fred Gorbet stressed that other objectives than simply raising revenues, such as delivering social and economic programs, were becoming more important.

The challenges to the TCA came to a head when the Ontario Minister of Finance threatened to pull out of TCA in his 1997 budget if the provinces were not given more flexibility. This lead to the establishment of a Federal Provincial Committee to study the questions raised. Its October 1998 report opened up the new more flexible "tax on income" option for provinces under the TCA, which replaced the old constraining "tax on tax" system. To those proponents of more strict rules for harmonization, this was akin to letting the genie out of the bottle. Around the same time the Federal Government established the Canadian Customs and Revenue Agency (CCRA) with a mandate to collect provincial as well as federal taxes.

The provincial governments took advantage of their new found flexibility to introduce taxes on income in their 1999 and 2000 budgets. The proposed provincial PIT reforms were described at the conference by participating provincial officials. Elizabeth Cody, the Executive Director, Fiscal Policy, Nova Scotia Department of Finance, presented the Nova Scotia measures. In her view, the provincial deficit and the need to preserve the existing system of tax and transfers are key concerns of the Nova Scotia government. Nancy Wright, the Director of Taxation, Alberta Treasury, described the new proposed Alberta Single Rate Tax System, which, as might be expected given that Stockwell Day was Treasurer, has many similarities to the Canadian Alliance's proposal for a single tax. Paul Boothe, Saskatchewan's Deputy Minister of Finance, outlined the Saskatchewan Personal Tax Reform. And last but not least, Tom Sweeting, the Assistant Deputy Minister of Tax Policy in the Ontario Ministry of Finance, mapped out Ontario's plans for a "Made-For-Ontario Tax System."

Differing Views on Proposed Provincial Personal Income Tax Reforms

Many different views were heard at the conference. At one extreme was the alarmist view that the proposed tax changes would set the country on the road back to the tax jungle of the 1930s and lead to the balkanization of the economic union. Providing some support for this view was the fact that the federal share of income tax was not as preponderant (over 80 per cent according to Howard Zee) as in United States, making federal-provincial or state harmonization much more important in Canada than in the United States. At the other extreme was view that the proposed tax changes were not revolutionary and simply represented the natural evolution of the provincial income tax. Tom Courchene noted that Ontario's actions have their origin in the Ontario Economic Council Report on a separate tax system for Ontario done in the early 1980s.

At first glance, it seems obvious that the proposed provincial reforms would result in reduced tax harmonization. But some provincial officials were quick to point out that the old system of "tax on tax" was not actually very harmonized. Similarly, it seems likely that the reforms would result in increased tax competition. But it must be admitted that the old system did not prevent wide gaps in rates from opening up among provinces and that tax competition is more important for the corporation income tax than for the personal income tax. Finally, it seems that the reforms run counter to simplicity and transparency. But provincial officials argued that the old system was far from simple and transparent. In fact, it made it virtually impossible for a taxpayer to know his/her marginal tax rate. Under the new approach, provinces should be able to simplify the complex web of credits, deductions, surtaxes and flat taxes that has grown up as a result of creative provincial efforts to get around the constraints imposed by "tax on tax." The new approach could thus ironically end up enhancing the accountability of governments by making the tax system more simple and transparent.

The new approach definitely allows for increased flexibility. Nancy Wright and Paul Boothe argued that in their provinces it would improve tax fairness and allow a better treatment of families. In support of his view about improved tax fairness, Paul Boothe presented a progressivity index that measured tax at different income levels as a percentage of tax at the bottom level. This index was regarded as questionable by some because of the way it was based on very low taxes paid at the bottom. A more credible measure of progressivity would be taxes as a percentage of income. Ken McKenzie asked the more fundamental question of why tax reforms always had to increase progressivity. In his view, there must be some optimal level of progressivity.

But, there was some concern that provincial tax changes could go too far, leading to the effective abolition of tax on investment income and undermining the equity of the tax system.

The new "tax on income" approach has the advantage of eliminating federal provincial spillovers. Elizabeth Cody said that this was very important for Nova Scotia. There was nothing that provincial finance ministers hated more than to hear the Federal Minister announce on budget night that provincial taxes will be lower and provincial deficits higher.

One issue that did not seem to give rise to much concern at the conference was the implications of proposed provincial tax changes for stabilization. This is probably because as Tom Courchene noted Ottawa already seems to have abandoned its role in stabilizing provincial tax revenues. In addition, discretionary fiscal policy has been out of favour over the last few years as governments have concentrated on deficit reduction.

Politics was behind the eagerness of provincial governments to have more control over their tax systems. Provincial officials noted that politicians get elected to do things and they want to use the tax system as an instrument. Consequently, they perceived that there was political support for provincial initiatives fragmenting the tax system. It is unfortunate that politicians and the public don't recognize that tax tinkering doesn't really have a major effect on the economy.

On the other hand, Paul Boothe mentioned the political resistance encountered in Saskatchewan to positive changes that would broaden the tax base such as taxing lunches and services. The antipathy to the GST is another example of such resistance.

The Real Threat is Changes to the Definition of Income

The new "tax on income" system has many advantages and is not really a threat to tax harmonization in Canada. The real threats are the proposals that go beyond what is permitted under the new system and actually change the definition of income. These include the three changes announced by Ontario Minister of Finance Ernie Eves in his 2000 budget as part of a "Made-For-Ontario Tax System." The first of these would lower the inclusion rate for capital gains to 50 per cent; the second would provide for deductions up to $100,000 per year for capital gains on stock options for research workers; and the third would provide a 30-per-cent bonus deduction on flow through shares for Ontario eligible mining exploration expenses. The capital gains proposals in particular have wide ranging implications for the overall income tax system, extending to individuals, trusts and corporations.

These proposals are not the end of the story of the proposed Ontario tax changes. Ontario Minister of Intergovernmental Affairs Norman Sterling confirmed the worst fears of those concerned about tax harmonization in Canada. In response to a question, he characterized the changes in the definition of income announced in the 2000 Ontario budget as only the beginning of the divergences in the definition of income.

Saskatchewan has also proposed changes in the definition of income. These include its proposal for an 11-per-cent rate on eligible capital gains for farms and small business shares. This is less of a threat to the integrity of the national tax system because it could probably be handled by provincial tax credits. But it would be hard for the Federal Government to accept at the same time that it turns down Ontario's request to administer changes in the definition of income.

Tom Sweeting presented the Ontario Government's rationale for its proposed tax changes. In their view, Ontario must compete with the United States where taxes are much lower for mobile labour, not with the rest of Canada. In his words, Ontario looks South not East and West. Consequently, it must set the pace for tax competition in Canada. Ontario has already reduced income taxes by 30 to 40 per cent, offset to some extent by the Fair Share Health Levy. Ontario plans to reduce income taxes by another 20 per cent, including the elimination of high income surtaxes. It also plans to implement the revised treatment of capital gains by 2004 and invites the Federal Government to follow suit. In Sweeting's view, lower capital gains taxes are key to ensuring the growth of the dynamic new economy.

Munir Sheikh, the Assistant Deputy Minister for Tax Policy in the Federal Department of Finance, said that all sources of income should be taxed at the same rate, and that there should not be lower rates for mobile factors like capital. In his view, Ontario's proposed changes in the tax treatment of capital gains were changes in the definition of income, not rate changes. He emphasized that the Federal Government always consults widely about tax changes before the budget and that he regretted that Ontario didn't see fit to do the same. In his view, there were many ways federal and provincial governments can work together. He said that the Federal Department of Finance was prepared to talk about jointly defining tax base, but that if any province wants to be totally independent, it should not expect the Federal Government to subsidize the collection of its taxes through the TCA.

Satya Poddar, a former Director of Tax Policy in the Federal Department of Finance, mused that in the good old days there was a view in the Federal Government that the structure, base, progression and level of taxes all needed to be harmonized. It was only gradually that more flexibility was introduced. He recalled Mickey Cohen, a former Deputy Minister of Finance, advising tax policy officers in the Department to "loosen the screw but not so much it falls out." In Poddar's view, Ontario is proposing a very fundamental change, that affects not only the base, but the whole structure, and involves multiple definitions of income. He feels that, unfortunately, the days of the TCA are numbered. The proposed capital gains changes will affect corporations, trusts and individuals and will create an incentive to change residences. It will not only be the farmers from Saskatchewan that move to

Alberta when they retire, but "Bay Street farmers" as well. He raised the spectre of the disappearance of tax on investment income as has happened in Germany. He also lamented the increased tax complexity that will result noting that each extra line in the form increases the potential for tax avoidance.

Fred Gorbet, a former Federal Deputy Minister of Finance, observed that the TCA is a very efficient way to collect taxes and that proposals to change the tax base threaten harmonization. If the provinces are insistent on modifying the tax base, they should be willing to step up and take the political consequences of collecting their own taxes and making the process transparent.

Many other observations were made on the Ontario tax proposals. Tom Courchene viewed them as another sign that economic development and wealth creation policy was shifting to the provinces. This the other side of the coin in his view to that the Federal Government is taking over social policy including welfare. Richard Bird said that perhaps the provinces had had enough of "Big Daddy," meaning the Federal Government, calling the shots over taxation. Munir Sheikh said all right, but, if so, they should pay to collect their own taxes. Giles Gherson was concerned about the balkanization of the economic union. He thought that provinces going their own way would undermine equalization. It could also lead to a growing tax gap between the rich and poor provinces. But in his view, it would be different if Stockwell Day were to become Prime Minister (or, in my view, if Mike Harris were to lose the next election).

The tax showdown between the Ontario and Federal governments reflects a much broader ideological and political divide and a history of fiscal controversies. The fact that there is no training agreement yet between the two governments is indicative of the difficulties they have working together on anything. On the fiscal front, there is the billion dollar error in the forecast of PIT payments to Ontario in the early 1990s that contributed to the emergence of Ontario's deficit problem. More recently, there has been an ongoing dispute about the adequacy of payments out of the TCA.

If Ontario does leave the TCA to set up its own tax system, it is unlikely that it would ever go back into the agreement. The political cost of establishing a separate tax system is likely to be one shot and not ongoing. This is supported by Francois Vaillancourt's observation that there is no support in Quebec for joining the TCA. And once the machinery of tax collection is established, it takes on an institutional life of its own that makes it difficult for the government to abolish it.

Role of the CCRA in the Controversy

An additional factor in the controversy is the transformation of Revenue Canada into the Canada Customs and Revenue Agency (CCRA) with a mandate to administer provincial as well as federal taxes. Cynics might say that this is just another case of old wine in new bottles. The CCRA is just the same old Revenue Canada dressed up in a new package. Agency status could be viewed as only a way to justify higher salaries for audit staff and to get out from under the financial and management controls of the Treasury Board and Public Service Commission. When push comes to shove, the CCRA still reports to a Federal Minister and remains under Federal Government political control. This must cast doubt in the minds of the provinces on the extent to which they can count on the CCRA to administer their taxes independently.

Under the new "tax on income" guidelines the CCRA is required to administer provincial taxes on income for free. This is a continuation of what some have characterized as a bribe for harmonization. The new twist is that it can now administer any taxes provincial governments see fit to levy at cost. This is viewed by some as a big mistake that could end up facilitating the balkanization of income tax system. But others see the very existence of CCRA as preserving some degree of harmonization along the lines of that which Howard Zee attributed to the IRS's cooperative attitude with state taxing authorities in the United States.

Possible Outcomes of the Controversy

There is no agreed upon dispute settlement mechanism (DSM) to resolve federal-provincial tax disputes such as that with the Ontario government. Ontario Intergovernmental Affairs Minister Sterling lamented that there was no DSM like in the Social Union Framework Agreement for taxes and that even the one for the SUFA was not working.

There are several possible outcomes for the controversy. The first is that the Federal Government could agree to make changes in its own definition of income to accommodate Ontario. After all it is already moving in the direction of capital gains changes, but just not fast enough for Ontario. This is not very likely. The second is that the Federal Government could agree to have CCRA administer the proposed changes in base for Ontario free of charge. Again not very likely. The third is that the Federal Government could agree to have the CCRA administer the changes for marginal cost (say around \$200 million). This might be reasonable if there are some economies in having federal and Ontario taxes collected by the same agency. Ontario would have to evaluate the benefits it could expect to get from the tax changes relative to their cost and could accept this offer. But again this alternative is not very likely. The fourth is that the Federal Government could agree to have the CCRA administer the proposed changes for the full cost of administering the Ontario tax system or around \$500 million. Again Ontario could accept the offer. But it is unlikely that Ontario would be willing to pay the CCRA the full cost of collecting its taxes after the bad experience it has had in the past with Revenue Canada. This brings us to the fifth and most likely alternative, namely that the Ontario Government would establish its own income tax system at a cost in the \$500 million range, which would jeopardize the future of the TCA. The sixth and final option is that the Ontario government would back down. Needless this is highly unlikely given the high political stakes involved and the antagonism of the two adversaries.

Corporate Taxes

The TCA system is not threatened for the corporate income tax. With the big provinces of Ontario, Quebec and Alberta already collecting their own corporate income tax, the system had already disintegrated. And the situation is made worse by the fact that the Federal government has a much lower share of corporate taxes than in the United States. But Richard Bird had a point when he argued that the situation is still much better than in the United States because at least there is an agreement on allocation in Canada.

Tax competition is most likely to arise with respect to the corporate income tax. As Munir Sheikh pointed out globalization and the growing new economy are increasing the mobility of capital. Ken McKenzie presented data that showed the international trend is to lower CIT rates by 5 to 10 percentage points and that Canada was still slightly above average even after the recent reductions. McKenzie said that Ontario, which is in more direct competition with the US, will set the pace by establishing an 8-per-cent rate. He characterized this as throwing down the gauntlet for the other provinces, but not as starting a race to bottom. He felt that the other provinces would follow, but only to the 8 to 10 per cent range.

McKenzie stressed the need for corporate tax reform, putting forward Bird and Mintz's "modest proposal" for a Business Value Added Tax as a replacement for the corporate income tax. This would have the advantage, from an economic efficiency point of view, of reducing taxes on highly mobile capital. Ironically, Richard Bird found himself warning against the dangers of straying too far from US and others in adopting such proposals as his own for radically different forms of taxation.

Several people speaking at the conference mentioned that they supported the Mintz report's recommendations for corporate tax reform. There seems to be a consensus among tax economists that broadening the tax base and lowering tax rates is the way to go. It also appears to be the way the Federal Government is headed, but only gradually and in stages.

Sales Tax Harmonization

Sales taxes are much less harmonized than personal income taxes or even corporate income taxes. In Quebec, there is a Value Added Tax, called the TVQ, and the provincial government collects the GST for the Federal Government. In the Atlantic provinces except for Prince Edward Island, there is the Harmonized Sales Tax based on the GST. In the other provinces except for Alberta, there are retail sales taxes with widely differing bases and different rates. And of course, there is no sales tax at all in Alberta.

Richard Bird argued that there has been progress on some fronts. The TVQ is moving towards the GST with respect to its base, but it still does not have full input credits and has some additional zero rates. A HST has been achieved in the Atlantic provinces. There has also been coordination of changes in specific taxes on tobacco and alcohol. And provincial sales tax is collected at the border. But, in his view, the retail sales taxes are still levied too much on business inputs. In this context, it's interesting to recall Paul Boothe's comments about the political difficulties that Saskatchewan had in broadening the sales tax base and how it had to continue to tax business inputs.

Richard Bird made the provocative comment that Quebec might have it right and the HST wrong. By this he presumably meant that the Federal Government shouldn't try to constrain the sales tax rate that the provinces can levy. He also offered the dark thoughts that the way the provinces are headed Canada could easily go the way of India with increasing taxes on production instead of consumption.

My View of Sales Tax Harmonization

In my view, the HST in the Atlantic provinces provides a good model for the rest of the country, although obviously the Federal Government can not afford to pay the other provinces as much as the $1 billion the Atlantic provinces got for signing on. In addition, the provinces need to be given more discretion to set their own rate.

A HST would eliminate taxation of business inputs and increase efficiency. It would also reduce the costs of tax administration and compliance substantially. The new provincial data developed by Statistics Canada for purposes of revenue allocation is very costly and could be used at no additional cost for other provinces. The administrative costs of VAT such as the GST are high. They really require a much higher rate than the 7 existing per cent to be justified. If provincial sales taxes were piggybacked in an HST, the rates would come much closer to the 15 to 20 per cent common in Europe.

Provinces have been reluctant to adopt an HST because the political unpopularity of the GST, which has become very visceral and almost irrational.

Other Important Tax Issues

A number of other important tax issues were touched on at the conference that are worth noting. Munir Sheikh observed that globalization and technological change can raise welfare, but also make it more difficult to achieve equity objective because of the increasing mobility of factors. Sheikh cited the recent federal budget as an example of an effort designed to achieve both equity and efficiency objectives.

International tax competition has produced some notable successes. Ireland and the Bahamas have demonstrated that a country does not have to be large to attract mobile factors such as capital. It has also given rise to concern among countries and has become the focus of an OECD study. This study came up with an interesting proposal for blacklisting countries introducing specific tax measures harming other countries.

The taxation of e-commerce and internet sales is another big issue with implications for sales tax harmonization and competition that will have to be resolved. Howell Zee noted the race to the bottom in the US. He noted that the House of Representative has passed 5-year Moratorium on e-taxes. In his view, this was a federal threat to state occupancy of sales taxes. The big danger is the door that the exemption of e-commerce from taxation creates for more conventional goods to escape taxation. It threatens the whole sales tax system. As Munir Sheikh put it, the issue is not new taxes on e-commerce, but how to collect the old taxes.

Concerning green taxes, Nancy Olewiler presented interesting empirical evidence debunking the alleged trade-off between green and growth. She also observed that the Mintz Report is green in that its recommendations would raise taxes on high polluting industries and lower them on low.

An important area noted by Richard Bird that also raises issues of harmonization and competition and that was not covered at the conference is property taxes. But that is an issue for another day.

Conclusions

This conference could not have been more timely in focusing public attention on the threat of reduced harmonization and increased competition facing Canada's tax system. It brought federal and provincial officials and academics together in a relaxed atmosphere much different from the highly charged federal provincial meetings to discuss the most important issues facing Canada's unique federal provincial tax system. While none of the problems were solved at the conference, at least the main issues were given a good public airing for the first time and a public debate on the future of the tax system was launched. Too much is at stake to allow the issues to be resolved behind closed doors in federal provincial meetings with only a minimum of public input.