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TAX REFORM FOR EFFICIENCY AND FAIRNESS IN CANADA

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ABSTRACT/RÉSUMÉ

Tax reform for efficiency and fairness in Canada

The Canadian government has set a high priority on reducing the economic burden of taxation. In a context of fiscal surpluses, it has been: markedly reducing corporate income and capital taxes; providing more personal tax relief especially at lower incomes and above all for saving; and cutting the federal value added tax (GST). While such measures, in particular income and capital tax cuts, reduce the economic damage caused by tax, Canada should go further along this route with significant revenue-neutral reforms to achieve a more efficient tax mix that also retains its redistributive features. Numerous tax preferences to favoured activities, firm types, investments and savings vehicles narrow the tax base and create loopholes, keeping statutory rates higher than otherwise and distorting resource allocation. They should therefore be removed. It would also help to shift the tax mix toward more user fees and indirect taxes – including VAT, environmental levies and property taxes – which do not distort inter-temporal economic choices as income taxes do. Lower corporate and personal income taxes could improve the incentives for capital formation, FDI, innovation, entrepreneurship, labour-force participation, work effort, and the pursuit of higher education. The result would be higher standards of living.

JEL classification: E62, H2, H21, H77

Key words: Canada, taxation, tax progressivity, tax expenditures, corporate tax, personal income tax, consumption tax

Réforme fiscale au Canada pour plus d'efficience et d'équité

Le gouvernement canadien s'est fixé pour priorité d'alléger la charge fiscale qui pèse sur l'économie. Dans un contexte d'excédents budgétaires, cette stratégie s'articule autour des objectifs suivants : réduire de manière significative l'impôt sur les sociétés et les impôts sur le capital ; multiplier les allégements fiscaux en faveur des particuliers, surtout ceux à bas revenus ; et abaisser la taxe fédérale sur les produits et services (TPS). Même si ces mesures, et notamment les baisses de l'impôt sur le revenu et sur le capital, atténuent les préjudices économiques causés par l'impôt, le Canada devrait aller plus loin dans cette direction en engageant de vastes réformes sans incidence sur les recettes visant à établir une structure fiscale plus efficiente qui conserve ses fonctions redistributives. De nombreux avantages fiscaux qui favorisent certains types d'activités, d'entreprises, de produits d'investissement et d'épargne restreignent l'assiette d'imposition et créent des failles, ce qui maintient les taux légaux à un niveau inutilement élevé et fausse la répartition des ressources. Ils devraient donc être supprimés. Il serait également judicieux de rééquilibrer la structure fiscale en faveur des droits d'utilisation et des impôts indirects – y compris la TVA, les impôts liés à l'environnement et les impôts fonciers – qui ne faussent pas les choix économiques intertemporels, contrairement aux impôts sur le revenu. Une baisse de l'imposition des ménages et des sociétés pourrait encourager la formation de capital, l'IDE, l'innovation, l'entrepreneuriat, la participation à l'activité économique, le travail et la poursuite d'études supérieures, améliorant ainsi le niveau de vie.

JEL classification : E62, H2, H21, H77

Mots clés : Canada, taxation, progressivité de l'impôt, dépenses fiscales, impôt sur les corporations, impôt sur les particuliers, taxe à la consommation

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TAX REFORM FOR EFFICIENCY AND FAIRNESS IN CANADA

by Alexandra Bibbee¹

Canada has a long history of tax reform and has been actively cutting taxes since the late 1990s against a background of general government surpluses. The resulting gains in business tax competitiveness are expected to raise investment and attract foreign capital. A flatter personal income tax structure, along with better targeting of tax reliefs, has generally improved work incentives and helped to boost female labour-force participation. The near-term economic slowing precludes further tax cuts while the imminently mounting public expenditure burden of ageing will require more tax receipts. Tax reforms must henceforth focus on a combination of rate cutting and base broadening that would be broadly revenue-neutral and maximally growth-promoting. Within such a framework, there is a need to go further in restructuring taxes to make them less distortive through neutral treatment of economic choices. Adjusting tax policy in this way could boost savings, investment and innovation and should be central to the nation's productivity agenda. There is likewise a need to do better in reducing the high effective taxation of low skilled groups in order to price them into the labour market, helping to counteract demographic ageing. Tax policy is also arguably Canada's main instrument to confront a widening income distribution across individuals and regions. This paper looks at making the most of tax policy.

Main tax trends

Canada exhibits an average tax-to-GDP ratio in the OECD context, although with a comparatively high reliance on more distortive income taxes. The Canadian government is thus on the right track in reducing such taxes, though efforts are called for to shift the tax base toward consumption. However, with its strong federal structure, Canada needs to continue to co-ordinate tax policy across autonomous government levels, a reform hurdle that few other OECD countries face to the same degree.

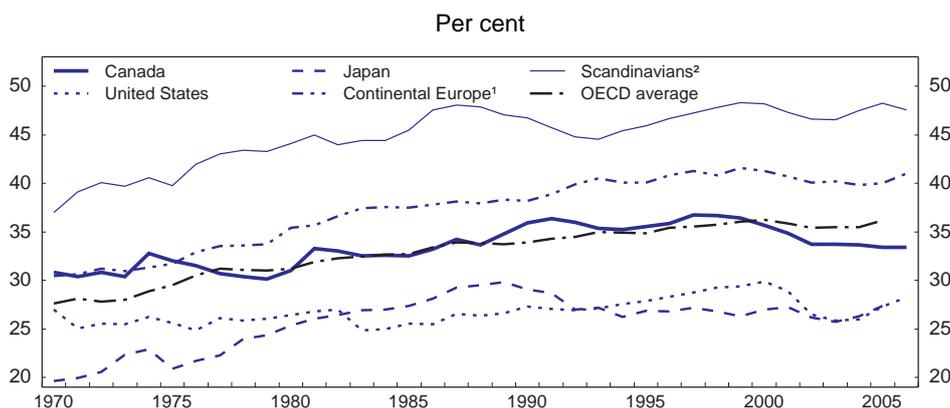
Canada in a global perspective

OECD tax ratios, which had long been trending upwards, broadly stabilised by about the early 1990s (Figure 1). Nonetheless, OECD tax systems are in a marked state of flux. Globalisation has increased the mobility of capital and high skilled labour. This has exerted relentless downward pressure on countries' ability to tax income earned by those factors and required greater reliance on less mobile labour and consumption tax bases. Globalisation, *via* the trade channel, has also raised the stakes for productive efficiency, innovation and structural flexibility in the OECD.² This challenge calls for a much more

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1. The author is a Senior Economist at the OECD Economics department. This paper is based on work originally prepared for the OECD *Economic Survey of Canada* 2008. The author is indebted to Andrew Auerbach, Andrew Dean, Yvan Guillemette, Chris Heady, Peter Jarrett, Annabelle Mourougane, and especially the staff at Finance Canada for their many helpful contributions. Thanks go also to Françoise Correia for statistical support and to Véronique Henriksson for secretarial assistance.
 2. In other words, low wage pressure by emerging market competitors has reduced the price of low skilled labour relative to high skilled labour and capital in the OECD. Relieving formerly high relative taxation of the latter two factors helps not only to prevent their moving abroad but also to induce their substitution in domestic production. However, this tends also to reduce tax progressivity, at least in a static sense.

efficient tax structure, or less public spending, to reduce the excess burden of taxation. Many OECD countries have responded with cuts in personal and corporate income tax rates (Figure 2). Corporate taxes have been particularly exposed to tax competition in continental Europe, where corporate tax rates have been cut deeply in order to safeguard revenue bases. Canada is also vulnerable because of its high degree of openness to the United States, and it too has been cutting corporate tax rates substantially. According to legislated reductions, Canada's marginal effective tax rate (METR) on business investment will be the lowest in the G7 by 2010, though likely remaining above the OECD average (Figure 3).

Figure 1. Tax-to-GDP ratios in OECD countries



1. France, Germany and Italy.

2. Denmark, Norway and Sweden.

Source: OECD (2007), Revenue Statistics database.

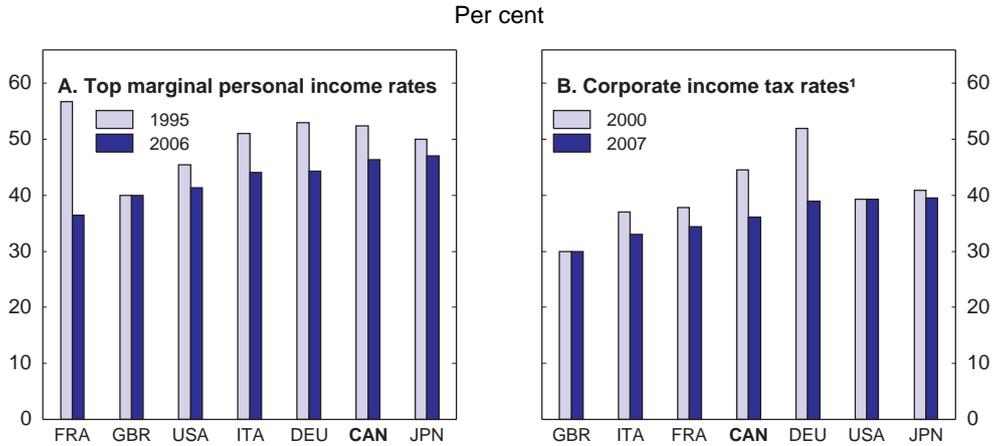
Statutory rate cuts have in most countries been funded by base-broadening measures, as income tax revenues have not declined. An important issue is how much further such base broadening can go: once a country has eliminated most loopholes, there is little further it can do to reduce average tax rates apart from cutting spending ratios or raising consumption-based taxes, generally thought to be less distortive albeit also less redistributive than income taxes. Canada alone among the G7 has managed to cut spending as a share of GDP to any serious extent.³ Hence, it has experienced a falling tax ratio since the late 1990s bucking the recent OECD trend to rising tax burdens.⁴

As to the tax mix, the main cross-country change over the last decade or so has been a growing share of corporate income taxes, which could reflect a highly elastic response of the tax base to rate reductions as well as cyclical conditions and a likely positive evolution of the “structural” profit share – in Canada’s case, reflecting *inter alia* the commodity price boom (Table 1). Personal income tax shares have tended to fall, most notably in Canada where marginal tax rates were cut in the latter half of the 1990s. Canada’s tax structure, like those in other English-speaking countries, remains heavily based on income taxes and in particular personal income taxes; these also bear the principal burden of tax-based redistribution. Continental Europe, by comparison, displays a much greater reliance on payroll and social security taxes, reflecting generous social insurance schemes, and on value added taxes (VAT). The Scandinavians also rely markedly on VAT but differ in their mixes of personal income taxes and social security contributions. There has been no widespread long-term shift from direct to indirect taxes, as growth in VAT revenues has been offset by falling specific consumption taxes, notably excise duties.

3. Between 1992 and 2006, Canada’s structural current spending to GDP ratio fell by 6¾ percentage points, Germany’s fell by 1½ points, while those of all the other G7 countries rose.

4. The average tax burden in OECD countries, measured as the ratio of tax to GDP, was in 2006 back up to the same levels as in 2000 after a brief reduction between 2001 and 2004 (OECD, Revenue Statistics).

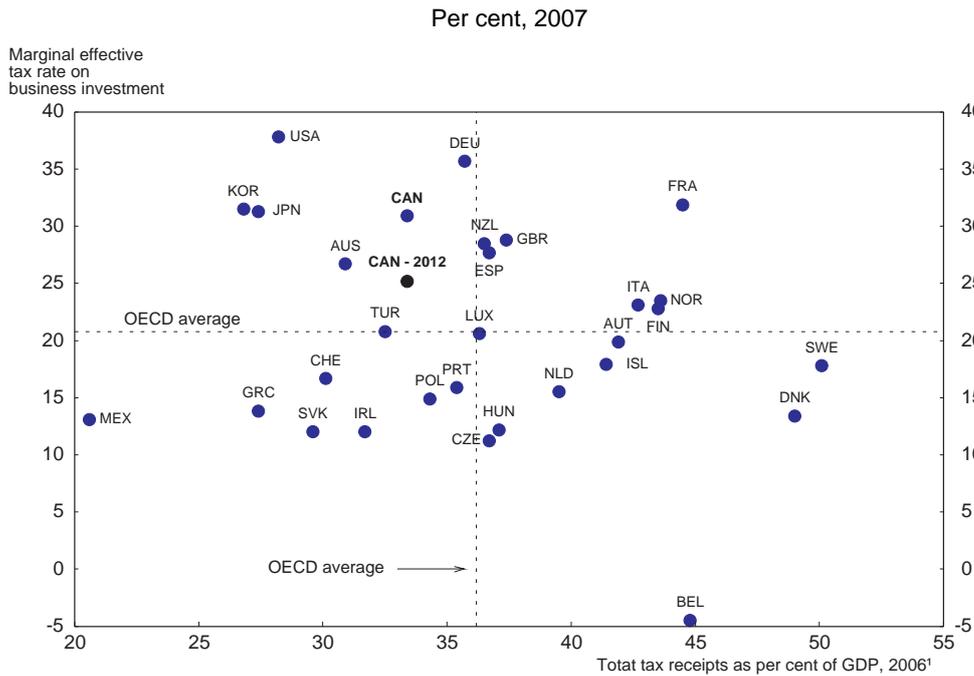
Figure 2. **Statutory tax rates in G7 countries**



1. Defined as the basic combined central and sub-central corporate income tax rate.

Source: OECD, Tax database. Calculations from Centre for Tax Policy and Administration.

Figure 3. **Effective tax rate on capital vs total taxes**



1. Provisional.

Source: J. Mintz (2007), Tax Competitiveness Report: A Call for Comprehensive Tax Reform, *C.D. Howe Institute Commentary*, No. 254, September; D. Chen (2007), "Flaherty's Missed Opportunity", *C.D. Howe Institute e-brief*, December; and OECD (2007), *Revenue Statistics database*.

Table 1. **The tax mix in OECD countries**

Per cent of GDP

Tax base:	United States		Canada		EU15		Sweden		Denmark	
	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
Corporate income	2.9	3.1	2.9	3.5	2.6	3.4	1.8	2.6	2.3	3.8
Personal income	10.0	9.6	13.4	11.9	10.5	10.2	16.1	16.0	26.2	24.5
Payroll	6.9	6.7	5.8	5.7	11.8	11.5	14.3	15.9	1.3	1.3
Goods & services	5.0	4.8	9.0	8.5	11.8	11.9	13.3	13.2	15.7	16.2
Property	3.1	3.1	3.8	3.4	1.7	2.1	1.3	1.5	1.7	1.9
Total	27.9	27.3	35.6	33.4	38.8	39.7	48.1	50.7	48.8	50.3

Source: OECD (2007), Revenue Statistics database.

Having a tax ratio around the OECD average, as Canada does, may reflect a middle way between the heavy spending nations of continental and northern Europe, and the more market-oriented approaches of the United States and Japan (Figure 3). It is also plausible that the higher a country's tax/spending levels, the greater its emphasis on distributive justice, as achieved by social benefits targeted to the less well-off and progressive tax structures. But it is also the case that in many European countries, less progressive taxes, such as payroll and consumption taxes, account for a larger share of total taxes. Indeed, there is no other way to finance a thorough social safety net than to tax heavily along the whole income scale. The Canadian and US tax systems are relatively more important tools of redistribution than in Scandinavia, or in other parts of Europe, where there is a much greater reliance on (taxed) transfers. Thus, among those countries where government is smaller taxes are, perhaps surprisingly, more progressive (Table 2).

Table 2. **Income inequality and the tax/transfer systems in selected OECD countries**

Late 1990s

	Gini coefficient		% reduction of Gini	of which, due to:	
	Market income	Disposable income		Transfers	Taxes
Sweden	0.375	0.238	36.5%	38.0%	-2.4%
Denmark	0.345	0.237	31.3%	32.5%	-0.1%
Canada	0.390	0.298	23.6%	17.9%	6.9%
United States	0.436	0.363	16.7%	7.9%	9.6%

Source: Pontusson (2005), *Inequality and Prosperity: Social Europe vs Liberal America*, Cornell University Press.

Canada is one of the most federal OECD countries, as extensive spending devolution is matched by exceptional sub-national revenue autonomy, implying a high degree of fiscal decentralisation. Provinces have the constitutional authority to define both the tax rate and the tax base for income taxes, even though most provinces have agreed to harmonise their personal and corporate income tax bases with those of the federal government.⁵ This means that the central government is limited in how much it can do in the way

5. All provinces and territories except for Quebec have signed a Tax Collection Agreement in respect of personal income taxation that requires the province or territory to adopt the federal tax base. All provinces except for Quebec, Ontario and Alberta have signed a Tax Collection Agreement in respect of corporate

of tax reform, apart from using its spending power and setting a hopefully compelling example. It also suggests that tax distortions could be magnified by adverse spill-overs from one level's policies onto the tax base of another within the federation. Administrative and compliance costs are also likely to be higher where there are multiple layers of tax authority. On the other hand, Canada has the chance for superior public-sector performance, in terms of better targeted and more efficient public-service provision in accordance with the subsidiarity principle of fiscal federalism theory – provided that political accountability for the use of tax dollars is preserved at all levels of government.

Tax reforms in Canada

Tax policies in Canada have evolved partly in reaction to the domestic macroeconomic situation, but also in line with prevailing influences of tax theory and practices within the OECD. The late 1980s' reductions in marginal tax rates on personal income to enhance tax system efficiency were followed by the introduction in 1991 of a federal goods and services tax (GST), a VAT, to reduce the deficit and replace a series of cascading sales taxes on goods only. The mid-1990s federal budget crisis then required temporary tax surcharges and tightening of allowances, although most of the adjustment occurred on the spending side. Between the late 1990s and 2007-08, uninterrupted federal budget surpluses allowed an unwinding of crisis measures and resumption of tax reductions. The present federal tax-cutting programme includes significant corporate income and capital tax cuts to improve business tax competitiveness; personal income tax relief targeted on those with lower incomes, partly to make up for progressivity lost at the top with earlier cuts in marginal tax rates; but also a first-time pair of cuts in the GST (Table 3).⁶ The federal government has encouraged parallel reforms at the provincial level, where a shift to balanced or surplus budget positions likewise had set the stage for tax cuts.

Table 3. **Distribution of federal tax relief**

CAD billion, year ending March

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	Total	Share in total (%)
GST	7.1	12.0	12.6	13.2	13.7	14.2	72.7	39
Personal income tax	12.3	10.3	10.1	10.3	10.6	11.2	64.9	34
Business income tax	1.1	5.9	7.9	9.3	11.5	14.8	50.5	27
Total	20.5	28.2	30.6	32.8	35.8	40.2	188.1	100
Total as per cent of GDP	1.3	1.8	1.8	1.9	1.9	2.1		

Note: Totals may not add due to rounding.

Source: Department of Finance (2007), *Economic Statement*, 30 October and OECD, MTB83 database.

income taxation with the same requirement to adopt the federal tax base, though Ontario has agreed to sign such an agreement which will be applicable beginning in the 2009 taxation year.

- In the government's overall strategy document, entitled *Advantage Canada* (Department of Finance, 2006), the government commits to creating a tax advantage, among others, by: delivering on its commitment to reduce the goods and services tax (GST) rate to 5%; reducing taxes on savings, including capital gains, to make them more competitive with tax treatment of savings in other countries; establishing the lowest tax rate on new business investment in the G7; helping low-income Canadians over the "welfare wall" by implementing a Working Income Tax Benefit; and continue reducing personal income taxes to make the tax system fairer so as to attract and retain high skilled workers.

The ambitious new programme of tax cuts is to be commended, as it clearly reduces the “excess burden” of taxation (*i.e.* the amount by which the cost to society of each dollar in tax raised actually exceeds that one dollar, insofar as the tax distorts economic choices and causes production and/or welfare to shrink). Even so, it is valid to ask whether this golden opportunity for achieving useful tax reforms is being well exploited. The cumulative 2007-13 federal tax cuts, being divided roughly evenly among business, personal and consumption taxes, appear to be broad-based and thus may be wise in a political economy sense. However, it is unclear whether such a use of scarce budget funds is as effective in boosting long-run social welfare as it could be. In general, business tax cuts are best for economic efficiency, since such taxes are thought to carry a high excess burden, while GST cuts not so much.

The Department of Finance has estimated rankings of the main categories of taxes according to the economic harm they do, and conversely, to the gains from reducing them (Box 1). Taxes on capital are the most distortive, because they directly reduce savings, investment and growth. The wealth and income tax cuts going to business should thus account for more than half of total eventual welfare gains (and two-thirds of the overall boost to long-run GDP) from the federal tax-cut package, even though costing less than one-third of it. It is in this sense fortunate that the provinces have responded well to federal incentives to cut their own, equally distortive, capital taxes, boosting expected efficiency gains further. The personal income tax cuts are somewhat larger than those for corporate income in terms of budget cost, and, being focused on low-income groups, they improve work incentives, but give rise to only about half the expected welfare benefits because labour supply is relatively less price sensitive than is capital. The biggest share of the tax-cut pie, some 40%, goes to the federal GST (a consumption tax), but it delivers less than a fifth of the total ultimate welfare gain, which also remains modest on a per capita basis. Had the government conditioned its GST cuts on equivalent shifts to VATs from provincial retail sales taxes (RSTs), which are estimated to fall 40% or more on business inputs (Smart, 2007), the resulting net gain could have been perhaps quadrupled with welfare gains from the overall tax cut programme almost doubled.⁷ Even though such calculations are rough and impressionistic, they help to set the stage for the analysis of Canadian tax policies that follows.

Issues in business tax competitiveness

A top tax policy issue is the comparatively high effective rate of corporate capital taxation, which reduces Canada’s attractiveness as a place to invest. A relatively high statutory corporate income tax rate also reduces its attractiveness as a place to report profits. The federal government’s programme goes a long way to remedy this situation. However, provincial retail sales taxes still penalise business inputs. Also, federal and provincial targeted tax reliefs have been on the rise, distorting the playing field within Canada while preventing base broadening and deeper statutory rate cuts. On the other hand, where there are large and clear social spill-overs from private behaviour, tax interventions – tax relief in the case of beneficial activities like R&D and tax surcharges in the case of negative activities like polluting emissions – to correct the failure of markets to internalise these effects can be a first-best solution.

7. The total dollar amount of tax relief achieved by 2012-13 for each tax in Table 3 was multiplied by the per dollar welfare (or GDP) gain shown in Table 4. This gives an estimated \$8 billion long-run welfare gain from the \$15 billion in business tax cuts (both corporate income and capital taxes, assumed to have respective assumed weights of 75 and 25%); \$3½ billion from the \$11 billion in personal income tax cuts; and \$1½ billion from the \$14 billion in GST cuts. Replacing the provincial retail sales tax by a VAT in the full amount of the federal GST cuts, and assuming that roughly 40% of the RST falls on capital inputs, would imply a net \$6 billion gain.

Box 1. Differential economic efficiency costs of capital, labour and consumption taxes

Baylor and Beauséjour (2004) have calibrated and simulated a dynamic general equilibrium tax model for Canada in order to arrive at comparative estimates of the marginal efficiency costs (MEC) of seven main categories of taxes. As with most such models found in the literature, taxes on savings and investment are found to carry far greater MECs than wage and consumption taxes, with strong implications for the optimal tax mix. In addition, generalised investment incentives are found to be highly effective welfare- and growth-boosting measures. The key results are the following:

- Cuts in personal capital income tax and in capital goods sales tax, as well as increases in capital cost allowances (CCA) on new capital, are by far the most beneficial: each dollar of reduction in such taxes implies long-run welfare gains of 1.3 to 1.35 dollars. A higher after-tax marginal product of capital raises savings and investment and leads to a higher capital stock, hence greater output, income and wealth. It likewise stimulates labour supply, because the real wage rises along with the capital stock.
- An equivalent cut in the corporate income tax produces only 0.4 dollars worth of welfare gains, partly because it also reduces the value of deductions (notably CCA and interest on debt). Another reason for the lower impact is that some of the gains accrue to foreign owners of capital (it is a source-based tax), whereas changing the personal capital income tax (a residence-based tax) affects only domestic residents. The gap with the sales tax on capital goods and CCA largely reflects the fact that these measures focus entirely on new investment so that, unlike the corporate income tax, there is no windfall gain to existing capital.
- Taxes on labour (payroll tax) appear to be considerably less distorting, with estimated long-run welfare gains of only 0.15 per dollar of wage tax reduced. In part this reflects that labour supply is relatively less sensitive to changes in the real wage than investment is to changes in the cost of capital. Increased demand for work due to higher after-tax wages raises the marginal product of capital and, hence, the demand for capital, especially in labour-intensive industries.
- Consumption taxes are slightly less distorting still, providing 0.13 dollar of welfare gain per dollar of tax cut, *i.e.* they are the most efficient type of taxes. A consumption tax cut, like a wage tax cut, raises the real after-tax wage, but only in terms of non-housing goods (housing is not subject to the tax). It will again induce a positive labour-supply effect, increasing the marginal product of capital and capital formation in the non-housing sector as compared with a large decline in housing capital.
- An alternative metric to evaluate the impact of taxation on the economy is the impact of tax reductions on the steady state levels of GDP. While the GDP measure provides a more familiar concept, it has the drawback of not taking developments during the transition into account. Nevertheless, the key results continue to hold, and the relative ranking of the different measures are similar under both metrics. The main difference is that tax reductions that boost both domestic and foreign investment (particularly the capital and corporate income taxes) tend to be relatively more effective in terms of GDP impacts.

To be sure, the model does not provide definitive answers. Some of the channels through which tax policy affects the economy are not modelled, and these seem in particular to understate the efficiency gains from corporate income tax cuts. For example, income shifting abroad (considered by many to be a main reason for corporate income tax reductions) is not modelled. It is also assumed that the domestic resident is the marginal investor, but, if instead it is a tax-exempt foreign investor (as in a highly open economy), then the potency of personal capital income tax cuts diminish while that of corporate income tax cuts would rise. Another ignored benefit of corporate income tax cuts is (according to some studies) relatively large effects on R&D investments, which generate substantial positive spill-overs.

Table 4. Long-run economic well-being from revenue-neutral tax reductions¹

	Welfare gain per dollar tax reduction	Impact of tax reduction on GDP level ²
Sales Tax on Capital Goods	1.3	3.1
Personal Capital Income Tax	1.3	3.4
Capital Tax	0.9	3.6
Corporate Income Tax	0.4	1.9
Average Personal Income Tax	0.3	1.3
Wage Tax	0.2	0.7
Consumption Tax	0.1	0.2
Capital Cost Allowance	1.4	4.4

1. The revenue loss is assumed to be recovered through lump-sum taxation

2. Percentage change in steady state GDP for an *ex ante* 1% of GDP tax reduction.

Source: M. Baylor and L. Beauséjour (2004), "Taxation and Economic Efficiency: Results from a Canadian CGE model", Department of Finance, *Working Paper 2004-10*.

Effective tax on capital: from highest to lowest in the G7

Only a few years ago Canada imposed the heaviest effective tax burden on business investment in the OECD and one of the highest in the world (Table 5). But since then, corporate tax cutting commitments by a succession of federal governments have been implemented. As measured by the marginal effective tax rate (METR) on capital, Canada moved from 2nd highest of 81 countries in 2005 to 5th highest in 2006, then by 2007 down to 11th place, still some 10 points above the OECD average but only in the mid range of the G7 countries.⁸ A critical medium-term goal the government has set for itself is to fall to the bottom of the G7 business tax rankings. The federal measures already announced would just be sufficient to bring this about, assuming that other G7 countries do not announce any new measures of their own. Besides the ongoing deep cuts in statutory corporate income and capital tax rates, capital METRs have been reduced by better alignment of capital cost allowances (CCA) with true economic depreciation rates of assets, especially as technology developments may have shortened the useful lives of some equipment, notably computers, relative to the past. (CCAs going beyond true economic depreciation would lower METRs further, but would be worse for allocative efficiency).

A key reference point for Canada is the United States, against which Canada seeks to increase its business tax advantage to 9 percentage points by 2012 (against a 2½ percentage point disadvantage in 2005). The lion's share of this advantage would reflect a sharply lower statutory tax rate in Canada as a result of its cuts. Otherwise, a comparatively less onerous sales tax on capital inputs in Canada would be offset by fewer capital taxes and more generous depreciation and inventory-accounting treatment in the United States. The United States allows companies to choose either FIFO or LIFO inventory accounting for tax purposes. Canada allows only FIFO accounting, which effectively implies using historical costs to value inventories. In the presence of inflation, this would understate the actual cost of carrying inventories, increasing the tax bill and the METR. Canada has rejected LIFO accounting, however, and this is

8. The METR is the amount of corporate income and other capital-related taxes (sales tax on capital purchases, asset and net worth taxes, stamp duties on securities, and taxes on contributions to equity) paid by a business as a percentage of pre-tax profits for marginal investments. The effective tax burden takes into account not only the tax rate but also the measurement of the base.

consistent with its tax system generally, which does not take inflation into account. In any event, Canada's commitment to low inflation should keep this tax disadvantage to a minimum.

Table 5. Marginal effective tax rates on capital by country

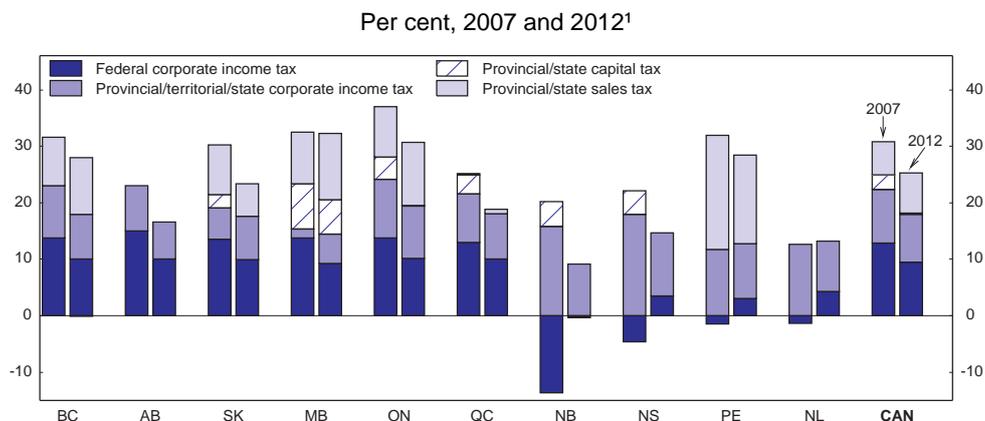
	Per cent						<i>Memo:</i> Statutory corporate income tax rate 2012 ¹
	2005 Average	2006 Average	2007			2012 Average	
			Manufacturing	Services	Average		
United States	36.7	37.8	34.7	40.1	37.8	36.9	38.1 (38.5)
Japan	30.4	31.3	35.2	30.4	31.3	31.3	41.9
Germany	36.1	35.7	36.9	35.3	35.7	29.7	30.2 (37.0)
France	33.0	31.9	33.0	31.7	31.9	31.9	34.4
Italy	23.4	23.1	21.8	23.4	23.1	18.7	31.4 (37.3)
United Kingdom	28.5	28.8	24.4	29.8	28.8	26.9	28.0
Canada	39.1	36.6	23.1	36.4	30.9	25.2	27.3 (34.2)
Australia	23.4	26.7	27.7	26.6	26.7	26.7	30.0
Korea	31.7	31.5	32.8	31.0	31.5	31.5	27.5
Mexico	15.6	13.7	17.1	12.1	13.1	13.1	13.1
New Zealand	25.1	28.5	29.9	28.2	28.5	25.7	30.0 (33.0)
Norway	21.0	23.5	25.8	23.2	23.5	23.5	28.0
Brazil	39.1	36.6	37.6	36.6	36.6	...	...
China	47.2	49.0	48.5	46.8	47.1	...	...
Hong Kong	5.8	5.6	3.6	6.2	5.6	...	...
India	24.6	29.5	28.8	30.1	29.8	...	...
Russia	36.3	35.7	38.0	34.9	35.7	...	...

1. The numbers in brackets denote the statutory CIT rate for 2007, if it is higher than that scheduled for 2012.

Source: J. Mintz (2006), "The 2006 Tax Competitiveness Report: Proposals for Pro-Growth Tax Reform", *C.D. Howe Institute Commentary*, No. 239, September; J. Mintz (2007), "2007 Tax Competitiveness Report: A Call for Comprehensive Tax Reform", *C.D. Howe Institute Commentary*, No. 254, September; and D. Chen (2007), "Flaherty's Missed Opportunity", *C.D. Howe Institute e-brief*, December.

It is probably optimistic to assume that Canada's comparator countries will stand still on tax reductions until 2012, given the intense global competition for increasingly mobile capital. Therefore, to be sure to achieve the government's objective, provinces need to do their "fair share" in the national effort to lighten business taxation. As proposed in the government's strategy document (*Advantage Canada*, 2006), this result could be achieved by: *i*) reductions in provincial statutory rates parallel to the federal ones; *ii*) elimination of all provincial capital taxes; and *iii*) conversion of all remaining provincial retail sales taxes into a federal-type VAT, or so-called harmonisation, which by definition exempts business inputs. All provinces plan to eliminate their general capital taxes by 1 July 2012, and most have already legislated the phase-out. Several of these provinces have responded to the federal incentive that encourages provinces to eliminate their capital taxes as quickly as possible. However, there has as yet been no progress on VAT harmonisation, and sales taxes will continue to add significantly to business capital costs in the five provinces with RSTs (Figure 4). Encouraging the provinces to go in the direction of such harmonisation is therefore appropriately a top priority of the federal government.

Figure 4. METRs on capital investment by province



1. In calculating the METRs, different assumptions are used by the Department of Finance (2012 data) and by the C.D. Howe Institute (2007 data), which may give rise to slight discrepancies.

Source: Department of Finance (2007), *Economic Statement*, 30 October; and D. Chen, J. Mintz and A. Tarasov (2007), "Federal and Provincial Tax reforms: Let's Get Back on Track", *C.D. Howe Institute Backgrounder*, No. 12, July.

Even without VAT harmonisation, by 2012 Canada will have managed a remarkable reduction in the marginal effective capital tax rate, by more than one-third from its 2005 peak (from 39 to 25%). This will result in a decline in the cost of capital that should stimulate productivity-enhancing capital-for-labour substitution and crowd in previously unprofitable investment projects. If the ultimate impacts of tax cuts are large, as some studies predict;⁹ then the resulting expansion of the corporate income tax base might help pay for part of the rate cuts. This process cannot be without limit, however. Mintz (2007), hypothesising a non-linear effect in cross-country analysis, derives a "Laffer curve" relationship, suggesting a revenue-maximising corporate income tax rate of around 28%.¹⁰ As Canada plans to go to a 25% rate by 2012, there would be a small net loss of tax revenues relative to that maximum, but a significant net gain compared to the old tax rate of 39%.¹¹ Mintz nonetheless argues for a further reduction to 20%, since the economic efficiency gains of doing so would far outweigh the added net budget cost.

Non-neutralities due to selective tax reliefs

The contribution of the tax cuts to productivity and growth will in the end depend not only on boosting the level of investment but also on its efficient allocation. Insofar as tax cuts may be targeted on selected industries or firm types, they could be squandered in relatively less efficient investments. Preferential tax policies, *i.e.* special low rates and deductions, also complicate the tax code, raising costs

9. Mintz (2007) reports estimated elasticities of real investment with respect to the cost of capital of perhaps 1 or more; Parsons (2008) estimates that a 10% reduction in the tax component of the user cost of capital is associated with an increase in the capital stock of as much as 0.7%.
10. Dahlby and Ferde (2008) provide a novel cross-provincial analysis suggesting that a 10 percentage point cut in a province's corporate income tax rate is associated with up to a 2 percentage point increase in the per capita GDP growth rate. An equivalent reduction in the top personal income tax rate is associated with a 1 point increase in per capita GDP growth. Furthermore, they find a "Laffer curve" effect in the corporate tax (revenues are maximised at around a 12-14% provincial tax rate) but not in the personal income tax.
11. The budget projections assume no such tax-base feedbacks, which therefore constitute an upside risk. Also, it should be noted that the Mintz outcome is a function of what other countries are doing. If they cut rates, then the revenue-maximising rate could fall to below 28% so that 25% may entail no revenue loss after all.

and creating opportunities for rent seeking and tax avoidance. In general, non-neutralities in pursuit of extraneous goals (largely shaped by politics and lobby groups) erode the tax base and reduce investment quality. They are often counter-productive and hugely expensive in opaque ways.

In Canada, a substantial tax rate reduction, some 16 percentage points, is given to small firms (Table 6). The small business rate is the third largest federal corporate tax expenditure and the seventh largest overall (see Table 7). Furthermore, small firms can claim federal R&D credits at a rate of 35% against only 20% for large firms.¹² Owners of shares in small firms can claim a lifetime capital gains tax exemption of CAD 750 000. A number of other OECD countries allow such preferences, but Canada's is particularly large and the qualifying ceiling for taxable income is especially generous (Johansson *et al.*, 2008). Canada also seems to be unique in allowing only domestically-owned firms to have access to the lower rate, though this restriction may not be binding (foreign-owned firms tend to be large). Small-firm tax breaks are often considered as compensation for financial-market information asymmetries and other factors making it hard for small and new firms to raise money. However, it is not clear that a tax preference is the most efficient way to address this market failure, or money wisely spent. Previous OECD *Surveys* have considered it to be a serious distortion, reducing firms' incentives to grow to the optimal size for scale economies, while also creating opportunities for personal and corporate tax avoidance.¹³ Johansson *et al* (2008) furthermore presents evidence that reducing the CIT for large firms would produce far more growth benefits than reducing it for small firms, in part because profitability of the latter is too small to be affected very much by corporate income taxation in the first place.

Table 6. Corporate income tax rates for large and small firms

	2006	2012
General rate		
Federal	22.1	15.0
Weighted provincial average	12.2	12.6
Total	34.3	27.6
Small business rate		
Federal	13.1	11.0
Weighted provincial average	5.4	5.4
Total	18.5	16.4

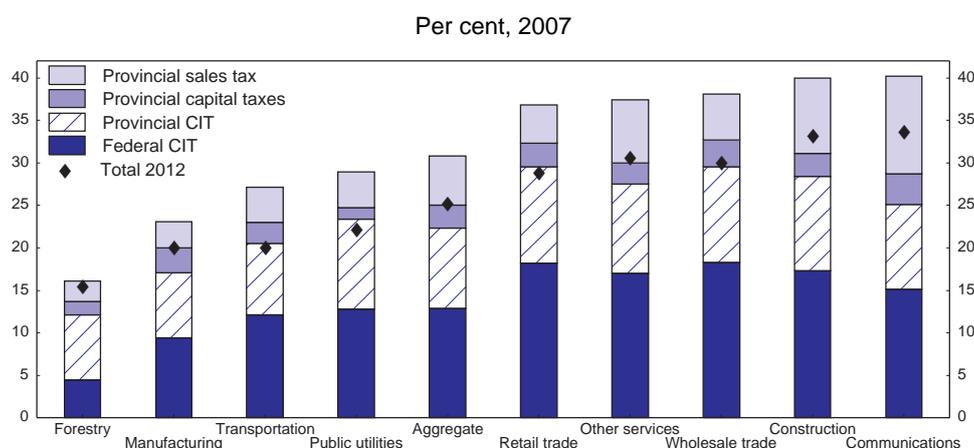
Source: Department of Finance.

12. In the 2008 budget, the definition of what constitutes a "small" firm was eased in the case of access to the SR&ED enhanced investment tax credits: the ceiling was raised from CAD 15 million of taxable capital to CAD 50 million. However, for the lower corporate income tax rate, the limit of CAD 15 million in taxable capital remains.
13. According to Mintz (2008), high-income investors can split income with other family members by forming small business corporations rather than by earning salary income. Employees of large public companies create private management companies so that their shares may be eligible for the CAD 750 000 capital gains exemption, reducing taxes on their employment income. Another typical arrangement in the high-tech community is for employees to quit large companies in order to form their own start-ups, in part so as to increase R&D credits. There are safeguards against the behaviours identified by Mintz, though: the lower tax rate for small businesses is restricted to the active business income of a Canadian-controlled private corporation; passive or investment income is not eligible for the preferential rate. In addition, integration between the corporate and personal income tax system through a refundable tax ensures that there is no tax advantage to investing through a corporation as compared to an individual investing directly.

Measures have recently been taken to reduce these disincentives. The Canadian government, like some others in the OECD such as the United Kingdom, is moving away from small-firm tax-rate relief in an effort to reduce the standard corporate tax rate further. It is focusing its ongoing tax cuts on the general corporate rate and allowing only smaller reductions for the preferential small business rate. The result will be a laudable (75%) reduction of the federal large-small firm tax-rate differential between 2000 and 2012. Taking all levels of government into account, though, this differential remains large (over 11 percentage points), as targeted tax cuts for small business are continuing at the provincial level.¹⁴ Convergence at the federal level should thus be speeded up, and provinces should follow this lead.

Other types of targeted federal and provincial tax relief are suggested by highly variable effective tax rates on capital across sectors (Figure 5). Market services – increasingly the main source of productivity growth and comparative advantage of OECD economies – are strongly disadvantaged by the tax system relative to manufacturing, public utilities and natural resources. Indeed, the tax subsidy given to manufacturing, relative to both services and the overall economy average, substantially exceeds that in any other developed or emerging market country examined in Table 5. Capital-intensive market services such as construction and communications are hard hit by the incidence of provincial retail sales taxes, mainly because special exemptions are given to manufacturing and public utilities. High taxation of financial services (included in “other services”) could result in higher lending margins (especially as this sector is not highly competitive), reducing savings and investment in the economy (Dahlby, 2005). Provinces are indirectly affected by these sector differences according to their production mix or by direct federal investment credits to lagging regions on the Atlantic coast (see Figure 4).¹⁵

Figure 5. METRs on capital investment by industry



Source: D. Chen, J. Mintz and A. Tarasov (2007), “Federal and Provincial Tax Reforms: Let’s Get Back on Track”, *C.D. Howe Institute Backgrounder* No. 12, July; and D. Chen (2007), “Flaherty’s Missed Opportunity”, *C.D. Howe Institute e-brief*, December.

It seems important that the government wind down generous tax preferences to “traditional” sectors like mining, forestry and manufacturing for the efficiency and competitiveness reasons noted above. However, discretionary tax reliefs are in some cases even being enhanced. In the last two years, credits have been adopted or enhanced at federal and provincial levels alike for sports, transit passes, film making,

14. A notable exception is New Brunswick, which is boosting its small business rate from 1% to 5%.

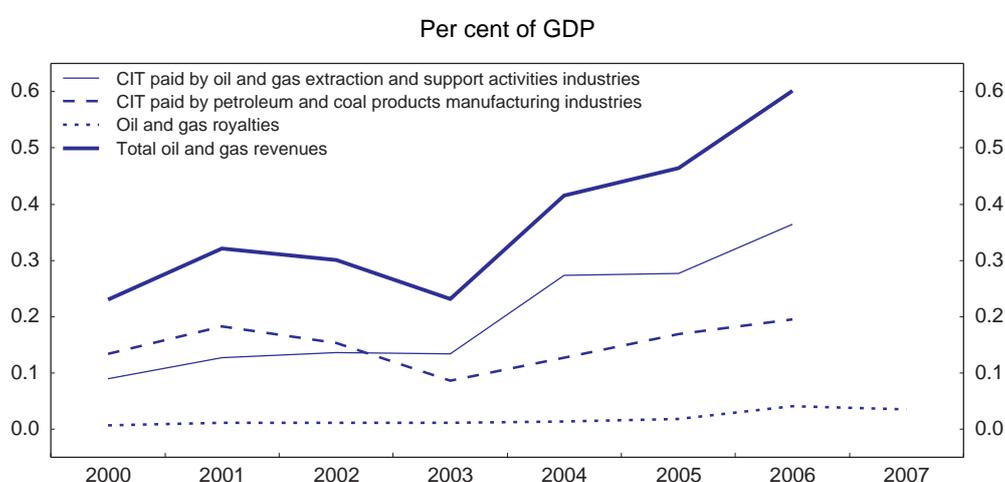
15. Variations in the provincial CIT component of the METRs are less indicative of tax non-neutralities *per se* on account of autonomous provincial tax-policy setting. However, horizontal tax competition may keep tax preferences from varying too widely across provinces, putting an effective check on “autonomy”.

research, labour training and manufacturing and forestry equipment (Chen *et al.*, 2007). The 2007 federal budget provided for a temporary two-year write off for capital equipment for manufacturing which was extended for another three years in the 2008 budget.

The 2007 and 2008 federal budgets achieve a better alignment of CCA with the economic lives of assets, which goes in the direction of a more efficient CIT, namely by increased CCAs for non-residential buildings, computers, natural gas pipelines and other assets. Accelerated CCAs for clean energy might also be viewed as a socially desirable tax intervention (though a carbon tax would be preferable; see Box 2). However, providing accelerated depreciation provisions for manufacturing alone is highly non-neutral, and even if it assists this sector in the light of the exchange-rate shock it has sustained, it could also retard the needed structural shift toward services. If adjustment assistance has to be given to the hard-hit forestry and manufacturing sectors, a more accountable way would be as explicit grants, which have to pass the annual appropriations process.

Oil-sands developments have likewise benefited from accelerated CCA, which is now being phased out. This non-neutrality may have contributed to overheating in the sector and the surrounding economy, now well lubricated by well over \$100/barrel oil. Thus, its announced elimination is highly appropriate, if overdue. However, tax preferences for the oil and gas industry remain (see Mourougane, 2008). The federal and Alberta governments should reassess such preferences, which would also be consistent with efforts to curb greenhouse gas (GHG) emissions, of which the energy sector is a major source. It would furthermore increase the contribution of the oil and gas sector to general government revenues, being more commensurate with the profits it generates than do the currently still modest amounts (Figure 6).

Figure 6. **General government revenues paid by the petroleum sector**



Source: Statistics Canada.

Some desirable tax interventions

This is not to say that targeted tax instruments can never be justified. In clear cases of externalities, tax credits or surcharges to alter private behaviour in desired directions, sometimes in combination with grants and regulations, may produce better social outcomes. A general rule is that they be applied equally to all firms and sectors across the board; otherwise, non-neutral tax preferences could creep into the tax system ostensibly justified by externality arguments.

Tax subsidies to private research are used by virtually all OECD countries because of the existence of externalities and therefore under-investment in R&D in the absence of government support. R&D credits

figure among the top 10 federal tax expenditures in Canada (see Table 7), although multifactor productivity statistics have so far failed to show much of a payoff from all this spending (see OECD, 2008d). Canada's R&D credit scheme should thus be further evaluated for "value for money". Its impact is possibly diluted by giving small, Canadian-owned firms a substantially larger credit (Box 2).

Even though it has proposed a system of GHG emissions permit trading (see Mourougane, 2008), the government should further consider a tax on carbon emissions on excluded sectors. This would internalise more fully the expected costs to future generations of Canada's current contributions to global warming. Existing environmental excise taxes could be broadened to include other energy sources in order to more fully account for emissions. The rate of tax should vary with the environmental damage that the various energy sources inflict. It would also need to be set at an appropriate level to discourage emitting activities and encourage the development of cleaner technologies, and not be viewed as a revenue raising device.¹⁶ One way for government to discipline itself and to gain political acceptability would be to announce one-for-one reductions in other (business) taxes as revenues are collected under the proposed emissions tax, on the model of British Columbia (Box 2).¹⁷

Box 2. Correcting for social externalities: R&D credits and GHG emissions taxes

R&D credits

R&D credits are a prominent example of a justifiable tax subsidy, one that is widely used in OECD countries on the premise that R&D provides benefits to society at large (knowledge spill-overs) beyond those to the individual firm undertaking the investment. They are *a priori* more efficient than research grants, which are administratively costly and may involve government picking winners, though basic research usually taking place within the private or non-profit university sector may require a grants approach. Administration of a tax credit is not costless either as vigilance is required to ensure that the credit is not abused by firms reclassifying sundry spending as "R&D".

Canada offers one of the most generous rates of R&D tax assistance among a large group of OECD and emerging market countries (Johansson *et al.*, 2008). The effective marginal subsidy (reduction in the METR) for large firms is close to 120% (as compared with 30% in the United States; see Lester *et al.*, 2007). Canada's high ranking reflects the generous federal Scientific Research and Experimental Development (SR&ED) credit on eligible current spending (mostly wages) along with provincial add-ons. Work by Parsons and Phillips (2007) has evaluated the efficacy of the SR&ED credit for both large and small firms, finding a positive welfare effect (including the non-negligible costs of administration) of about 11 cents per dollar of foregone revenue. This results from an estimated 30% cost of additional distortive taxes offset by a 41% return to additional R&D spending. This result does not differentiate between nominal and real gains, so that wages of R&D workers could in principle be bid up by the public subsidies in the case of supply constraints in the form of a lack of professionals with the right skills on hand.

Currently, 32% of the total value of SR&ED tax credits goes to small firms who are likely to account for a much smaller share in total-economy R&D, although the taxable capital ceiling for access to such credits has just been raised significantly. Future research should look into whether unifying the tax credits for small, Canadian-owned and large firms – respectively 35 and 20% – at the lower level would raise the public's rate of return insofar as large and foreign firms may be better placed to undertake R&D investments. OECD research suggests that fiscal incentives can be effective when firms face financial constraints and tend to provide a stronger stimulus than direct government subsidies, but their overall impact on innovation may be small (Jaumotte and Pain, 2005).

16. As seen with alcohol, tobacco and gambling levies, the tax rates are often set to achieve revenue targets, rather than dissuade people from consuming products. Governments become reliant on the revenue so that other social objectives can be compromised (Mintz, 2007). That said, it is not clear that raising revenue from Pigouvian taxes is a bad thing.

17. This, in principle, would keep the policy focus on reducing emissions while also financing reductions in highly distortive taxes, creating a win-win situation. The EU's approach is along such lines; see Norregaard and Khan (2007). However, the received wisdom in the OECD is that such a "double dividend" is unlikely to exist, except in very special circumstances (see OECD, 2006c, pp. 70-72).

GHG emissions taxes

Greenhouse gas (GHG) emissions taxes illustrate the converse need to discourage private actions that generate negative externalities. Discriminatory taxation of GHG-emitting activity is one instrument that can help internalise the future costs of global warming. However, businesses are loath to accept new taxes and politicians to propose them. Consequently, grants are often extended to explicitly subsidise the development of renewable energy supplies, but this is an inferior solution, since it is better to tax “dirty” energy than to subsidize clean forms (Norregaard and Khan, 2007). Carbon taxes are likely to provide a considerably more powerful incentive to develop “green” technologies than targeted grants.

Other market instruments like cap-and-trade schemes set limits on emissions above which companies would have to purchase credits from other companies that are below their limit. Experimentation with such schemes thus far suggests that the initial design of government auctions and subsequent market pricing of permits can be problematic. Future permit-price uncertainty also implies major investment risks. Trading schemes’ coverage is also often inadequate, since it is practicable to involve only large emitters, omitting households and small businesses. The federal government has committed to permit trading as the market-based pillar of its approach to GHG emissions control (Mourougane, 2008).

Carbon taxes seem in a number of ways to be a superior solution to permit trading, though future permit trading may bring other advantages (OECD, 2008d). Taxes give clear, long-term price signals, in contrast to price volatility of permit trading schemes, making it easier for firms to plan ahead to cut emissions. They provide governments with a revenue stream that could be used to cut other distortive taxes. They also offer fewer opportunities for political favouritism and corruption, and because they do not rest on private property rights, are easier to adjust when needed. In any case taxes seem necessary for sectors excluded from the permit trading scheme. Taxes on transportation fuel should prove a better approach than mandated product standards (Victor and Cullenward, 2007).

Indeed, the province of British Columbia may have shown the way forward for the rest of Canada in its 2008 budget, which imposed taxes on GHG emissions from fossil fuel combustion and legislated that this carbon tax revenue will be returned to taxpayers through reductions in other taxes. Some experts consider that applying such a plan nation-wide would produce revenue gains that could be dedicated to deep income tax cuts (Jackard, 2008). It would still be important to harmonise such a tax with other environmental policies, at both federal and provincial levels, notably to avoid multiplying the burden on business. Energy excise taxes already in place in Canada could be broadened to include other energy sources in order to more fully account for emissions, the rate of tax varying with the environmental damage that the various energy sources inflict, and allowing no exemptions for specific sectors or groups. However, a consumption basis exempting exports and taxing the energy content of imports is warranted.¹

1. This was recommended by the 1998 Technical Committee on Business Regulation. See Mintz (2007).

Cross border-tax competition and leakages

As a G7 country, Canada is not a “small” open economy, but next to its giant US neighbour with whom it has extensive trade, investment and production links, it is quite vulnerable to relative tax-rate shifts in two major ways. *First*, lower statutory tax rates in the United States would partially deplete Canada’s tax base insofar as multinational enterprises adjusted to minimise their tax liabilities. *Second*, if US effective tax rates fell, and Canada did not respond, the United States would become a more attractive location for many economic activities that can be sited in either country (McLure, 2005). The latter supposition reflects the fact that location-specific rents (such as size of market, agglomeration and network effects, infrastructure availability, labour quality, etc.) are a major underlying determinant of FDI flows and are presumably high in the United States, which can in principle set a correspondingly higher tax rate. By the same token, Canada can expect to reap considerable benefits from both real resource and declared profit inflows in response to competitive reductions in its own statutory and effective rates.

Tax competition for FDI flows

Foreign investors are likely to respond to tax incentives, perhaps even more so than domestic investors, as such capital is by its nature “footloose”. But here the interaction of home and host countries’ tax codes including relative effective tax rates,¹⁸ withholding tax arrangements and tax treaties all matter, as do taxes in alternative host-country jurisdictions. Even if labour costs, in turn a function of the labour tax wedge, and business environment factors may be more important determinants of FDI location decisions (Hajkova *et al.*, 2006), the magnitude of Canada’s realised and prospective corporate tax cuts is such that even a marginal response by foreign investors could involve a significant and highly desirable inflow of capital into Canada – provided that the foreign direct investment regime stays open and that authorities not over-react to fears of a “hollowing out” of Canadian business.

International tax arbitrage

Tax arbitrage – when an investor pays tax-deductible interest to finance a tax-preferred investment – is generally countenanced by the tax law but could go beyond interest deductions to include, for example, aggressive transfer-price manipulation and debt-placement strategies to shift profits to low-tax countries and incur debts in high-tax countries like Canada where the value of their deductions would be higher. OECD (2006b) noted that a significant part of share price rises associated with mergers and acquisitions arises from the possibility of taking large tax deductions for the heavy proportion of debt used to finance these takeovers. Lower statutory taxes will greatly reduce the profitability of such tax arbitrage, even turning it to Canada’s advantage and helping to reduce revenue losses. Canada has recently put an end to certain types of tax arbitrage and is also stepping up information exchanges and other forms of co-operation to discourage international tax planning (Box 3).

Box 3. Measures to deal with abusive international tax planning

The international tax measures in the 2007 federal budget set out important initiatives to deal with aggressive international tax planning by multinational groups and the use of secrecy laws in other jurisdictions that facilitate tax evasion in Canada, both of which have led to significant leakage in Canada’s tax revenues. These include proposals to respond to multinational groups’ use of low-tax jurisdictions and other avoidance structures as a means of obtaining two deductions for the same financing expense.

In respect of the use of secrecy jurisdictions, Canada has announced that it will not conclude new tax treaties, or update an existing tax treaty, unless the treaty partner country agrees to abide by the highest international standards of transparency and exchange of information for tax purposes established by the OECD. In addition, a jurisdiction that has a tax information exchange agreement (TIEA) with Canada will be granted an important benefit that up to now has been reserved for tax treaty partners: active business income earned there by the subsidiaries of Canadian companies will be eligible for Canada’s exempt surplus system, so that dividends paid to the Canadian parent from business income will not be subject to tax in Canada. Active business income earned in a jurisdiction that has not agreed to a TIEA within five years of the beginning of negotiations (and does not have a tax treaty with Canada), on the other hand, will be taxed in the hands of the Canadian parent company as the subsidiary earns it. This measure should at once protect the Canadian tax base, while expanding the number of jurisdictions in which Canadian firms can earn business income without attracting Canadian tax. Canada’s public endorsement of the OECD’s standards of transparency and exchange of information in tax matters should be applauded in this regard, as it shows that they can be accommodated within a competitive international tax system.

18. According to Devereux *et al.* (2002), the relative average effective rate (which, for infra-marginal investment, is close to the statutory tax rate) is likely to determine the location decision whereas the relative marginal effective rate will matter for the decision to expand investments in a country once there.

Rethinking the corporate income tax

Canada's decision to stake out a strong tax advantage *vis-à-vis* the United States and other G7 countries makes a great deal of sense. At the limit, though, such strategies could drive capital tax rates toward zero, in the prototypical "race to the bottom", especially in small open economies.¹⁹ Some experts are predicting the demise of the corporate income tax for that reason,²⁰ and others advocate its abolition by shifting all capital income taxation onto individuals. However, there are reasons to maintain a corporate income tax, primarily its usefulness as a withholding tax on personal income.²¹ Taxation of risky returns to entrepreneurship (with tax loss carry-forward and -backward provisions) may also be seen as a form of risk sharing by government (OECD, 2006b).

Nonetheless, the basic structure of corporate taxation may need to be made less prone to unintended consequences. Indeed, much of the tax literature has been aimed at this objective. Given high capital mobility and openness, the old idea of equal treatment of all income no matter what its source has given way to one of differential treatment of capital and labour income, notably under a consumption tax which exempts the "normal" return to capital altogether. The old distinction between debt and equity, increasingly blurred by financial innovations may need to be scrapped in the tax code, and the consumption tax and its variants accomplish this also.²²

Annex A1 examines some alternative theoretical corporate tax systems. Perhaps most promising are the destination-based flow-of-funds tax or the dual income tax which rigorously tax capital income on a consumption basis. In either case debt and equity would be taxed equivalently and cross border distortions would be smaller than they are today. However, such "fundamental reform" of the corporate tax is a radical step which Canada and indeed most other OECD countries have so far been reluctant to undertake.

Issues in personal taxation – balancing efficiency and equity

Canada's labour force participation rates are the fourth highest in the OECD, but high tax wedges that discourage work are a growing concern in light of labour shortages in many regions and prospective ageing. Indeed, participation by marginal groups is weak and that of older workers only average. Personal savings tend to be discouraged by income taxes but are critical for sustainable growth and public finances. The net benefits to education are also reduced by high marginal taxation of future earned income. Efficiency-enhancing tax reforms – to boost savings, work and human-capital investments – often reduce tax progressivity, however. Consumption-based taxes *cum* better targeting of tax reliefs to the needy (progressivity concentrated at the lower end of the income spectrum) could help resolve this dilemma.

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19. Economic theory suggests that the optimal rate of tax on capital income in the small open economy *is* zero: taxing the return to capital earned at source will distort its location. Domestic investment facing a world interest rate declines in response to the capital tax, business activity generating any mobile rents flows out, and the productivity of labour falls because of lower capital intensity of production. The tax falls entirely on (immobile) labour, as output prices are fixed on world goods markets. There are also incentives to shift profits to other jurisdictions.
 20. One of these is Roger Martin, Dean of the Rotman School of Management at the University of Toronto.
 21. With global capital markets, ownership of large corporations is often widely diffused throughout the world, and it would be very difficult to track down all the individual shareholders to collect the capital income tax. However, collecting tax on global corporate structures and innovative financial operations may not be so easy, either.
 22. Some problems are longstanding but exacerbated with financial innovations: the relief for debt finance, double taxation of dividends, and realized capital gains taxation give rise to distortions such as thin capitalization (over-leveraging and consequent bankruptcy risk), lock in of capital gains, unfairness to shareholders and new firms, and distortions in choice of firm legal structure.

Tax distortions on participation, work, effort and study

Taxes on wages increase the attractiveness of leisure or home production relative to paid work, but on the other hand they require more work in order to maintain income. The average effective tax rate enters into the labour supply decision at the extensive margin, *i.e.* the discrete choice of whether to participate and where (province or country). The marginal effective tax rate determines the work choice at the intensive margin: for the single worker, how many hours to put in; for the family unit, whether secondary earners should work and, if so, whether part or full time; for low-income or disabled people, whether to work rather than collect benefits; and for people eligible for retirement, how soon to withdraw. Demand for labour is reduced by employer social-security contributions, which must be paid on top of wages, but the market-clearing wage may fall, thereby ultimately absorbing all or part of this cost if the bargaining power of workers (and thus rent sharing) and public benefit systems are weak enough. Business taxes will also tend to be passed through into lower wages and productivity, especially in a small open economy, implying a double hit to workers' wages arising from taxation.

The tax wedge captures the effects of various labour taxes, namely social security and payroll charges plus personal income tax on final worker compensation. In Canada, the marginal wedge for the average wage ranges from around 40% to 60%, depending on family type – higher than in the United States but lower for some family situations than in Europe (Figure 7).²³ Empirical work points to a strong link between the tax wedge and labour-market outcomes: on average in the OECD, each 10 percentage points of extra tax wedge reduces labour input by up to 3% (Nickell, 2004). Bassanini and Duval (2006) show that the rise in Canada's structural unemployment rate between 1982 and 1993 overwhelmingly reflected a rising tax-wedge trend, as product- and labour-market regulations were at the same time being eased. But a declining tax wedge since the mid-1990s has helped to produce the opposite effect: the estimated structural unemployment rate has over the same period declined by some 1¾ percentage points, and actual unemployment rates have plunged thanks also to cyclical effects (see OECD, 2008d).

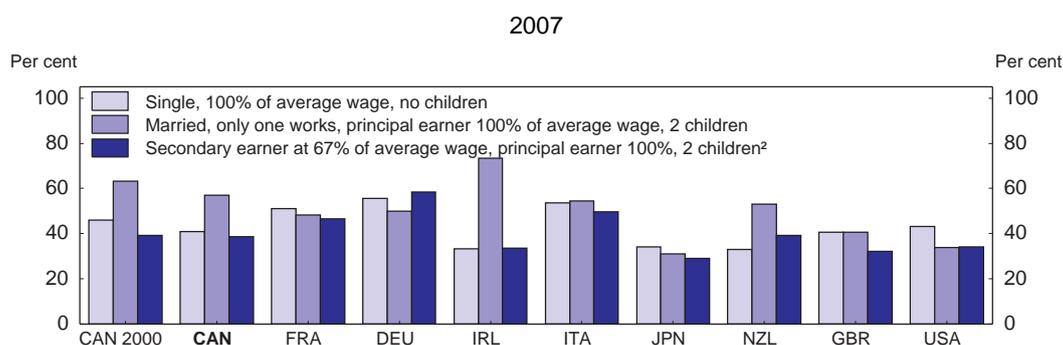
Most estimates show that by far the most elastic labour-supply response to the after-tax wage is that of married women, who provide a second family income but also face added opportunity costs in terms of child- and/or elderly-care expenses. Canada's tax system appears to do a good job in encouraging female participation, and indeed, given lacklustre productivity growth, rising female participation has been the mainstay of per capita real income growth over the last decade (see OECD, 2008d). Two events appear to have been pivotal in this regard. In the late 1980s, the federal spousal exemption was replaced by a non-refundable credit. This eliminated "jointness" of the individualised system, and, in response, female participation rose strongly for a time.²⁴ In the 1990s, tax cuts and benefit increases to lower income

23. The marginal wedge has been chosen as the basis for comparison because it corresponds more closely to the critical choices facing marginal groups in Canada: second-worker earnings as a supplement to principal-worker earnings, people graduating from collecting benefits to earned income, or retirees weighing the implicit taxation of an extra year of work due to foregone pension benefits. Nevertheless, average and marginal tax wedges are highly correlated and tend to show the same patterns.

24. Joint taxation is likely to distort the labour supply of women, as it subjects the secondary worker's earnings to the primary earner's higher marginal tax rate. Canada, like most OECD countries, has treated the individual as the unit of taxation since 1998 (the US maintains family taxation mainly for reasons of horizontal equity). But joint taxation can be mimicked under an individualised tax by dependent spouse deductions that are withdrawn as spousal earnings rise. See Crossley and Jeon (2007), who calculated that METRs for a treatment group of low-educated women married to high-earning husbands dropped on average by 17% as a result of the 1998 reform, in turn accounting for a 9-10 percentage point increase in their labour force participation. Tsounta (2006) shows that the secondary-earner tax wedge dropped by some 4 percentage points between 1996 and 2003, which in turn could explain at least 30% of the 5 percentage point rise in female participation in Canada over the same period.

families, in particular child benefits,²⁵ sharply reduced the tax wedge for second workers, and female participation shot up to nearly rival that of the Nordics. The secondary-earner tax wedge remains higher than in Japan and most other English-speaking countries but is considerably lower than in continental Europe. However, the 2007 federal budget raised the spousal exemption for the supporting spouse, and, even though by a symbolic amount, this step risks once again increasing the jointness of the system.

Figure 7. Marginal tax wedges on labour¹



1. Marginal tax rates covering employees' and employers' social security contributions and personal income tax with respect to a change in gross labour costs.
2. Marginal tax wedge on secondary earner captures the share of his/her earnings that goes into paying additional household taxes, calculated as $1 - (\text{increase in household net income} / \text{increase in household gross income})$, where the base case is the one-earner couple-earning 100% of average wage, in each case with 2 children.

Source: OECD, Taxing Wages database.

METRs capture disincentives of benefit withdrawals in addition to taxes on earned income

Particularly strong work disincentives afflict people eligible for social assistance, who face extremely high marginal effective tax rates as benefits are withdrawn with earned or pension income. In Canada, the growth of income-tested family supports to those on low incomes has led to sharply rising METRs: up to 100% or even more if taxes are levied at benefit-qualifying income levels, as in some provinces. Even without benefits, first-time job-seekers may be priced out of work and denied a chance to develop skills by high entry-level social-security charges combined with binding minimum wages. Low or negative returns to paid work for vulnerable groups – notably Aboriginals, the disabled, high-school drop-outs, new immigrants, lone parents and unattached males aged 45-64 – can keep them in relative poverty over a lifetime, and prevent important virtuous cycles for the economy as a whole from getting underway (Institute for Competitiveness and Prosperity, 2007).

Some OECD countries are trying to “include” marginal or first-time workers by reducing social-security charges. Canada has recently introduced a federal in-work tax credit, the Working Income Tax Benefit (WITB) and other refundable credits, notably for child care, coming on top of the 1991 GST credit which notionally offsets a portion of the GST paid by low- and modest-income families. Such “non-wasteable” credits are phased out as income rises. The US Earned Income Tax Credit, the inspiration for the WITB, has been successful in improving labour-market participation of low-income individuals as

25. This included introduction of the Canada Child Tax Benefit and Earned Income Supplement in 1992 and the National Child Benefit System, expanding on the Child Tax Benefit, in 1997. When the larger Child Benefit was integrated into the basic earned income supplement in 1997, the requirement that taxpayers earn income to qualify for the earned income supplement disappeared. See Poschmann (2008).

well as reducing poverty,²⁶ and it is by far the most important US federal assistance scheme, albeit a costly one. In Canada, provinces have the main competence for social benefits. These benefits have had the side effect of increasing METRs as they are phased out with rising earned income, undermining work incentives higher up the income range. The costs of working are even understated by the measured METRs, as they also involve the loss of non-cash benefits like free medical and dental services.

Marginal effective tax rates faced by low-income Canadians vary significantly across provinces and family types depending on their respective structures of income taxation and support. In some jurisdictions, METRs can reach 100% for families on social assistance, although the WITB partially offsets that as from an income of CAD 3000 per year. For Ontario, the largest province, the social assistance reduction rate has in recent years been reduced to 50% and the initial earning disregard eliminated.²⁷ This removes the sharp METR spikes at very low incomes observed elsewhere but pushes the problem out to modest incomes. Hence, Ontario METRs reach around 60 to 70% between yearly incomes of CAD 10 000 and 40 000 as some federal and provincial incomes-tested benefits are clawed back. They then fall to a trough of 35% between incomes of CAD 60 000 and 80 000 before stabilising at 46% at higher incomes, where they are not far above average effective tax rates (Figure 8). High marginal tax rates at middle income levels (where taxpayer density is also highest) continue to weaken work effort and/or induce tax planning and evasion practices, especially for the self-employed – in either case shrinking the tax base. On the other hand, labour-supply responsiveness to METR spikes might decline as income rises, as prospects for upward wage mobility also strengthen.

There seems to be scope for efficiency gains by reducing statutory tax rates all the way up the income scale. Phasing out cash benefits well before middle incomes are reached could also help, and, even if that pushes up METRs at lower incomes, this could be mitigated by applying the resulting savings to lowering income tax rates. Better harmonisation with provincial cash-benefit programmes could further reinforce work incentives of the federal tax credit schemes by smoothing out METR peaks.

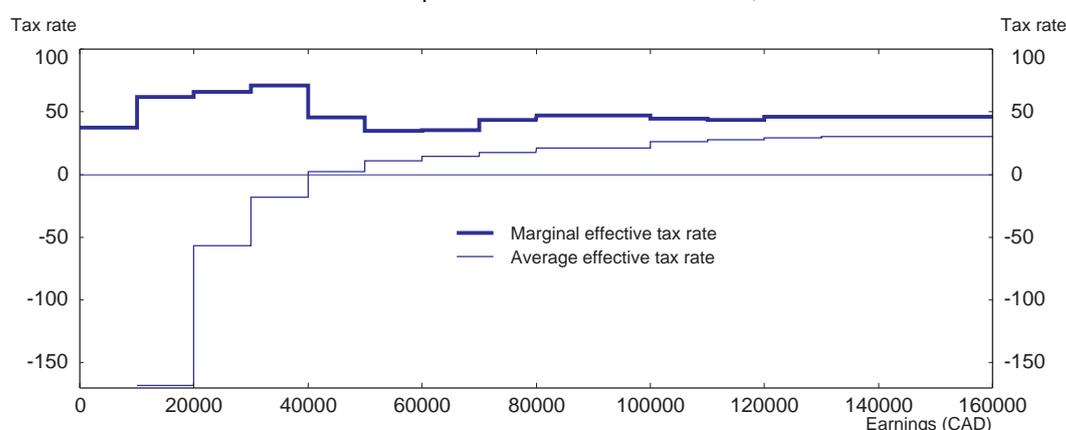
Acute labour shortages in booming areas like Alberta should elicit the growing participation of marginal groups while drawing migrants from other parts of Canada. However, as seen, METRs for marginal groups are too high. Those for unemployed workers in poorer regions like the Atlantic provinces may also be high, curbing their incentives to search for jobs, as Employment Insurance (EI) benefits are perversely higher and last longer where unemployment is higher. Even though labour mobility is already high and the factor shift in response to the commodity price boom has gone smoothly (see OECD, 2008d), it could be even better. *Going for Growth* (OECD, 2008a) has recommended cutting EI benefits in order to improve labour mobility, especially given that in-work benefits are now provided *via* the tax system. Regional policy goals should be pursued by more transparent and less distorting means.

26. Empirical evidence shows that the US EITC has positive effects on labour market participation, especially for single parents.

27. Ontario has also announced a major restructuring of its social assistance system to pay children's benefits through a new separate programme, the Ontario Child Benefit (essentially de-linking child benefits from the work status of parents to better protect children), to be integrated with the Canada Child Tax Benefit. This change, which starts in July 2008 and will be fully implemented in 2011, will have a considerable impact on EMTRs for these families, partially offsetting the muting provided by the 50% phase-out rate.

Figure 8. Marginal and average effective tax rates on earnings

One earner couple with two children in Ontario, 2007



Source: Finance Canada calculations.

High marginal rates may limit innovative capacity

METRs at higher incomes, which are correlated with the progressivity of the tax system, may distort incentives to invest in education. This weakens the impact of public subsidies for education (Mintz, 2006). Conversely, high average effective tax rates (likely to be highly correlated with METRs) reduce the opportunity cost of studying, but when combined with generous education subsidies, a perverse effect could be prolonged schooling and shortened working lives. OECD research suggests that the impact of taxes on tertiary education can be sizeable, including for Canada (Oliveira Martins *et al.*, 2007), so that reducing top marginal tax rates could encourage human capital investments. It may likewise be desirable to replace “middle-class-welfare” – type tuition tax credits by income-contingent loans (see OECD, 2007).

But sufficient demand for the resulting knowledge acquired, and of the right type, is also important. As high top marginal tax rates reduce the pay-off to risk-taking by individuals, reducing them could boost entrepreneurship and innovative activity in the economy. A lower tax wedge, as seen, should enhance Canada’s ability to attract FDI inflows, hence international knowledge diffusion that enriches domestic human capital development. In conjunction with corporate tax reform, greater openness to foreign capital will also spur market competition, providing the stimulant for enterprises to innovate and hence to demand research skills and managerial talent. It thus seems important to reduce top marginal tax rates – still the second highest in the G7 (see Figure 2) – in order to raise TFP growth.²⁸

Reducing tax disincentives to savings

Net household savings rates have fallen to historical lows in Canada. This partly reflects the long period of exceptionally easy monetary conditions, along with rising household wealth thanks to capital gains. Nevertheless, savings are critical to sustainable long-run growth, since they help to finance productivity-enhancing investment, even if Canada has had a surplus of national savings for many years and domestic investment can (up to a point) be financed by foreign savings. Equally important, a robust

28. Furthermore, labour taxes distort the price of capital relative to labour, affecting capital intensity and causing labour and capital to be combined in ways that differ from the most efficient technology available, thereby lowering production efficiency and MFP (OECD, 2008c). Presumably a too low capital-income tax would also create a bias toward capital-intensive production.

rate of personal savings underpins fiscal sustainability, because reformed public pension schemes rely increasingly on private pensions to supplement retirement incomes.

As with a labour tax, a tax on savings has a dual impact: it penalises future consumption relative to present spending (an inter-temporal distortion), reducing the incentive to save, but it also makes it necessary to save more in order to attain a target future level of wealth. METRs of 46% for top earners and 60% or more at lower incomes plus even a moderate inflation tax virtually wipes out the reward to saving, and this distortion increases sharply as the investment horizon lengthens.²⁹ In order to encourage more savings and investment, therefore, a large chunk of personal savings has been sheltered from tax.

Reduced taxation of shareholder income

Reduced taxation of shareholder capital income is practiced, as in many OECD countries, with the aim of curtailing the “double taxation” of corporate capital income. That is, post-tax corporate profits are either: *a*) distributed as dividends or *b*) reinvested as retained earnings, which in turn causes share values to rise – in either case giving rise to a further tax liability at the shareholder level. Thus, in recognition of prior corporate taxes paid on profits, dividends in Canada benefit from a corresponding tax credit,³⁰ while capital gains enjoy a one-half exclusion and are taxed only upon realisation rather than as they accrue. A capped lifetime capital gains exemption under the personal income tax is provided for farmers, fishermen and small business owners, and it was sharply raised in the 2007 federal budget. The dividend tax credit and half exclusion rate on capital gains together ensure that income from unsheltered equity investment is taxed at an overall rate that is roughly comparable to that on other forms of income, which by increasing tax neutrality between stock and bond investments reduces capital-market distortions. Such reliefs likewise help to “integrate” the CIT and PIT,³¹ though other possible non-neutralities across the two tax systems remain.³²

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29. Mintz (2006) gives the example of a 20-year government bond earning a 4% return, with a 60% marginal income tax rate and a 2% inflation rate, combining to give a post-tax real return of –0.4%. For 50-year horizons the theoretical literature has found the optimal capital tax rate to be zero (Auerbach, 2006).
30. Eligible dividends from large corporations benefit from a 30% combined federal-provincial tax credit after being grossed up by a factor of 45% (reflecting an average combined corporate tax rate of about 32%). Ordinary dividends from small corporations currently benefit from a 21% tax credit after being grossed up by a factor of 25% (reflecting an underlying corporate tax rate of 20%). Other countries like New Zealand follow a full (rather than notional) imputation system in which actual corporate tax paid that can be allocated to the dividend payment is deducted from the shareholder’s tax liability. While more accurate, this approach is also likely to be administratively burdensome.
31. The case for imputation or reduced taxation may be weakened by the fact that the effects of double taxation of dividends are fully capitalised in share prices; hence integration would only deliver windfall gains to (rich) shareholders without lowering the cost of corporate capital (Zee, 2005). Imputation also discriminates against foreign shareholders, which is why some European countries (following a European Court ruling) have chosen to drop it and instead lower their corporate income tax rates.
32. Nevertheless, such distortions may not be large. Canada’s tax system treats business income earned and distributed through a corporation, and that earned directly by an individual, in a fairly neutral manner. Even if corporations benefit from tax deferral on their retained earnings, it is only one among many factors that entrepreneurs take into account when choosing an appropriate business structure. In addition, passive or investment income in a Canadian-controlled private corporation, whether distributed or not, is taxed at 28% at the federal level, comparable to the top federal marginal personal income tax rates of 26 and 29%.

Near-consumption tax treatment of housing

Housing is far and away the major investment most people make. A true comprehensive income tax requires that individuals pay tax on imputed rental income from owner-occupied housing, while deducting their mortgage interest and maintenance and depreciation costs. Canada neither taxes imputed income nor allows mortgage interest and other costs to be deducted – in other words, largely consistent consumption treatment, though exempting capital gains upon sale. Explicit rental income from leased real estate is taxed on an income basis, *i.e.* allowing for depreciation and other costs including mortgage interest payments, while capital gains are taxed with a one-half exclusion as for shares. Property tax has to be paid at the provincial and local levels, and might be seen not only as a wealth tax but as a kind of user fee for local public services and amenities that maintain the value of the property and contribute to enjoyment of housing services. However, residential property tax may be set too low for this purpose (see below).

Since a consumption tax exempts the normal return to investment whereas an income tax does not (Auerbach, 2006), home ownership enjoys a tax advantage relative to renting and other non-sheltered investments, further increased by the exoneration of capital gains, which, as an economic rent, should be taxed under either basis. It is not certain how large the final advantage is, since the normal return (roughly the risk free rate of interest) is itself not very large, but imputed rent is more than that. What is clear, though, is that Canada's treatment avoids the big distortions found in many other OECD countries, namely blithely exempting mortgage interest payments while failing to tax implicit rents to owner-occupied housing (besides exonerating capital gains upon sale, often conditional on the purchase of a new home). Furthermore, near-consumption treatment of housing as well as most other types of savings (below) makes Canada look ready to move toward consumption-tax treatment of *all* savings.

Consumption tax treatment of qualified pension savings plans

Investors are able to shelter investment income from tax by investing in registered pension plans (RPPs) or registered retirement savings plans (RRSPs), up to a limit. Most forms of financial assets can be held in these accounts, and all incomes and losses are treated equally. The tax treatment is "EET", that is, the initial contribution and the returns are untaxed during one's working life, but withdrawals are taxed upon retirement. The result is once again consumption-based tax treatment. That is, since the initial investment outlay is fully expensed (*i.e.* normal return is exempt), income is taxed only as it is consumed. From the government's perspective, revenues will be needed more when the population is aging than now (when they may be given away in tax cuts, rather than saved for future ageing needs). However, these preferred savings vehicles will tend to crowd out those non-qualifying financial instruments offering meagre or negative risk-adjusted post-tax returns.

Many low-income seniors suffer extraordinarily high METRs on their pension returns, some 70% for single seniors with annual incomes of around CAD 17-21 thousand, because of the claw-back of old-age benefits, notably the Guaranteed Income Supplement (Mintz, 2006). This effective tax may far exceed the tax savings achieved by making contributions to plans while working. Hence, there is very little incentive for lower-income people to contribute to pension savings plans as heretofore constructed. The 2008 federal budget proposes a new Tax-Free Savings Account, a "pre-paid" savings plan (or "TEE") in which contributions are from after-tax income but investment income including capital gains and all withdrawals are tax free. This appears tailor made for such cases where income and hence the marginal tax rate are lower while working than in retirement. Allowing penalty-free withdrawals prior to retirement likewise is well suited to the poorer saver. The budget also stated that TFSA income and withdrawals will not affect eligibility for federal income-tested benefits and credits, providing a guarantee that withdrawals will be immune to means testing for the GIS, a critical condition for success of the reform (Poschmann and Robson, 2004). The modest annual contributions cap (CAD 5 000 vs. up to 20 000 for EET plans) should

probably be maintained, targeting the plan on small savers, as unlimited exemption of capital gains and other “supra-normal” returns could be regressive and costly for the budget.

Tax exemptions for pension savings absorb the lion’s share of federal tax expenditures, and they are (together with capital gains reliefs and R&D credits) among the fastest growing, reflecting sharply rising investment income (Table 7). It is important to ask whether all this tax expenditure augments national savings, as opposed to merely displacing non-sheltered forms. Evidence from other countries suggests that pension savings tax breaks do not create much net new savings (OECD, 2006a). But in Canada, with about 90% of individuals expected to hold all of their financial assets in tax-sheltered vehicles as the TFSA matures over time, this displacement of non-sheltered savings should be progressively reduced. This suggests that the limited taxation of savings should help to stimulate net savings. Further reducing tax on savings would continue to improve the neutrality and efficiency of the Canadian tax system.

Table 7. **Largest tax expenditures**

Top ten expenditures in 2007	CAD billions	Percentage changes 2002-09
RPPs: Net tax expenditure	17.0	339
RRSPs: Net tax expenditure	11.2	152
Partial inclusion of capital gains for corporate income tax	5.1	113
Partial inclusion of capital gains for personal income tax	5.1	217
SR & ED tax credit	4.3	122
Non-taxation of capital gains on principal residences: partial inclusion rate	4.2	211
Low tax rate for small businesses	4.1	16
Zero-rating of basic groceries	3.7	-1
GST/HST credit	3.6	21
Charitable donations credit	2.5	67

Source: Finance Canada, *Tax Evaluations and Expenditures*, 2007.

Moving toward a consumption tax

It is true that favourable treatment for some types of capital income reduces effective capital income taxation. But it does so in a very different way than, for example, would shrinking the income tax and replacing the lost revenue with a consumption tax (Auerbach, 2006): *first*, the differential treatment of assets distorts the allocation of capital; and *second* (albeit thankfully less so in Canada), the differential treatment of assets and liabilities and in particular the full deductibility of interest combined with reduced taxation of capital income encourages borrowing to invest in tax-favoured assets, rather than saving. Instead of attempting to fix one tax distortion by imposing another, the problem should be corrected at its source, *i.e.* too high METRs.

Thus, moving toward a consumption tax (EET treatment) should be accelerated in Canada, building on the substantial progress made over recent years in this direction. This would imply extending current EET tax treatment of pension savings to other forms of savings while removing all contribution caps. An exception could be made for the new Tax-Free Savings Account, which should stay on a TEE basis to prevent the claw-back of savings by low and modest-income individuals. METRs would be equalised across competing investments and capital allocation improved, with a potential reflow of non-sheltered savings held in low-tax jurisdictions abroad. There would also be a better allocation of income between current and future consumption needs, particularly for large savers for whom contribution limits act as

binding constraints. Making private pension savings mandatory (as in Australia), or else considering options like automatic enrolment and matching contributions, could then address the externality concern that because of myopia or cash constraints, people do not save enough for their old age.

There are various ways of implementing a consumption-targeted tax, and an “expenditure tax” seems the least regressive (Box 4). Most countries, like Canada, have been moving in that direction *via* tax-preferred savings vehicles. But this implies unequal treatment of savings vehicles which creates distortions. In Canada, as a large proportion of savers (two-thirds) already hold all their savings in tax-preferred vehicles, and housing is taxed on a quasi-consumption basis, further increasing consumption tax treatment of all savings may not cost too much but could stimulate savings and reduce tax distortions to capital allocation. It may also be important that coherent reforms be pursued on the corporate tax side (Annex A1), in order to ensure the significant advantages of consumption-based taxation in providing uniform treatment of all savings and investment decisions under a simplified tax system.

Box 4. Targeting consumption in taxation

Virtually all OECD countries are moving in the direction of a consumption tax as they increasingly tax earnings from capital at a lower and flatter rate than labour income. According to Zee (2005), there are various ways to target consumption under a personal “income” tax. As taxing labour income is equivalent to taxing consumption over the life cycle of a taxpayer, this outcome can be achieved through two alternative but equivalent reforms to a conventional PIT: *i*) shifting the base of the PIT to wages (wage tax) and *ii*) allowing a deduction for savings (expenditure tax).

The well-known “flat tax” (e.g. Rabushka-Hall tax) and “USA tax” (unlimited savings allowance) respectively correspond to the wage and expenditure tax notions but also differ as to the corresponding treatment of corporate tax. The flat tax replaces the conventional PIT/CIT with the individual wage tax/corporate cash flow tax (immediate expensing of new capital with no allowance for debt interest) combination. The USA tax replaces the conventional PIT/CIT with the individual expenditure tax/corporate consumption-based value added tax. The dual income tax (DIT) exempts the “normal” return to capital but maintains progressivity on labour income tax. Norway has revised its DIT in order to counteract the tendency for small or privately held businesses to classify labour income as capital income.

Auerbach (2006) has pointed out that the distributional impacts of the alternative approaches to consumption targeting can differ significantly. Notably, the switch to a wage tax is highly regressive, whereas transitional asset-price impacts or implicit double taxation of old wealth under a full savings exemption scheme are an important means by which efficiency gains are earned and progressivity is restored. And, as noted above, capital gains and other forms of economic rent continue to be taxed under a consumption tax, further underpinning fairness. Thus, consumption targeting may not be quite as regressive as often feared with holders of “old” capital (rather than advocates for the poor) providing major political resistance and demanding compensation for “transition costs”.

In some cases, however, *ad hoc* moves toward a consumption tax may be worse than reforming the original income tax. In particular, allowing accelerated corporate capital cost allowances and relieving capital income taxation at the individual level without providing for consumption-based treatment of interest expenses sacrifices revenue while not gaining the efficiency advantages or simplicity of a consumption tax. A hybrid tax of this sort also winds up exempting economic rents from taxation, which even the slightly regressive consumption tax does not. According to Zodrow (2005), referring in this case to the US experience, “piecemeal reforms that cobble together various elements of a consumption tax reform, but do not include all of its features, can be highly undesirable”.

Some small, open OECD countries such as Belgium and the Scandinavians have respectively implemented a corporate consumption-based tax and the dual income tax. So-called flat taxes have been adopted by some transition countries such as Estonia, Russia, and Slovakia, which has apparently boosted tax compliance through lower tax rates and a simplified tax code. Canada has already gone a long way toward consumption tax treatment with its high share of coverage by tax-preferred vehicles. Moreover, mortgage interest, usually a political stumbling block to adoption of a consumption tax, is not deductible in Canada, nor is interest on provincial and local debts.

Equity considerations

Distributional issues seem to be the Achilles heel of tax reform. The tax-cutting agenda unfolded just as pre-tax income distribution in Canada had widened due to rapid income growth at the top against a 30-year-long stagnation of real wages for the bottom 80%.³³ *A priori*, as more people are pushed into higher (inflation-adjusted) tax brackets, progressivity should rise because of compositional effects. However, declining top marginal rates, increasing thresholds for higher tax brackets, and large capital income tax breaks meant that the bulk of reform gains have gone to the top earners,³⁴ as higher payroll taxes generally offset income tax gains for the middle, and the tax system as a whole has become less progressive, especially since 2000.³⁵ Studies show that provincial income tax cuts are the culprits behind Canada's eroding tax progressivity (Lee, 2007), even though distribution is the concern of provincial as well as federal governments, through either the tax system or the provision of public goods and services.

The classical dilemma is that most of these efficiency-enhancing reforms are also distribution-widening. Critics note that greater income inequality *per se* may have efficiency costs. For example, it may be one factor behind increasing consumer debt and plummeting net personal savings, as lower and middle-income groups attempt to emulate the consumption of the more affluent. More fundamentally, it is said to undermine democracy (Jackson, 2007). It is often asserted that social spending for the poor, as well as that for infrastructure that benefits all Canadians, has been squeezed in order to make way for tax cuts that put cash in the pockets of the already well-off few. Indeed, the cases of the Nordic countries go to show that a high level of economic efficiency and heavy taxation are not necessarily mutually exclusive.

As seen (Table 1), there has been a shift in the tax mix away from PIT towards CIT. Looking at each tax's estimated incidence by income decile, the CIT becomes very progressive at the top end as may be expected, while the PIT simultaneously turns regressive because of its generous capital-income reliefs; conversely, at lower incomes CIT is mostly regressive while PIT is substantially progressive (Figure 9). Hence, any shift from PIT to CIT might be on balance regressive. The most regressive tax, however, is that on commodities (goods and services), which implies a 15-17% average effective tax rate on the poorest but less than 6% on the richest. This seems to militate against even further efficiency-enhancing shifts in the tax mix toward consumption, as discussed above.

These arguments need to be taken seriously but also nuanced. Much of the regressivity of consumption taxes reflects excise taxes on alcohol and tobacco, combined with fact that provinces with sales tax do not tax most services. Hence, an increase in VAT would have smaller regressive effects. Moving to a consumption tax may also have less adverse distributional consequences than is immediately apparent. In the presence of consumption smoothing, a consumption tax base will always appear less progressive when evaluated on an annual basis than on a lifetime basis. Indeed, its purpose is to remove the inter-temporal consumption distortion of the income tax. Hence, the lifetime consumption base is the

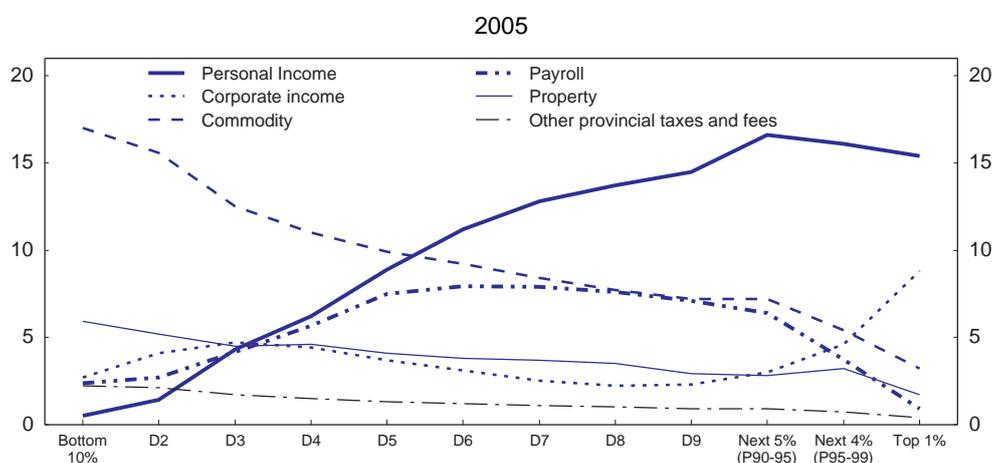
33. Inequality often rises during periods of structural change such as the present, since technological progress and globalisation are putting a high premium on skills. However, this does not necessarily imply more poverty, as Canada's experience proves.

34. Individuals also receive tax breaks for investing in flow-through shares, used by corporations to finance mineral exploitation (*e.g.* the 15% personal mining-exploration credit, renewed in the 2007 and 2008 budgets).

35. According to tax incidence calculations by Lee (2007), the top 1% of the population paid a total tax rate nearly 5 percentage points lower in 2005 than in 2000, and it was then actually slightly lower than that paid by the poorest 10% who saw their average tax rate rise by 5 percentage points from 1995 to 2005. According to OECD (2008c), Canada is among a significant minority of OECD countries where tax reform, combined with fiscal drag, through 2006 mainly benefited high-income individuals.

relevant one, and it is equal to the lifetime income base apart from bequests, which can also be taxed. Canada also taxes “deemed” capital gains on death, which is like an estate tax.

Figure 9. Tax progressivity
Combined federal and provincial tax rates by type



Source: M. Lee (2007), “Eroding Tax Fairness”, Canadian Centre for Policy Alternatives, November.

Furthermore, even a flat tax can be made progressive by adjusting the basic exclusion (Zee, 2005). Regressivity could be avoided by the use of tax credits against liabilities in lieu of deductions from income, as the value of the latter increases with the taxpayer’s marginal tax rate whereas the former remains invariant. Such credits could also be made income-contingent and non-wasteful (producing a negative income tax). As noted, Canada has been following such an approach. The federal GST income-contingent refundable credit in the PIT partly corrects for the GST’s regressivity.³⁶ The new child and in-work tax benefits have helped raise a standard simple measure of PIT progressivity to the highest in a group of OECD comparator countries by 2007,³⁷ albeit also inducing high METRs due to benefit phase-out. Canada also continues to enjoy much better intergenerational income mobility than for instance the United States or France.³⁸

But more could be done to assuage the equity-efficiency dilemma. GST zero-rating of basic groceries, which benefits the rich as well as the poor, should be abolished and replaced by an expansion of the GST credit (which would double; see Table 7), enhancing both efficiency and equity. Federal and provincial benefit programmes could be better co-ordinated to iron out METR spikes as income is earned and benefits withdrawn. But it remains the case that the PIT at the top end becomes perversely regressive. Abolishing

36. The GST credit is not netted out of the commodity tax curve in Figure 9 since, as a tax expenditure, it is methodologically treated as an income transfer. The WITB credit is not included because the Lee (2007) calculations underlying the figure are for 2005, whereas the credit became available only in 2007.

37. In 2007, the ratio of the average tax wedge for a two-earner, two-child couple earning 167% of the average wage to one earning only 67% was 1.8 in Canada. This compares with 1.6 in the United States (and for Canada in 2000), 1.4 in Germany, 1.3 in France, 1.2 in Denmark and 1.1 in Sweden. It should also be noted that the same ratio for single parents is heavily negative in Canada and the United States while staying close to those for dual-parent families in the other countries (calculations based on OECD, *Taxing Wages*).

38. In Canada, only 20% of parental earnings advantage is passed on to children, a rate similar to that found in Scandinavian countries. In the United States, the United Kingdom and France, on the other hand, 40% to 50% of the advantage is passed on. See Institute for Competitiveness and Prosperity (2007).

special tax preferences on certain savings vehicles and forms of capital income while reducing tax rates across the board as advocated above would have largely offsetting efficiency impacts and cause the tax incidence curve to become steeper while shifting downwards, thus easing the burden on the middle class.³⁹

Tax issues in fiscal federalism

A very uneven distribution of natural-resource wealth, high oil prices and strong tax preferences for the resource sector are straining the national revenue equalisation system and distorting provincial tax competition. Federal redistribution thus takes on a crucial role. Achieving VAT harmonisation is a high priority in federal-provincial relations, not only as a major source of efficiency gains but also as a secure and comparatively well distributed revenue base for the provinces. Municipal property taxes and user fees likewise provide scope for efficiency gains and can help to assure sustainable local finances.

Horizontal fiscal imbalance: the natural-resource shock

Canada confronts the challenge of a natural-resource shock having highly asymmetric impacts across the federation, in particular the large concentration of oil and gas in Alberta and the shifting of collateral costs to other regions *via* a knock-on exchange-rate effect (see OECD, 2008d).⁴⁰ The Canadian constitution requires that comparable levels of services be provided at reasonably comparable levels of taxation in the various provinces. The federal equalisation system was set up to implement this provision and modified in 2006 to address the resource issue. It basically corrects upwards for fiscal capacity shortfalls of provinces below the national standard tax base. However, the recent resource shock is having profound effects on relative revenue-raising capacities of different provinces, stretching the capabilities of the equalisation system: Alberta's rising tax capacity raises the average to which all "have not" provinces must be lifted, even though only 50% of its resource revenues are counted, and since the system is not symmetric, rich provinces are not required to contribute directly to these transfers (see Usher, 2007). The shock is thus an unprecedented source of imbalance in the Canadian federation (Boadway, 2006).⁴¹

Corporate tax preferences to the resource sector artificially boost the natural advantage of resource-rich regions. On top of generous tax write-offs for exploration and development expenses in the resource sector, federal revenue losses occur through the deductibility of provincial resource levies from the federal corporate tax base and, until 2006, acceptance of income trusts (flow-through entities that were heavily used to eliminate corporate tax liabilities, especially in the resource sector) (Boadway, 2006). A distorted playing field for fiscal competition due to highly unequal fiscal capacities and distorted product-market competition can exacerbate inter-provincial asymmetries. Fiscal migration, having nothing to do with inherent productivity differences but rather with the attraction of low taxes and high public spending, could amplify the main symptom of Dutch disease, *i.e.* excessive movement of resources from exposed traditional sectors toward the non-renewable resource sector, albeit also providing a safety valve in the form of reduced wage pressure.⁴² On the other hand, migration could be held in check by rising

39. According to Auerbach (2006), taxing capital income may allow the government more scope for redistribution, because less capital income increases the cost to high-ability individuals of not working.

40. There could also be highly adverse environmental spill-overs to other regions in the form of heavy water use by the oil sands industry and its GHG emissions (see Mouragane, 2008).

41. Dahlby (2005) argues that the accords that the government signed with Newfoundland and Labrador, and Nova Scotia are other important contributors to horizontal fiscal imbalances.

42. Empirical work by Day and Winer (2005), using a data set for 1974-1996, suggests however that public policies (EI, personal income taxes, social assistance) are notably less important determinants of internal migration than employment prospects and moving costs. But they also find that the impact of large discrete policy shocks, rather than marginal ones, could swamp the retarding influence of even high moving costs.

house prices in the booming region, as well as certain features of Employment Insurance (EI) that discourage mobility (see OECD, 2008d). The latter seem more pernicious because they tend to keep people idle, rather than displacing them from alternative productive employment as fiscal competition might.

Federal instruments such as progressive income taxation and EI need to alleviate asymmetries and promote balanced and sustainable national development. To enhance these instruments, reform of the PIT is called for, but even more so reform of the CIT, which becomes a useful redistributive device when there are major per capita income differences across regions. A possible federal carbon tax would likewise go in this direction. The deductibility of provincial royalty payments in calculating income for federal tax purposes, introduced in 2003, may have the opposite effects insofar as it shifts part of the burden of provincial royalty payments to the national taxpayer (Dahlby, 2005), creating a significant negative vertical fiscal externality (Dahlby *et al.*, 2000) and accentuating regional inequities. This tax shifting effect is set to increase with the recent reform of the Alberta royalty regime, which will allow the royalty rate to vary over an increased range of the price of oil (see Mourougane, 2008), likely further cutting into federal tax room. In general in Canada, “expenses” such as municipal or provincial property taxes, capital taxes, payroll taxes, user fees, and resource royalties incurred to earn income are deductible in computing taxable profits. This treatment might be best reconsidered, at least in the case of royalties.

Vertical fiscal balance: achieving VAT harmonisation

The issue of vertical fiscal balance is one of finding the “right” mix between provincial revenues obtained from their own tax sources as opposed to federal transfers. Most major tax bases are co-occupied by provincial and federal governments (Figure 10). This could give rise to negative vertical externalities in tax policy – *i.e.* when one level raises its tax rates, it reduces the shared tax base and thus forces the other level to raise its tax rate also. Higher federal taxes and transfers (*i.e.* over and above those for equalisation) along with lower provincial taxes might in such a situation be justified to reflect the fact that the marginal cost of raising public funds is likely to be smaller for the federal government – given that it faces a less mobile tax base – than for the provinces. But there is a political risk that federal discretionary transfers could exceed such a theoretical optimum. A corollary of this risk is that transfers could be abruptly cut if the federal budget runs into difficulties, as in fact happened in the mid-1990s. Hence, a more sustainable funding source for provinces, who bear the brunt of ageing and other health-care cost pressures (see OECD, 2008d), might be an increase in their share of the VAT, which is a comparatively dynamic, efficient and well distributed tax base apparently well suited to federalist arrangements.⁴³

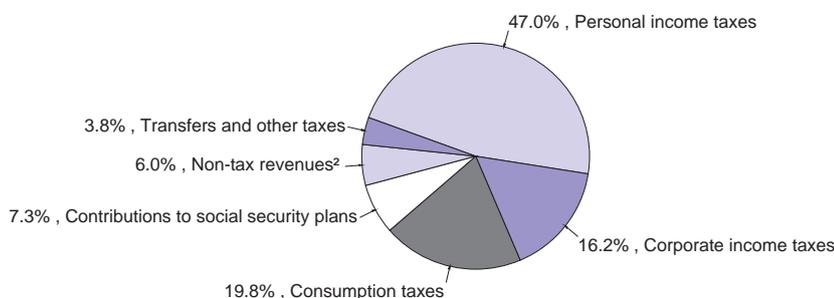
There have been various proposals to implement such a shift of tax power. One is to centralise all sales taxes by adopting an Australian or German style VAT-sharing system and to assign revenue collection to the federal government, which would then distribute the proceeds to provinces according to a transparent apportionment formula (Boadway, 2006). Three Atlantic provinces – Nova Scotia, New Brunswick, and Newfoundland and Labrador – have already signed up to the Harmonized Sales Tax (HST)-system, of which one element is the assignment of revenue collection to the federal government, with payments made to each province on the basis of a revenue-estimation formula. Unlike in Australia or Germany, though, the federal-provincial harmonisation agreement that accompanies the HST legislation also provides participating provinces with a degree of latitude to change their common provincial tax rate,

43. The last OECD *Survey* proposed abolishing the health and social transfer in exchange for shifting the federal GST base entirely to the provinces and territories. This would eliminate a large amount of fiscal churning under which no government has clear responsibility (Smart, 2005). The 2002 Seguin Commission likewise called for a so-called tax point transfer from Ottawa to the provinces; under this plan, federal health and social transfers would be abolished entirely in exchange for a transfer of federal tax revenue to the provinces (about 4½ per cent of federal income tax or the same number of points from the federal GST base would be needed to make the proposal revenue neutral).

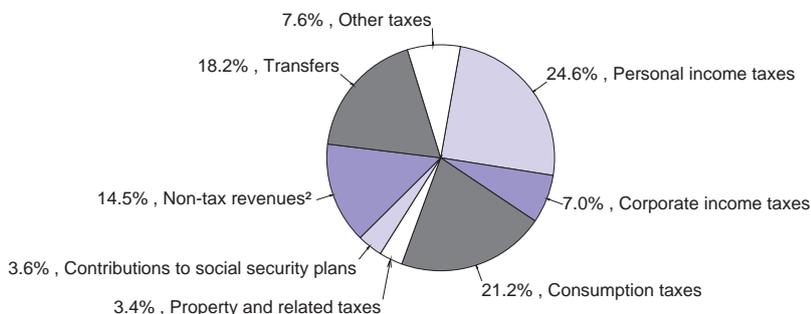
as well as shared responsibility with the federal government for changes to the tax base. Compared with the relinquished retail sales taxes, the HST has yielded significant efficiency benefits: annual M&E investment in harmonising provinces rose 12.2% above trend levels in the years following the 1997 reform (Smart, 2007). By comparison, Quebec has chosen a different approach by adopting a provincially-legislated VAT. It has adopted an essentially harmonised VAT but maintained its autonomy to modify the provincial rate and base and administers both the provincial VAT and the federal GST in the province, resulting in a so-called dual VAT. Given that there are some differences between the two systems, provinces could be expected to consider the relative advantages and disadvantages of each approach. However, central revenue collection of harmonised VATs would continue to provide significant efficiency gains. A federal auditing role could likewise avoid VAT “carousel fraud”, a serious problem in the EU, which lacks a central revenue authority.

Figure 10. **Decomposition of government revenues**
As a percentage of total revenues

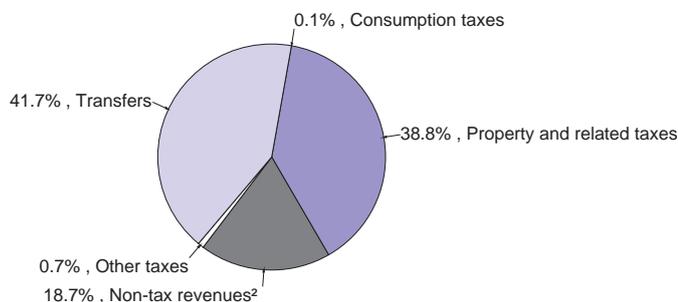
A. Federal government revenue, 2007¹



B. Provincial and territorial government revenue, 2007¹



C. Local government revenue, 2006¹



1. Year ending 31 March for federal and provincial revenues, 31 December for local revenues.
2. Includes sales of goods and services, investment income and other revenue from own sources.

Source: Statistics Canada.

A few years ago Dahlby (2005) argued that the federal government should reduce its GST rate from 7 to 5% in a strict exchange for the remaining five provinces with RSTs to adopt a VAT. As the VAT has a broader base than the RST, this could offset the loss of sales tax revenues deriving from taxation of business inputs. Political resistance to the switch has often derived from the fact that housing would be subject to the VAT whereas it is not under the RST. However, the direct impact should be largely offset by the lower taxation of construction inputs into housing production (Table 8). Hence, provinces could keep their old RST rates unchanged under the new VATs to increase their political palatability, with little or no sacrifice in revenue. The federal government has in fact reduced its GST rate from 7 to 5% in the last two years. While this could well be a first step in the devolution of GST, no province seems to have yet taken up the available tax “room”. Indeed, they are not likely to do so with a steadily increasing transfer flow, and unfortunately the federal government set no conditions on its own cut. If anything, the federal GST cut may increase the political pressure to do the same at the provincial level. Alberta is exerting similar competitive pressure on its fellow provinces with its “no-sales-tax” policy. The problem for the federal government is to find a way to induce VAT harmonisation, now that it has passed up the chance to use the GST cuts for this purpose. A more explicit offer of assistance may be necessary (IMF, 2008).

Table 8. Predicted revenue impacts of provincial sales tax reform

CAD billion

	Ontario			British Columbia		
	Current RST	Harmonised VAT	Difference	Current RST	Harmonised VAT	Difference
Estimated change in statutory tax burdens on:						
Consumers						
Goods	5.4	6.7	1.3	1.5	1.9	0.4
Services	2.6	3.3	0.8	0.4	1.1	0.7
Housing	0.0	1.8	1.8	0.0	0.6	0.5
Business						
Construction inputs	1.6	0.0	-1.6	0.5	0.0	-0.5
Other intermediate	2.7	1.2	-1.5	0.8	0.3	-0.5
Capital	1.4	0.4	-1.0	0.4	0.0	-0.4
Government	0.4	0.6	0.1	0.2	0.1	0.0
Total	14.1	14.0	-0.1	3.9	4.1	0.2

Source: M. Smart (2007), “The economic impacts of value added taxation: Evidence from the HST provinces”, mimeo, University of Toronto, February.

Improving cities’ finances

Cities are often seen as a primary engine of growth in Canada. However, the municipal financing base has not been able to keep up with the pace of urbanisation. The main municipal tax base is property (see Figure 10). This is an ideal local tax, as it fulfils the benefit principle and is visible, imposes discipline on the quality of services and level of taxes, and is relatively immobile and resistant to tax-base flight. It is therefore highly efficient. Its use should be extended in order to provide a dependable revenue base for cities. However, provinces are providing a high level of transfers to cities, while curtailing their flexibility on property tax. This undermines their accountability.

Municipalities in Canada (and other OECD countries – see OECD, 2008b, for example) tend to over-tax business while under-taxing residences under the property tax. The ratio of non-residential to residential property tax rates varies across provinces, from a reasonable 1.5 in New Brunswick up to very

high levels in British Columbia, and the excess taxation of businesses relative to households is even greater if adjusted for the relative amounts of local services received.⁴⁴ This distortion works against firms' long-run competitiveness because property tax (not included in the METRs shown above) must be paid repeatedly on the same investment and is invariant to the profitability of the firm (Mintz and Roberts, 2006). Owners of local enterprises or property investments are often out-of-towners, so that imposing heavy property taxes on them is a politically expedient form of tax exporting, useful to keep those on local voting residents correspondingly low. Such "free riding" may also weaken the incentive to be efficient in spending. Provinces should reduce transfers and give cities the autonomy to update property valuations while restricting their autonomy to vary tax rates across sectors. Lower taxes on business would stimulate the local economy and contribute to a better geographic allocation of resources. In other words, the current differential treatment is not the free ride for a municipal tax base that it might seem to be.

User fees are another worthy revenue source for local governments, by definition satisfying the benefit principle while revealing preferences, hence non-distortive. Canadian municipalities should raise more revenues in user fees. Figure 9 suggested that they may not be as regressive as commonly feared. In any event, income redistribution should not take place through the pricing of market-like services, which should be aligned with marginal costs. Under-pricing of services like electricity and garbage collection is more likely to become a subsidy for larger households who may be better off (Mintz and Roberts, 2006). On the other hand, local authorities should avoid setting excessive tariffs for the services of local public monopolies, and competition policies should try to promote yardstick competition. Similar arguments apply to the provinces. Raising co-payments for higher education and health could help avoid tax increases by restraining public demand for such largely unpriced goods, and improve private incentives.

The direction for tax reform

As taxation touches on most aspects of economic behaviour, this paper has covered a wide range of subjects and made many suggestions for improving tax policy. This section will attempt to tie together main themes and conclude (see Box 5). The discussion suggests that the Canadian government is making encouraging progress on many fronts but still has work to do to achieve a tax system that provides the soundest foundation for sustained long-run growth. This would call for reducing still high marginal effective tax rates on income from capital, labour and entrepreneurship – the drivers of growth – while making their incidence as neutral and fair as possible across different activities and individuals.

The budget room for tax cuts has probably been exhausted (see OECD, 2008d), so that the next phase of reform will need to be revenue neutral. In Canada's case, there is still substantial scope for base broadening that can allow for further reductions in average and marginal tax rates on income. Beyond that, shifts in the tax mix toward consumption-type taxes are warranted. For maximum effect, both approaches should be pursued. It seems vital first to eliminate glaring non-neutralities within each tax component, initially in business and then in personal income taxes, and then to get the tax mix right as tax bases are adjusted over time. The following thus appear to be the main reform priorities:

- Targeted tax reductions or allowances under the *CIT* need to be eliminated in order to level the playing field, plug tax leakages and release resources for further reductions in statutory tax rates. Closing the small-large firm tax differential could drive the combined federal-provincial-territorial corporate income tax rate down to 20%. Similar arguments hold for preferential R&D credits to small firms and sector-specific reliefs.

44. Mintz and Roberts (2006) calculate that non-residential properties are over-taxed relative to the services they receive by 56% in Alberta, 29% in B.C., 24% in Ontario, 18% Nova Scotia, 11% in Newfoundland, and less elsewhere. Residential properties are universally under-taxed relative to the benefits they receive.

- The *PIT* should be purged of remaining distortions to the allocation of savings and capital. EET treatment, exempting the “normal” return, should be extended to all forms of savings, without caps, the only exception being the new Tax Free Savings Account, which could stay on a TEE basis with a modest limit to meet the needs of poorer savers. High METRs facing those with low to middle incomes should be mitigated by better focusing of tax credits on vulnerable groups (earlier yet more gradual phase-outs) and better co-ordination between tax and benefit schemes across provincial and federal levels of government.
- Further reforms should shift the overall *tax mix* toward relatively benign consumption taxes. Some possibilities suggest themselves. Greenhouse-gas-emitting activities should be more highly taxed, promoting sustainable development and providing scope for further reductions in distortive taxes on income. Municipal property taxes and user fees should be increased and transfers from provinces (themselves financed by distortive taxes) reduced. Provincial VAT rates (once harmonisation is achieved) should be raised in line with evolving ageing needs.

The benefits of such a programme could be quite large. Substantial productivity and revenue gains could be associated with lower CIT rates due to more and higher-quality capital formation, FDI inflows and associated knowledge spill-overs, and reduced exposure to international tax arbitrage. Lower labour tax wedges and PIT rates would reinforce productivity gains as they raise FDI appeal, domestic innovative capacity and savings; they also strengthen the incentives to join the workforce facing still excluded persons. The result would be long-run real per capita income gains for all Canadians.

Box 5. Main recommendations for tax reform

Business tax reform

- Replace remaining provincial sales taxes by harmonised VATs to reduce business capital costs. Maintain all collection (apart from Quebec's, which already has an independent “dual VAT” scheme) at central government level.
- Continue to rationalise the federal and provincial business tax preferences (special low rates, accelerated CCAs, etc.) to sectors like manufacturing and natural resources, and to small-scale, Canadian-owned firms.
- Eliminate the 15% personal mining exploration credit.
- Once the tax base is sufficiently broadened, cut the combined federal-provincial-territorial statutory corporate income tax rates toward 20%.
- Consider eliminating deductibility of provincial royalty payments from federal corporate income; use resulting revenue to lower statutory corporate income tax rates.

Personal income tax reform

- Target in-work non-wastable credits on low income earners while starting to phase them out earlier and more gradually to reduce high METRs at low to middle incomes. Co-ordinate federal and provincial benefit programmes to avoid excessive METR spiking.
- Eliminate GST zero-rating for basic groceries and use resulting savings to boost the GST credit for low-income people.
- Following on recent progress made, equalise tax across savings instruments – eliminate targeted tax preferences to qualifying pension plans, and capital gains exclusions.
- Then make “normal” return to all savings tax-free, namely by taxing all savings on an EET (consumption) basis with the exception of the new Tax-Free Savings Account which should stay on a TEE basis to facilitate savings by low- and modest-income individuals.
- Once the base is broadened, cut statutory PIT rates, narrowing the top marginal PIT-CIT rate gap.

Improving the tax mix

- Encourage VAT-harmonising provinces to take up the GST “room” the federal government has vacated, for example by offering them time-limited, modest financial incentives.
- Consider introduction of a (federal) GHG emissions tax at sufficiently high level to achieve environmental targets, as a complement to the emissions-trading scheme to apply to those sectors not covered by such trading. Lower levels of government could also implement more environmental excise taxes and congestion charges. Apply resulting revenues to further reductions in CIT to keep the overall burden on business stable.
- Make more use of property taxes and user fees by municipalities, while easing the property tax burden on business. As their tax base becomes more sustainable, reduce local authorities’ reliance on provincial transfers.
- Use provincial savings resulting from lower transfers to municipalities to cut their PIT and CIT rates.

ANNEX A1. ALTERNATIVE CORPORATE TAX SYSTEMS

Corporation income tax (CIT): on the return to equity and source-based

Canada like most OECD countries taxes the *return to equity* (what) and *at source* (where). This means that the tax base deducts, from gross earnings, payments for debt finance (considered a prior claim, or cost), fixed capital costs as the stock depreciates, and current costs (wages, inventories, materials, services etc.). Tax (credit) is applied to profits (losses) earned (incurred) on Canadian soil by domestic and foreign owned corporations alike. The problem of “double taxation” of dividends and capital gains (reflecting reinvested earnings) at the personal level is partially solved in the form of credits or deductions for prior corporate tax paid, as happens to varying degrees elsewhere.

Significant problems are inherent in the classical model. Taxing the normal return to capital affects the cost of capital and distorts the scale of investment and its financing, the latter implying a preference for debt with attendant bankruptcy risks and opportunities for tax arbitrage. In the small open economy, taxing the return to capital earned at source will also distort its location: domestic investment facing a world interest rate falls in response to the capital tax, business activity generating any mobile rents flows out, and the productivity of labour falls because of lower capital intensity of production. The tax falls entirely on (immobile) labour, as output price is fixed on world goods markets. There are also incentives to shift profits to other jurisdictions. The following tax proposals try to address such issues.¹

Corporate flow of funds tax

Proposed by the 1978 Meade Committee (UK), this tax leaves marginal investments, hence the cost of capital, unaffected, taxing only economic rents and avoiding distortions to both the size of investment and its mode of finance (in the closed economy). There are two versions: R base (real cash flow, *i.e.* sales less all capital and current costs) and R+F base (cash flow plus financial transactions, *i.e.* proceeds from borrowing and interest received less repayment of borrowing and interest paid). The latter catches bank margins in the tax base, and in principle remains neutral between real and financial decisions. However, care needs to be taken for new types of hybrid instruments, such as equity that could be converted into debt (with which a company could issue equity and debt to related parties and make deductible payments to debt rather than to non-deductible payments to equity), *i.e.* by taxing such conversions.

There are a few problems with either flow of funds tax, though. The initial investment is effectively subsidized by government, generating potential fraud and moral hazard. During a transition period old capital is taxed more heavily than new capital which could distort competition, even if this inequity is still efficient (decisions are already made). Distortions remain in the open economy as well: *i)* location decisions are not unaffected as they normally depend on the average effective tax rate, less so the marginal one; *ii)* there is likewise an incentive to shift profits if the tax is source-based. Since the tax base is smaller than that of the CIT due to full expensing, it would require a higher statutory rate, being more exposed to international tax competition. The UK adopted this model for a time, but then dropped it in a decision to expand the tax base (no more expensing) and competitively lower statutory rates.

1. This taxonomy, and the accompanying descriptions, draws on Auerbach *et al.* (2007). See OECD (2006b) for several more alternative tax variants and an in-depth description of all variants and country experiences.

The Meade Commission also envisaged a tax on economic rent at the corporate level as being combined with consumption tax treatment at the personal level, so that the overall marginal tax rate on savings would be zero.

Allowance for corporate equity (ACE)

First proposed by Boadway and Bruce (1982), this flow of funds tax variant avoids the government's problem of subsidizing initial investment costs. A version closest to the R base eliminates the deduction for interest but instead of giving up-front relief for all investment expenditure uses an arbitrary depreciation schedule while exactly compensating for the delay in receiving such depreciation allowances. A version closest to the R+F base continues to allow interest to be deducted but introduces a separate allowance for the cost of equity finance, designed to compensate exactly for the delay in receiving depreciation allowances. The bottom line is that equity is given the same treatment as debt, and the METR on capital is still zero, but the foregoing open economy and transition problems remain.

Belgium has recently adopted this tax; Brazil and Italy have used variants.

Comprehensive business income tax (CBIT)

Proposed by the US Treasury (1992), this reform simply removes the deductibility of interest from taxable income, resulting in a single tax on all corporate income, whether the source is equity or debt. Since the tax base would be larger, the tax rate could be lower than under a CIT, or else personal taxes on capital income could be abolished. A lower rate would ease the location distortion and reduce incentives to shift profit at the margin to other jurisdictions. Transitional problems would hit companies relying heavily on debt; they would need time to adjust.

Dual income tax (DIT)

Introduced in Denmark in 1990 and thereafter adopted by the other Nordics, the basic idea is to tax all capital income at a uniform low rate, so as to minimize cross-border leakages, while keeping a progressive labour income tax, with the lowest marginal personal income tax rate normally matching the uniform corporate income tax rate. As far as the corporation is concerned, this tax is essentially the same as the CBIT. As for individuals, there is a strong incentive for owner-managers to reclassify labour income as capital income, implying distortions to organizational form.

Norway has attempted to tackle the latter problem by imposing personal taxation on all share income exceeding an imputed rate of interest, which is still neutral as it exempts the normal return, but implies a combined (personal and corporate) tax burden on corporate equity income close to the top marginal personal income tax rate.

Residence based taxation

A tax levied on corporate source income at the level of the individual shareholder could in principle solve the problem of tax distortions to location of capital and profit, as the tax bypasses the company so that it is indifferent to locational tax differences. But with growing international diversification of portfolios, it would be virtually impossible to track down all shareholders worldwide or to co-ordinate such payments with foreign governments.

Some OECD countries attempt instead to tax worldwide earnings of resident companies. Both the US and UK tax repatriate earnings of parent companies (dividend income paid by foreign subsidiaries), while giving credits for taxes paid abroad. Taxing only repatriations however generates a strong incentive for the company to reinvest abroad, while foreign crediting can give rise to various tax minimizing strategies. This

is why when Canada cuts taxes there are often accusations that tax is being “shifted” to the US Treasury, insofar as US company profits made in Canada are repatriated; in other words the tax cuts do not boost FDI inflows if Canada’s tax falls below that of the US.

Hence, taxing accrued worldwide profit would be the more appropriate approach, but this system may not be much more feasible than worldwide shareholder taxation, as: *i*) it is increasingly difficult to identify the residence of headquarters of a multinational insofar as the ultimate holding company is mobile and even headquarter functions may be split into various parts; *ii*) a multinational company may have hundreds or thousands of subsidiaries and branches scattered around the globe and identifying/ checking each of these is impossible.

Destination based taxation

As proposed by Bond and Devereux (2002), basing tax on where the final consumption of the company’s output takes place, in other words destination-based taxation, is the most feasible way of taxing corporations globally. It is best applied to the flow of funds base, R or R+F (a destination based income tax is not very meaningful).

A destination-based, R-based, flow-of-funds tax has many desirable features: as an R-base it would not affect financial policy or the scale of investment (all real costs but not financial costs are deducted from base) and as a destination-based tax it would not affect the location of capital or profit. Such a tax would relieve costs in the exporting country where they were incurred, refunding any VAT already paid plus a refund to reflect the cost of labour. Offsetting that, countries would be taxing imports. The disadvantage is that a country with considerable location specific rents foregoes the claim to tax those rents for good that are exported. Transitional valuation effects remain, including windfall gains on foreign holdings of domestic assets and losses on domestic holding of foreign assets as the exchange rate appreciates to compensate for the downward tax adjustment on exports and the positive one on imports.

It would also be possible to impose a destination based tax on an R+F base, which allows taxation of the economic rent generated on the interest spread, albeit only on domestic transactions since border adjustments apply to transactions with non-residents (*i.e.* borrowing from a foreign bank would not generate taxable income and neither would its repayment be relieved from tax; and conversely, lending to a foreign company would not generate tax relief and neither would the return from such lending be taxable). This approach solves a long-standing distortion in the VAT, namely its exemption of financial services, which overtaxes business users and undertaxes consumers.

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