





The first step in making this case is to examine the mix of taxes Canada currently uses to raise revenues.

## Canada's current tax mix

### What is Canada's current tax mix?

The question is complicated by the fact that Canada has a large federal government and also large provincial governments, so the tax mix is different across the country. Alberta has no sales tax while some provinces collect up to a third of their own-source revenues from sales taxes.

I therefore look at the overall Canadian tax mix - ignoring those provincial differences. This has the added advantage of washing out Canada's significant inter-governmental transfer system. Table 1 rolls up those differences and compares Canada's tax mix to that of other G7 countries and the OECD average. On this table, Carbon taxes fall into the "Other Consumption" category.

Table 1: Tax Revenues as a Percent of Total Revenues

	Germany	UK	France	Japan	Italy	G7	OECD	Canada	US
Payroll	29.0	26.2	16.5	7.0	5.0	14.9	24.0	37.6	18.9
Corporate Income	18.9	14.1	9.8	18.6	9.1	18.9	14.1	9.8	18.6
Personal Income	36.8	40.4	30.1	36.8	40.4	36.8	40.4	30.1	36.8
Other Consumption	14.9	18.9	44.6	48.6	36.5	18.9	14.1	36.5	48.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0



taxes.”

Why are consumption taxes more efficient and more growth-friendly than income taxes? Consumption taxes tax only what is consumed, not what is invested or saved. Taxing savings or investments reduces their rate of return. This biases decisions in favour of spending today rather than saving or investing and thereby spending tomorrow. And less investment today means lower growth in the future.

Think of it this way: when you tax savings or investment, the interest rate at which these decisions should, from an efficiency perspective, be made is reduced. To the extent that corporate income taxes reduce the funds available to the firm to invest, it has the same effect – decisions are biased in favour of spending today rather than investing for the future.

This is less of a problem for the Canadian personal income tax, which does not tax Canadian’s largest sources of personal savings: Registered Retirement Savings Plans and principal residences. And our personal income tax system also provides tax breac/c2BDC B1ou42.F larg0.5 ( E70.5[Savings 42.(s: R)10 (egistergs 42.E larg0.5 ( E)0.[Sa

wealthy Canadians use to shelter their savings.

So, if we want our tax system to shift further towards consumption and away from taxing savings and investment, we should focus on reducing the corporate income tax. This is all the more urgent as Canada's corporate income tax appears to be more distortionary compared to its key competitors – not surprising as we tend to rely on it to a greater extent than other countries (Table 1).

A further shift toward more consumption taxation would make our tax system more efficient. But is a carbon tax a consumption tax? Some economists get quite exercised at the very suggestion. Yet, if a consumption tax is a tax that avoids taxing savings or investment, a carbon tax is clearly a consumption tax. A carbon tax is levied on things that are consumed, not saved. So a shift from taxation on savings or investment to a carbon tax will reduce the distortion associated with taxing savings or investment.

Some may object that a broad-based consumption tax--a value-added tax like the GST/HST for example--is more efficient than a carbon tax. But our conclusion remains true even if we could get a greater efficiency gain from relying less on corporate income taxes and more on a broader-based consumption tax. The question we are asking here isn't how we can design the most efficient tax system, the question is how we can design a more efficient tax system. And shifting tax from corporate income to carbon could make our tax system more efficient.

## Flaws in the tax system

A second argument for carbon taxes is that they are an opportunity to remove some of the distortions our personal income tax system has on the decision to work. High tax rates are a key source of economic distortion in individuals' decision to work.

These distortions operate in two offsetting ways. As tax rates rise, it makes taxed activity, like work, relatively less valuable than non-taxed activity, like leisure and family time. So as tax rates rise people will do less of one type of activity (work) than the other (leisure or family time) than they would if tax rates were lower. This

distortion is called the substitution effect.

On the flip side, a rise in tax rates makes leisure and family time more costly because it means you need to work more to maintain your income. So as tax rates rise, people will work more to sustain their standard of living than they would if tax rates were lower. This distortion is called the income effect.

These two effects sometimes cancel each other out. Indeed, most – though by no means all – studies suggest that men shift their labour supply very little in response to changes in tax rates. On balance, most studies show that when men face higher taxes the relatively higher value of leisure is cancelled out by their need to keep their income stable.

This typical finding for men as a whole, however, masks important differences between men. As men's incomes rise, they become increasingly receptive to the substitution effect and reduce their labour-force participation. And under a progressive tax system rates rise as income rises and magnifies those distortions. To put the point starkly, if the sole goal of the tax system was to minimize these kinds of economic distortions (it isn't, of course) then tax rates should fall as income rises, not the other way around.

These effects are larger for women. In particular, rising tax rates reinforce patriarchal pressure by pushing women to reduce their labour-force participation in favour of (most often) family time. These effects are larger for married women and even higher for married women with kids. And these effects grow as incomes and tax rates rise.

The deleterious effects of higher tax rates are reinforced when comparing higher tax countries to lower tax countries, with the former showing less work and employment and economic growth than the latter.

To sum up, a more steeply progressive income tax is, on balance, more economically distorting than a less progressive tax. This statement remains true even if you believe that a more progressive tax is fairer – which it certainly is. All we are saying here is that there is a cost to that fairness and that a flatter tax is less

economically distorting than a progressive tax.

Carbon taxes are flat taxes. The rate you pay is entirely independent of your income level. It therefore follows that if we were to replace some of our progressive income taxes with carbon taxes, the result would be a less progressive tax system overall, and thereby a less economically distorting tax system overall.

Which is not to say that carbon taxes aren't distorting in different ways. A carbon tax is economically distorting in how it taxes consumption – it taxes some consumption at higher effective rates than other consumption. Nic Rivers from the University of Ottawa has evaluated the impact of a \$30 (per tonne) carbon tax on the price of various goods. He estimates that a carbon tax will increase the cost of services by about one percent while raising the cost of electricity by eight percent and natural gas by eighteen percent. (This is also true of a sales tax which, like the GST/HST, exempts certain items from tax. Food and children's clothing, for example, are taxed at zero while everything else faces the tax.)

These distortions between different types of consumption are different in nature than income or substitution effects. Higher-income individuals pay the same carbon or sales tax as lower-income individuals for the same goods or services. It may distort their choices between which things to purchase (groceries which are exempt versus restaurant food which is not, or higher-carbon goods versus lower-carbon goods), but not how much or whether to work.

And so we circle back to our previous point that shifting away from a progressive income tax and toward a carbon tax will reduce the economic distortions on employment for, especially, higher income men, and women who are married or have kids.

## Slow the growth of taxes

The third way a carbon tax can improve the efficiency of the tax system is that it can slow the growth of government. Or to frame it in the form of a question: Should a tax system automatically collect greater amounts of revenue, either per person or as a share



of the economy?

There are at least four reasons to think it should not. First, to continue the point in the last section, higher taxes are more distorting than lower taxes, so we should avoid taxes that automatically rise. Second, rising taxes mean a larger government and, without getting into the debate over the most efficient size of government, at the lawr231 e



Since 1999, income for poorer Canadians has remained constant in real per person terms while income for richer Canadians has risen (See Chart 2). A progressive income-tax system will therefore mean revenues growing faster than 25 percent in real per capita terms – as a progressive income tax means we collect proportionally more revenues from the rich than the poor. We are collecting more revenues from those whose incomes are growing faster and less revenues from those whose incomes are growing slower.

Perhaps holding tax revenues constant in real per capita terms is unrealistic – wages and incomes also grow in per capita terms and governments spend a lot of money paying wages and sustaining incomes. So perhaps revenues (and thus the size of government) *should* grow in real per capita terms.

But should government revenues grow faster than the overall economy? At the limit, the answer is obviously no – we cannot turn the entire productive resources of our economy over to the government.

Chart 1 also includes real per capita GDP. The Canadian economy has grown 21 percent in real per capita terms since 1999. This means that a flat tax on consumption or a flat tax on income would result in government revenues growing faster than the economy since 1999 while a flat tax on corporate income would have grown less than the economy over this time.

Almost three quarters (from Table 1) of Canadian government revenues come from taxing personal income (PIT and payroll) or consumption. In short, the very design of the Canadian tax system means that, if tax rates were held static, revenues would automatically grow faster than the Canadian economy.

Carbon taxes, on the other hand, should shrink over time, both in per capita terms and in relation to the size of the Canadian economy. In fact, as they say, that

so long as each increase in carbon taxes is entirely offset by a reduction in one of these other faster-growing tax bases. So long as the tax base on which we are shifting towards (carbon) grows slower than the tax base we are shifting away from (income or total consumption), the result will be lower overall taxes (and smaller overall government) under carbon taxes than under income or consumption taxes.

Increasing government reliance on carbon taxes while at the same time reducing government reliance on personal income, payroll or broad consumption taxes would therefore reduce the automatic long-term increase in government revenues that is a reality of the current Canadian tax system.

## Concluding thoughts

A carbon tax would make the Canadian tax system more economically efficient for three reasons. First, if we taxed carbon more and corporate income less, our tax system would tax consumption more and savings and investment less. Second, if we taxed carbon more and personal income tax less we would flatten the tax system and reduce the labour-force distortions caused by personal income taxes. Finally, if we taxed carbon more and broad consumption or personal income less, our tax system would consume less per capita and less of the overall economy. Taxing carbon offers a way to slow an inexorable growth of taxes... and government.

As a conservative, I welcome the opportunity a carbon tax provides to tax consumption more, to flatten taxes overall, and to slow the growth of government.

We have thus far ignored entirely the question of fairness. And while it is beyond the scope of this paper, I

that change should be abandoned. It might mean, instead, that we use some of the revenues from that now more efficient tax system to address those fairness challenges.

Which is precisely what every Canadian jurisdiction with a carbon tax has done. And any future introduction of a carbon tax should also be fair – indeed, it won't succeed politically if it isn't.

And so I will conclude with this. Even if carbon taxes did nothing for climate change, we should still raise carbon taxes while lowering other taxes. Why? Because it will improve the efficiency of our tax system and slow the automatic growth in taxes... and government.

# About the author

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