# Fiscal Priorities for Canada: Building on the Legacy of David Dodge

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## Introduction

It is often said that political realities preclude governments of the day from undertaking sound economic measures, especially when the gains are long term and the sacrifices occur now. Indeed, the constraint of politics is often invoked as an excuse for enacting bad policy compromises or restricting consideration of policy options, and the 2008 federal election campaign might be exhibit number one in support of that view. There are, however, notable exceptions, of which recent Canadian experience is exemplary. Canada underwent a bold and far-sighted period of fiscal policy innovation in the waning years of the twentieth century, implementing significant, but less than universally popular, policies that addressed a number of important fiscal concerns and gave us something to build on as new issues emerge. The question is whether the next generation of policy-makers will be up to the task or whether they will be deterred by political populism.

The most important of these policy initiatives included the introduction of the Goods and Services Tax (GST), the negotiation of the Canada-U.S. Free Trade Agreement (FTA) and subsequently the North American Free Trade Agreement (NAFTA), the reform of the system of retirement savings, and the stabilization of the national debt. The relevant details of these policy initiatives will be discussed below, along with other fiscal reforms of lesser importance, such as reforms of federal-provincial fiscal arrangements and the introduction of refundable tax credits.

Not all major fiscal policy challenges were successfully dispatched. The reform of the business income tax system accomplished little despite some broad consensus among experts of important directions for reform. The equalization system remains woefully and predictably inadequate to deal with horizontal imbalances in the Canadian federation, especially those that have recently emerged but were certainly foreseen. Reform of the unemployment insurance system seems to be perpetually hijacked by political constraints. And the Agreement on Internal Trade has proven to be utterly ineffective for addressing inefficiencies in the Canadian economic union. Nonetheless, if one were keeping score, the successes undoubtedly outnumbered the failures, especially when compared with experience elsewhere, notably, the United States.

It is a fascinating question as to why some seemingly sensible policies manage to get undertaken and others do not, when virtually all face the intransigencies of entrenched political interests and the opposition of public opinion. Students of political economy, public economics, and public choice have been preoccupied with this question in recent years, but have yet to provide a convincing explanation. In my view, the answer has much to do with the quality, persuasiveness, and fortitude of the politicians who take the lead in enacting the policies. But, it has equally much to do with the quality, persuasiveness, and integrity of the civil servants who provide the policy advice and ideas in the first place.

Now, of course, the Department of Finance, where many of these policies are incubated, is notoriously closed to public scrutiny, as it must be to some extent. Nonetheless, it is a reasonable presumption that David Dodge was in the thick of things and was instrumental in bringing to bear his analytical acumen as well as his public mindedness to see through monumental policy changes for which a considerable political price might be exacted. It was clearly a case of the right people being in place at the right moment with the will to undertake difficult policy decisions that, despite some political unpopularity, were in the public interest. The questions I want to deal with are: if David Dodge were reincarnated as Deputy Minister of Finance, what policy challenges would he face, what policy advice might he give, and how might he address the challenges in the service of good public policy? These issues are timely, because the fiscal challenges we face in the near term are arguably more serious and more divisive than those of the 1980s and 1990s.

Before embarking on this task, let me emphasize that in arguing that political constraints should not be an excuse for eschewing good policies, I am not suggesting that political consensus is not important. On the contrary, it is of ultimate importance in a democracy. However, political constraints and political consensus are not exogenous and immutable, but are influenced by political leadership informed by experts in the public service and in the public policy community. It takes skill and the courage of one's convictions to persuade politicians about sound public policy and for politicians to persuade the public. The persuasion is not always successful, and a high political price may be exacted, as the GST case illustrates. However, in other cases, such as NAFTA and deficit reduction, persuasion was successful in achieving a political consensus. The default position is pure populism, whereby policies are enacted passively to pander to prevailing public preferences. Sound policy will not emerge. The real challenge of political economy is how to design institutions and political processes that engender good policy making when populism is the lazy alternative. Surely, a necessary condition for that is a strong independent bureaucracy led by persons of wisdom and judgment, of whom David Dodge would be a good example.

## Notable Fiscal Policy Successes

The last two decades of the twentieth century witnessed some transformative fiscal reforms that compare with the major policy initiatives of the early postwar period. At that time, the foundations of the federal-provincial welfare state were put in place. Universal medical care and hospital insurance were established in all provinces, thanks to the inducement of federal shared-cost financing. Likewise, the Canada Assistance Plan solidified the provision of social assistance and services to the needy. The Canada Pension Plan (CPP) was enacted, and Unemployment Insurance became universal. Old Age Security (OAS) and the Guaranteed Income Supplement (GIS) as we know them were established. The basic form of the system of equalization payments was put in place, and the Tax Collection Agreements were established. By the end of the 1960s, a system of social protection and of federal-provincial fiscal arrangements that facilitated the welfare state were in place that, despite their warts, would persist in some form until today.

The introduction of these policies was not without controversy. Their enactment required innovation, leadership, and tenacity at the political level (one thinks of Tommy Douglas, Lester Pearson, Paul Martin, Sr., and so on) and in the civil service (the federal Department of Finance and the legendary Saskatchewan civil service). Moreover, though many of the policies necessarily involved provincial legislation and programs and were initiated at the provincial level, the federal government played an indispensable leadership role in encouraging the harmonized participation of all provinces.

The major fiscal reforms of the late 1980s and early 1990s were different in scope and responded to different policy imperatives, but they were transformative and far-sighted nonetheless. Moreover, all were very challenging from a political economy perspective. Three of these reforms stand out.

**North American free trade**

The FTA, enacted in 1988, was the most far-reaching of the policy measures and serves as a useful case study in the malleability of alleged political constraints. The issue of free trade has obviously been a policy issue as old as Canada itself. It was given new impetus by the advocacy of the Royal Commission on the Economic Union and Development Prospects for Canada (1985), appointed by the Trudeau government and chaired by the Liberal ex–cabinet minister Donald Macdonald. What is notable about the work of the Macdonald Commission, whose research was coordinated by David Smith (a onetime teacher and department head for David Dodge in his first two affiliations with Queen's University), is that commission researchers deliberately chose not to be bound by political constraints in their research or in their policy recommendations. Had they felt so constrained, they might well not have recommended free trade with the United States or even devoted scarce resources to providing definitive studies of the issue.

The politics of the free trade debate and its aftermath are well known. What is relevant for my purpose is the fact that it represented a policy that had wide, though far from universal, support among policy experts, while at the same time limited public support. From the point of view of economic policy principles, the FTA was a watershed event in that it acknowledged the primacy of relying on market mechanism as the main determinant of industrial outcomes rather than on proactive industrial policy directed by the government. In the Canadian context, this has always been a difficult argument to pursue, given the legitimate concerns that have to be addressed if market outcomes cause some woes. However, the system of social protection so carefully established in the 1960s was surely up to the task of dealing with the inevitable losers in a free trade world. Indeed, with globalization beginning to accelerate in this period, more losers would certainly have been created by not opening markets up to the outside world. Nonetheless, the FTA was a very tough sell, and it took a significant amount of leadership and goodwill to establish it. That the FTA and its successor, NAFTA, have been a success cannot be disputed, even if there remain challenges arising from some of its consequences that inform the policy imperatives of the immediate future that we discuss below.

**The Goods and Services Tax**

The FTA was not so much fiscal policy as foundation policy defining the rules of the game for policy intervention. On the other hand, the second major policy initiative enacted a couple of years later—the GST—was purely fiscal in nature but no less important in its own realm. This was a policy that seemingly originated in the Department of Finance, but was well in tune with the broader community of tax-policy experts. Although it was specifically conceived as a replacement for the very narrow and inefficient Manufacturers' Sales Tax (MST), it heralded a new era in Canada as elsewhere of tax-reform approaches based on the ideals of broad bases and low rates, the taxation of consumption rather than income, neutrality with respect to type of activity and business organization, and especially neutrality with respect to domestic versus foreign production. It was a natural complement to the FTA, with its tendency to level the playing field, something that was missing from both the MST that it replaced and the various retail sales taxes (RSTs) that many of the provinces stubbornly continue to administer.

The GST accomplished many things. It represented a move to a broad-based tax with low rates and relatively few exemptions and, as such, it was a natural complement to direct taxes (income and payroll) as the basis for revenue raising. The GST compares favourably with comparable taxes in other Organisation for Economic Co-operation and Development (OECD) countries, and is as close to ideal as value-added taxes (VATs) get. From a tax-design perspective, the GST achieved what were arguably the two main policy messages to emerge from the optimal-tax literature. The first of these was the desire for production efficiency, something that the GST is uniquely designed to achieve. While it brings all producers into the tax-administration net, the system of multi-stage taxation combined with input tax credits ensures that intermediate inputs escape taxation, putting all producers on a level playing field with respect to one another as well as with respect to foreign producers.

The second accomplishment was to redress the excessive taxation of capital income that exists in an income tax system, and to move the tax system as a whole in the direction of consumption-based taxation. One need not be a pure consumption tax advocate to favour such a reform. One simply has to believe that capital income should be taxed at a much lower tax rate than labour income, a belief reinforced by the optimal-tax literature, to favour adding a broad-based consumption tax to the mix.[1]

The final thing that the GST reform accomplished was the introduction of a major refundable tax credit. Although this was introduced to make the GST reform distribution-neutral, it has shown enormous potential as an effective device for achieving equity in the fiscal system where it is most sorely needed—at the bottom of the income distribution. I will return to this aspect of the fiscal system.

The GST reform was not without its downsides, and it is still a work in progress. Significant problems remain. First, the GST reform went only partway to eliminating the inefficiency of existing sales tax systems. Unlike the Australian and German cases, it failed to address the deficiencies of provincial sales taxes, something that is very high on the agenda for reform, as discussed below.

Second, the reform itself seemed to compromise the "tax morality" of Canadian taxpayers, that is, to condone their willingness to connive with small producers, especially those providing services, to avoid paying the tax. In fact, given the self-reporting basis of our tax-collection administration, the integrity of the tax system very much depends on the willingness of taxpayers to pay their taxes voluntarily. For whatever reason, the GST reform seemed to compromise that willingness. It may have had to do with the visibility of the tax: virtually all VATs in other countries are already included in the ticket price. It may

1. A recent summary of the arguments involved in the taxation of capital income may be found in Banks and Diamond (2008).

have had to do with the broadening of the base, especially to include services. But, taxpayer resistance also reflected a basic misunderstanding of the tax and a failure of policymakers to explain and sell the tax. (A similar misunderstanding permeates the carbon tax reform debate today.)

Third, the GST reform, being advertised as simply a replacement for the MST, rather than as a fundamental reform of the tax system in its own right, was not accompanied by a perceptible change in direct-indirect tax mix comparable to what other countries have done. Indeed, with the recent cuts in the GST rates, precisely the opposite has occurred.

More generally, revenue-neutral tax reforms are always difficult to accomplish, since the losers are comparable in size to the gainers. As the literature on behavioural economics has stressed, people seem to put much more weight on losses in their income than on gains. We have seen this not only with respect to the GST, but also with respect to the failure to implement far-reaching business tax reform, such as that advocated by the Mintz Committee (Technical Committee on Business Taxation 1997), which was constrained to seek revenue-neutral reforms. In that sense, the recent years of fiscal surplus would have been ideal times to implement major tax reforms, but that opportunity has been lost.[2]

Finally, in the interest of a level playing field in ideas and in ideology, there is a constituency that is relieved that the GST was not introduced more efficiently and with less taxpayer resistance. From the point of view of those who prefer to hold a tight rein on government (in part from a distrust of bureaucracy, as in Brennan and Buchanan 1980), an efficient and relatively easy source of revenue like the GST allegedly contributes to a lack of restraint on government spending. From that point of view, one can certainly rationalize the recent reduction in GST rates.

**Public indebtedness**

The third main fiscal accomplishment of government—and here one should stress that no single political party has a monopoly on successful fiscal initiatives, a strong bureaucracy being the unifying influence—was the vigourous reversal of deficit financing after many years of dangerously accumulating public debt. This accomplishment was one that very few OECD countries came near to matching in like circumstances. Several aspects of the manner in which it was done were problematic to some, myself included, but the task itself was necessary and was successfully accomplished. Ultimately, deficit financing over a long period of time represents largely an intergenerational transfer, and its benefits and costs need to be judged on that basis.[3] What is at stake is intergenerational fairness, which is particularly difficult to assess, especially since future generations cannot voice their concerns except through their predecessors. The running up of the public debt represented an increase in intergenerational transfers that had no clear justification, and indeed there was no attempt to provide one. It was not being used to finance lasting benefits whose costs fell disproportionately on the current generations, such as a war or a depression. On the contrary, coming demographic trends combined with the deteriorating state of the environment and the depleted stock of natural resources that we are leaving our heirs are already putting them at a disadvantage without further saddling them with a debt to pay for our over-consumption.

2. This theme is developed in Boadway (2007).
3. A review of the issues involved in assessing the stance of public indebtedness may be found in Boadway (2004a).

Therefore, debt reduction was good fiscal policy. Moreover, it had beneficial side effects, the most important of which was the intangible benefit of achieving a national consensus that deficit financing was a bad thing. Besides that, there may have been macroeconomic benefits from the reduction in interest rates that the cut in public borrowing had, and that probably contributed to buoyant investment and the accompanying embodied technical progress.

There were also downsides with debt reduction. It was largely accomplished by a selective reduction in federal spending falling disproportionately on transfers to the provinces, while exempting costly transfer programs to individuals that could have been beneficially rationalized. The cuts in transfers to the provinces, which to a large extent have been subsequently undone, led to a serious breakdown in trust between levels of government without which a federal system of governing cannot easily operate. It was not just the size of the cuts, but also their unexpectedness that angered the provinces, who responded with a chorus of demands for either more dollars or more decentralization to address the so-called fiscal imbalance. Whatever one's view of whether more decentralization is good or bad for the Canadian federation, it is a decision that should be made rather more deliberately than through a sequence of budgets with other objectives in mind. There is clearly much unfinished business with Canadian fiscal federalism, as I will discuss below.

**The pension system**

A reform very much related to deficit reduction in its impact and successful in its own right was the reform of the pension system. In fact, from an economic point of view, unfunded public pensions are public sector liabilities like public debt and a myriad of other policies that incorporate intergenerational transfers, explicit or otherwise. The same arguments that apply to reducing the debt also support refunding the pension system. By good chance as much as anything else, we inherited a pension system that was not dominated by a pay-as-you-go public pension. The purely unfunded part—OAS and the GIS—is not contributory, and moreover is targeted to those most in need. Even in an otherwise funded public pension system, this so-called first pillar would be financed from general revenues as part of the redistributive tax-transfer system. The contributory part of the pension system, the CPP (the second pillar), would have evolved to an unfunded system in the absence of reform. With relatively little fanfare, putting the CPP on sound footing was an important accomplishment, especially when accompanied by reasonably generous tax treatment of various forms of private savings for retirement, including Registered Pension Plans (RPPs), Registered Retirement Savings Plans (RRSPs), and housing.

One glaring indicator of the success of federal fiscal policies involving debt, public pensions, and other intergenerational transfers can be seen by calculations of so-called generational accounts for Canada. Generational accounting is, as the name implies, an accounting exercise whereby the costs of financing existing fiscal policies projected into the future are assigned to current and future cohorts. The result is each cohort's "generational account," which is the present value of the net taxes that the representative household of the cohort would have to pay over their remaining lifetime for cohorts currently alive or their full lifetime for future cohorts. These net taxes include all tax liabilities less transfers and less those types of government services that can be assigned to cohorts, such as education and health.[4] Generational accounts can be made comparable across

4. The basic technique is outlined and applied to several countries in Auerbach, Kotlikoff, and Leibfritz (1999). Applications to Canada may be found in Corak (1998), Oreopoulos and Vaillancourt (1998), and Oreopoulos (1999).

cohorts by converting them to lifetime net tax rates, which are ratios of generational accounts to the present value of lifetime income. Oreopoulos (1999) calculated generational accounts for Canada using data for 1995, after major budgetary and pension reforms had been undertaken. He found, perhaps surprisingly, that the generational accounts for future (unborn) cohorts were only slightly higher than for the current young.[5] This is a stark indication of the success of intergenerational fiscal policies in Canada and stands in sharp contrast with findings in other OECD countries.

The Canadian fiscal landscape achieved some order in other areas, as well. There were incremental measures of tax reform that, while incomplete in important ways, left the system poised for major tax reforms. The innovation of refundable tax credits for the GST, for children, and for employment earnings established the administrative machinery that could turn the income tax system into a proper negative income tax, long advocated by economists and emphasized by the social policy components of the Macdonald Commission (Royal Commission on the Economic Union and Development Prospects for Canada 1985) (and studied by David Dodge during his brief academic career). The Harmonized Sales Tax (HST) used by three of the Atlantic provinces established a model that could be used to achieve the elusive goal of sales tax harmonization across Canada. The system of tax saving for retirement savings (including the new Tax-Free Savings Accounts) serves as a useful complement to the CPP/QPP (Quebec Pension Plan) system to put retirement incomes on a more sustainable basis. And the consolidation of federal-provincial social transfers into block grants is a natural evolution now that the main provincial social programs are well established.

## Some Disappointments

The major fiscal policy disappointment was the inability to carry out a much-needed reform of the tax treatment of business income to adapt it to the imperatives of globalization. Ideas about how businesses ought to be taxed have evolved considerably since the time of the Carter Report (Royal Commission on Taxation 1966), which informed tax-policy thinking until well into the 1980s. Corporate taxation was seen as a backstop to a personal tax whose ideal was comprehensive income. Thinking has changed dramatically since then. Comprehensive income is no longer seen as the ideal. Even if one does not follow numerous recommendations of tax-reform commissions to adopt personal-consumption taxation (which effectively leaves capital income untaxed),[6] there is widespread belief that capital income should be taxed at a much lower rate than labour and other forms of income, and most tax systems now reflect that. The case for corporate-income taxation as a backstop or withholding device is no longer compelling. At the same time, structural elements of the tax system are now seen as detracting significantly from competitiveness and productivity. Many of these were documented by the Mintz Report (Technical Committee on Business Taxation 1997), especially the pernicious part played by so-called profit-insensitive taxes like the provincial retail sales tax and the business property tax. More generally, the corporate tax system itself remains riddled with inefficiencies, favouring sectors that need no favours (like resources) and discouraging the services industries from which much innovation flows.

5. These calculations assumed that future budget surpluses would be used to reduce government debt. Oreopolous and Vaillancourt (1998) showed that if budget surpluses were used instead to increase government spending, the generational account for future cohorts would rise significantly relative to the current young, thereby throwing intergenerational balance out of whack.

6. See, for example, the Meade Report (Report of a Committee Chaired by Professor J. E. Meade 1978), U.S. Treasury (1977), and Economic Council of Canada (1987).

The lack of policy response to the Mintz Report teaches us important lessons about policy reform. For one, it appears to be politically very difficult to enact revenue-neutral tax reforms, even those that are as reasonable and thoughtful as the Mintz Report proposals. The interests of the losers seem inevitably to outweigh the benefits to the gainers, even though in dollar terms that is not the case. This is equivalent to the notion of loss aversion that is prominent in the behavioural economics literature. Unfortunately, business tax reform was not pursued while the government was running sizable surpluses in recent years, which would have weakened the revenue-neutral constraint. Instead, tax cuts were enacted unaccompanied by needed structural reforms. Apparently, the right combination of political leadership and forceful policy advice that characterized the earlier fiscal reforms was lacking.

## Emerging Fiscal Challenges

Canada is now entering a new era of significant fiscal policy challenges, some of which involve unresolved inherited issues. My list of such issues is not exhaustive nor does it represent any consensual viewpoint. Moreover, my preferred policy responses are undoubtedly idiosyncratic and in some cases tentative. In each case, difficult politics are involved. They are proposed in the twin spirits of debate and informing policy-makers. The list includes five issues of new and unfinished business.

### Natural resources

Our abundant natural-resource wealth is a valuable asset, but it can be a mixed blessing if not managed properly. The elements of the so-called "resource curse" (Dutch disease) are well known, so little space need be devoted to them. Developing natural resources draws productive factors from other sectors, including especially from those sectors that have more potential for innovation and technological progress. Moreover, this is exacerbated to the extent that the rents accruing from the natural resources are spent rather than saved, causing real exchange rate appreciations and putting more pressure on other domestic industries. Such effects can be mitigated by controlling the rate of exploitation and accumulating rents in a fund, invested abroad and drawn down very gradually, as exemplified by the Norwegian case.

In Canada, one additional factor complicates things considerably. The provincial ownership of resources is the source of two significant problems. One is the enormous horizontal fiscal imbalance that results from resource-rich provinces having greater ability to provide basic public services than non-resource-rich provinces. As the literature on fiscal federalism teaches us, that gives rise not only to horizontal inequity—otherwise identical citizens obtain different fiscal benefits from government, depending on their province of residence—but horizontal inefficiencies as well, as persons and businesses have a purely fiscal incentive to relocate in low-tax jurisdictions.[7] The equalization system, which is designed to offset these effects, cannot easily cope with the horizontal imbalances of the sort that have developed recently in Canada. The federal government is faced with equalizing disparities arising from natural-resource revenues to which it may have limited access. Once Ontario becomes entitled to equalization, as it is predicted to do, the existing system will see the federal government raising revenues disproportionately from Ontario through the federal general tax system to make transfers to Ontario to

7. See, for example, the discussion of the fiscal inefficiencies and inequities arising in decentralized federations in Boadway and Flatters (1982).

compensate for resource-revenue deficiencies.[8] This does not mean that equalization is not achieved, but that it can only be achieved through a vast reallocation of tax room from the provinces to the federal government.

The other problem, and potentially the most lasting one, is that incentives exist for resource-rich provinces to use their wealth for province-building purposes, such as by developing infrastructure and attracting diversified industries. This obviously detracts from saving the rents in a heritage-type fund. It also skews regional economic development according to a pattern based not on inherent location advantage from an economic geography perspective, but simply in favour of the provinces that happen to have large endowments of natural resources.[9]

These are difficult problems to grapple with, and the federal government has limited policy instruments available, given that provincial ownership of natural resources is constitutionally prescribed. Nonetheless, there are options that could be exploited more fully than at the present. First, the equalization system could be reformed in a way that effectively extracts revenues from the resource-rich provinces. This could be done by aggregating the equalization system with the Canada Health Transfer/Canada Social Transfer (CHT/CST) system of social transfers and allowing the latter to reflect provincial fiscal capacity. This is essentially the system that is used in Australia and Germany to achieve net equalization. Its effectiveness is directly related to the size of the social transfers, that is, the vertical fiscal gap. A larger gap will not only enable more negative equalization to be extracted from resource-rich provinces, but will also have other advantages, such as maintaining federal fiscal influence on provincial social programs and, as discussed below, making tax harmonization more likely.

Second, the federal government could do much more to maintain and even increase the revenues it obtains from the resource industries without apparently violating constitutional norms. It could eliminate the deductibility of provincial royalties from federal tax liabilities. It could eliminate special provisions in the corporate tax system that favour resource industries, as documented by the Mintz Committee (Technical Committee on Business Taxation 1997). More basically, it could foster the use of the federal corporate tax as a rent-collecting tax by designing it on a cash-flow-equivalent basis. The so-called ACE (allowance for corporate equity) system used in some European countries is a good model.[10] The federal government could also protect the revenues to which it is already entitled offshore and in the territories.

Third, the federal government could attempt to deal with the adverse consequences of province building by resource-rich provinces. Thus, it could invest in infrastructure preferentially in the resource-poor provinces. It could also provide incentive for provinces to save more of their resource revenues. For example, resource revenues that are put into heritage funds could be exempt from equalization until they are withdrawn.

Dealing with the imbalances caused by unequal provincial resource wealth is obviously a difficult and sensitive issue, and the experience of the National Energy Program of the 1970s is often invoked. In fact, it need not be insuperable. Equalizing natural-resource wealth has almost always been a part of the equalization system, and the federal

8. See the recent discussion of this in Courchene (2008).
9. This theme is explored in Boadway (2009).
10. The experience with the ACE is discussed in Klemm (2007).

government has had significant access to that wealth through the tax system. This is clearly not the time for the federal government to abdicate all responsibility for dealing with natural-resource disparities. Removing natural resources from the equalization system, which one of the main political parties has advocated, would constitute abdication.

**Environmental pricing**

The need to deal with environmental issues is a compelling one, but also a much misunderstood one. Yet, the economics arguments are relatively simple, even if technical implementation is less so. Although pollutants of any form are policy relevant, much of the public debate has focused on carbon emissions policies to deal with global warming, and some special considerations apply there. Two main issues arise. To what extent should Canada have a carbon emissions policy? And, if it should, what form should it take? Let us begin with the second question, on which an economist is arguably better prepared to comment.

Setting aside the many implementation problems, the options are straightforward. One is to tax carbon emissions.[11] This could be (i) at the point of emission, (ii) on final products based on cumulative emissions, or (iii) on a multi-stage basis with credits for taxes imposed on previous ones. The multi-stage approach has the merit, as in the case of the GST, of avoiding tax cascading and of facilitating zero rating of exports, but at the cost of considerable complexity (by making all transactions taxable). Relative to other taxes, carbon taxation is undoubtedly more complex and entails substantial administrative costs of collection and compliance.

Apart from that, there are various other modelling issues that arise with carbon taxation. The first has to do with coverage. Should all sources of emissions be taxed, including agricultural, industrial, and household? In principle, the answer is yes, the broader the base the better, as with the GST. There are other, more effective ways of dealing with redistributive or regional concerns.

Second, what should be done with the revenues? From an economic perspective, there is no reason to treat them differently than general revenues. That is the nature of the so-called "double dividend." There is no reason, apart from political, for disbursing them to households or firms as a refundable tax credit. Nor is there any reason to use them to subsidize abatement technologies. The mere fact of carbon pricing provides an incentive for firms and households to abate. Some commentators propose returning the revenues to the provinces in proportion to where they were collected. Again, there is no economic argument for doing this. If carbon emissions are truly a social cost, carbon taxes should apply where those costs are borne, without compensation.

Next, there is the issue of federal-provincial carbon tax harmonization. This is imperative to avoid double taxation and distortionary effects across provinces. Indeed, from the perspective of fiscal federalism, the carbon tax is ideally federal rather than provincial. However, unless the federal government acts first, it would be difficult to implement a federal-only system. That being the case, there will be inevitable squabbling about the allocation of the double dividend among provinces, although this would be mitigated in the event that carbon tax/pricing revenues were subject to equalization.

11. For example, see the recent proposals by Mintz and Olewiler (2008) and Courchene and Allan (2008).

Finally, there is the international dimension, which is obviously important for Canada. To a purist, imports should be taxed on their carbon content (to the extent that international tax and trade agreements allow it), though with credit for carbon taxes levied abroad. Such crediting shifts the double dividend abroad, which may be unpalatable. The taxation of carbon content in exports is more contentious on competitive grounds. In the absence of carbon taxation abroad, one could argue for exempting exports, despite the fact that this violates the principle of pollution control. Of course, to the extent that carbon taxes are levied abroad on imports with credits applying, the case for domestic taxation on exports is strengthened as a way of capturing the revenues. What this really suggests is that, as in the case of other taxes on international transactions, some international coordination is desirable, albeit very difficult to achieve.

Carbon emissions can be controlled by quantity regulation as well. Regulation by itself is obviously an inefficient policy choice: it is virtually impossible to assign quantities of emissions in accordance with an efficient allocation. Quantity control through the issue of permits combined with permit trading—the cap-and-trade system—can achieve the same effective carbon pricing as carbon taxation, although with permits there is much more certainty about the level of carbon emissions that will be achieved (and correspondingly less about the price of emissions). But, depending on how the permits are issued, there are very different effects for the government. If the permits are auctioned off competitively, the auction price is analogous to a carbon tax, and equivalent revenues are available for the government in expected terms. On the other hand, if the cap-and-trade system operates by the government simply issuing permits or emissions entitlements to potential polluters and allowing them to trade, the double dividend disappears. The revenues are dissipated as firms obtain the implicit value of their entitlements. This represents a particularly arbitrary way of disbursing the revenues from carbon pricing and, as such, makes little economic sense. Yet, this is the direction in which the provincial system seems to be headed, presumably owing to political exigencies.

The difference in property rights to the implicit revenues from carbon pricing under cap and trade versus carbon taxation makes it difficult to harmonize carbon pricing among jurisdictions if different jurisdictions use different methods. For example, crediting firms under a carbon tax scheme for the emissions that they are entitled to receive under cap and trade amounts to turning tax revenues over to a polluting agent. It is better to have a uniform system, and it is better that the system be either a carbon tax system or a permit system where permits are auctioned off.

Let us return now to the prior question of whether a carbon emissions policy is necessary or desirable. Even if we accept the scientific argument that carbon emissions contribute to global warming, there are two separate issues that must be confronted in arguing for a Canadian carbon emissions policy. The first is the oft-cited point that our individual effort is pointless since we constitute a small percentage of world emissions. This is basically an argument to free ride, and holds independently of what other nations choose to do. The problem of free riding is endemic to society, and standard economic calculus suggests that, like the prisoners facing the proverbial dilemma, free riding is in one's own interest. As compelling as the logic of free riding is, the world would be impossibly unlivable if everyone took the economist's advice. I would prefer to hope that my nation acting on behalf of me acted ethically rather than selfishly, at least to some extent and despite the cost. There seems no other hope but that nations will choose that option, and that will not happen unless some countries take the lead.

A second, more troublesome and less recognized, issue plagues the carbon emissions debate, and that has to do with the consequences of taking the supply side into account.[12] Apparently, once carbon is in the atmosphere, it remains there for a very long time. The effect of carbon emissions is in that sense cumulative. Add to that the fact that there is a finite stock of carbon fuel on the earth. Imposing a tax on carbon may reduce the rate at which the stock of fuel declines, but eventually it will all be used and find its way into the atmosphere, at least in the absence of effective carbon sequestration technologies. That being the case, carbon pricing does not reduce global warming at all: it merely postpones it. Seen in this light, the main effect of carbon taxation is to slow down the rate of use of the carbon fuel stock, thereby redistributing its benefits from present to future generations.[13] That may be an unduly pessimistic view of global warming. But, to the extent that it is true, it reinforces the case for carbon taxation—now, however, on a different sort of intergenerational equity basis.

**Sales tax harmonization**

Despite its many benefits, the GST reform was unfinished business. We have an enviable GST at the federal level, but unlike the Australian and German federations, we retain a series of highly inefficient retail sales taxes (RSTs) in several provinces. The case for harmonizing RSTs with the GST is widely agreed, but the obstacles remain formidable. The unfortunate fact to be faced is that it is administratively difficult to run a VAT system in a federation with each government having minimal discretion over its own tax rate. In my view and as discussed below, the advantages of maintaining a decentralized VAT system with provincial discretion over rates are small compared with the advantages of a fully harmonized system with a single rate. Persuading the provinces of that is the main obstacle.

The problems with RSTs are well known. Apart from their narrow bases, which are fixable, single-stage sales taxes inevitably cause production inefficiencies by taxing business inputs at arbitrarily different rates. They discriminate against domestic producers for the same reason. A VAT is far and away the sales tax of choice across the OECD (with the notable exception of the United States), and with good reason.

At the same time, despite the experience in Quebec, harmonizing separate provincial VATs with the GST is bound to be cumbersome. Any firm operating across provinces would have to deal with different input-tax-credit rates and presumably different tax authorities at considerable cost for compliance and collection. There are theoretically appealing ways of harmonizing multi-jurisdiction VATs, some of which apply a uniform sales tax rate at all intermediate stages and differential rates at the final stage.[14] But, they have yet to be tested, and the administrative complexities appear daunting.

A more sensible approach is to question the need for provincial VATs. Harmonization would in any case entail a common base with the federal GST, so all that the provinces gain from a decentralized harmonized system is the right to choose their own rates. This right is of limited value relative to the complexities it entails. Given the system of equalization, the need for provinces to have different rates is limited. More important, the usual argument for tax-rate decentralization as a means of achieving accountability makes little

12. The following argument is due to Sinn (2008a, 2008b).
13. Sinn (2008a, 2008b) argues further that escalating carbon taxes is counterproductive. This simply induces accelerated use of the resource.
14. These methods are carefully reviewed in Crawford, Keen, and Smith (2008).

sense. Provinces, in fact, rarely vary their sales tax rates. On the contrary, they take sales tax revenues more or less as given and exercise accountability over their choice of how to spend them.

These considerations suggest a more imaginative alternative, which is to move to a national GST with a share of the revenues allotted to the provinces.[15] In effect, the HST system used in three of the Atlantic provinces would apply nationwide, though presumably with Quebec retaining its separate sales tax (QST). Such a revenue-sharing GST system—which mimics the Australian case—has a number of advantages. It would harmonize the GST in the simplest way and with a single tax authority. There would be no need to account for how the revenues are collected by each province. Instead, they would be allocated among provinces according to equalization principles. That is, the "have" provinces would receive correspondingly less according to their fiscal capacities. In addition to harmonizing the sales tax, this would bring a modicum of relief to the equalization system by implicitly equalizing down the non-equalization-receiving provinces even without the federal government having sufficient access to resource revenues.

### Income tax reform

Basic reform of the income tax system is long overdue. The last major reform (at least federally) was in the wake of the Carter Report (Royal Commission on Taxation 1966). In the meantime, the circumstances facing tax policy makers have changed, major reform initiatives have been launched elsewhere, especially in some European countries, and our thinking about the ideal tax system has evolved. What has happened instead is that we have had a long period of piecemeal reforms without a vision of an end point. Some of these changes have rationalized elements of the system in ways that facilitate fundamental reform, such as the introduction of refundable tax credits, the revision of the Tax Collection Agreements with the provinces, and the recent new tax-sheltering devices for retirement savings (Tax-Free Savings Accounts). Moreover, there has been some halting movement towards simplification. It is time, though, for a more thorough rationalization of the system.

Let us start with some principles. Unlike when the Carter Report appeared, few experts nowadays favour comprehensive income as the ideal personal tax base. Apart from its sheer unfeasibility, a comprehensive income tax would tax capital and labour income using the same rate structure, which makes little economic sense. For example, the result would be a massive differential taxation of future, relative to present, consumption, which would violate efficiency and equity norms. Moreover, the mere fact that it is difficult to tax some forms of capital income implies that inefficiencies are unavoidable, and in fact are exacerbated by the tax planning induced by a progressive rate structure. True, in a mixed direct-indirect tax system, the relative taxation of capital income is reduced, but against this are other forms of taxation that apply to capital income, such as property and business taxes.

Instead, opinion falls into two camps. One camp, following the Meade Report (Report of a Committee Chaired by Professor J. E. Meade 1978) in the United Kingdom, the Blueprints for Basic Tax Reform in the United States (U.S. Treasury 1977), and the Economic Council of Canada (1987), favours consumption as the basis for direct personal taxation. This would be achieved by sheltering all capital income, either through RRSP-type devices or

15. Tremblay (2009) has also advocated such a reform.

by allowing the capital income on non-registered assets to be simply tax-free (as in the Tax-Free Savings Accounts). Progressivity of any desired degree would be maintained by using a progressive rate structure. Given that elements of both types of capital-income sheltering are already in place, moving all the way to a consumption-based personal tax would be quite feasible (albeit politically difficult). The other camp, following the dual income tax model of Scandinavia—the so-called Nordic model—or one option of the President's Advisory Panel on Federal Tax Reform (2005) in the United States, advocates a schedular system with a separate rate schedule applying to labour and capital income. In the Nordic model, earnings (and transfer income) are subject to a progressive rate structure, while capital income is taxed at a flat rate, typically corresponding to the lowest rate of earnings tax. Corporate income is then taxed at the same rate as capital income.[16]

In my view, the Nordic model makes a lot of sense for Canada. While advocates of consumption tax would not tax capital income on the grounds that it entails double taxation of savings, which can be both inefficient and inequitable, the case for some tax on capital income remains strong. For one thing, it gets at income earned from inherited wealth, which otherwise would go untaxed in the absence of wealth or wealth-transfer taxation. For another, capital income is likely correlated with a person's wage-earning ability and thereby acts as a complement to earnings taxation (Banks and Diamond 2008). At the same time, the case for a flat-tax approach to capital income is realistic. Many administrative complexities from taxing capital income arise because of either differential tax rates on different types of capital income or a progressive rate structure. A single rate comprehensively applied avoids these problems and also facilitates the collection of taxes using withholding by financial institutions. Of course, flat capital-income taxation does relatively little to reduce inequities arising from inheritances, which is why in the Scandinavian case, wealth or wealth-transfer taxation complements the dual income tax. One could make a theoretical argument for inheritance taxation in Canada, as well, although that would be a bit ambitious, given that the federal government previously abandoned the field to the provinces.

Dual income taxation would have a further advantage in the Canadian context. The earnings part of the tax could be jointly occupied by the federal and provincial governments and harmonized. The capital-income part of the tax could be federal alone, thereby protecting the single-rate aspect of the tax and the administrative benefits that it implies. The dual income tax would be a fair and efficient alternative to the existing system, which taxes some sorts of capital income at high rates and exempts others altogether. It is by no means a problem-free system, since some forms of capital income would still be difficult to tax (housing) and one might want to shelter other forms (pension savings). Moreover, it may not always be possible to perfectly distinguish labour from capital income, as the Nordic countries have found. But it would represent considerable simplification over the existing system.

There are other measures that could further rationalize the direct tax system. The advent of refundable tax credits could be exploited more consistently. There is no particular reason why some credits remain non-refundable, including especially those that are intended to contribute to vertical equity. Making all tax credits refundable would transform the tax system into a proper negative tax system and in the process make it fairer to the worst-off members of society.

16. The pros and cons of the Nordic dual tax system are reviewed in Boadway (2004b).

A natural extension of the refundability principle would be to apply it to tax losses, especially those involving business income. Of all the distortions of business taxation, arguably the most important are the ones applying to risky, small, and growing firms, those typically in a loss position. The inability to refund tax losses increases their costs of finance and their riskiness, and puts them at a disadvantage relative to larger, more established firms.

Business income taxation more generally could be reformed to avoid the many distortions documented in the Mintz Report (Technical Committee on Business Taxation 1997). A dual income tax system would facilitate rationalization, since the personal capital tax rate would also be used for corporations. This would simplify the integration of corporate and personal taxation and eliminate some tax-planning opportunities.

Having said that, the potential of the corporate tax system as a device for collecting rents should not be overlooked, given the urgency of the federal government having some access to resource rents, as mentioned above. The problem is that a corporate tax designed for rent-collection purposes differs from one designed as a backstop to the personal income tax. In fact, with lower capital income tax rates under a dual income tax, the need for a corporate tax to withhold against income accruing on behalf of shareholders is much reduced. In these circumstances, a corporate tax designed to collect rents, such as an ACE, as mentioned above, would make a lot of sense.

**Human capital**

Human capital is an asset like no other. Unlike physical capital, it is not fully reproducible, and since it is embodied in individuals, it is not transferable. Human capital is, in part, an endowed trait that can be augmented by human-capital investments of various sorts. The pattern of endowed human capital and the ability to accumulate it are very unevenly distributed across the population, with the presumption that there is a positive correlation between the two. The ability to accumulate human capital also seems to vary systematically with one's social environment: family income and education, community, and one's peers in educational institutions and on the job. To complicate matters further, human-capital accumulation is relatively risky, and it very likely emits externalities. Finally, given the relatively large investment required early in life, and the difficulty in borrowing against future earnings, individuals may face liquidity constraints that affect their access to higher education.

What is the government's fiscal interest in human-capital accumulation? Let us talk in terms of higher education, although similar issues arise with respect to trades acquisition or training on the job. On purely efficiency grounds, there are various market-failure arguments that can be used to justify some corrective action. The supposition that there may be externality effects from education is the classic case for fiscal support of the sort we observe in practice, such as the relatively heavy subsidization of educational institutions and the direct support offered through the tax system, which is discussed below. The extent of these externalities is unclear, and they could take many forms, such as the diffusion of information and skills through human contact of educated workers on the job and in society, the contribution of educated persons to civic society, the acquisition of new knowledge in universities, and so on.

Other market failures apply at the individual level. The lack of insurance markets to deal with the high risks of education and liquidity constraints faced by individuals in financing their education might rationalize government intervention to provide some collective form of educational financing and risk insurance. Indeed, that is the core justification for income-contingent loans and equivalent devices.[17] In their purest form, they are actuarially fair and not intended to subsidize an individual's education.

Recently, emphasis has been put on arguments from behavioural economics to justify government encouragement of education (and perhaps even the mandating of school education that is a universal feature of education policies). Standard behavioural economic reasoning suggests that persons under-invest in their own education (or even underperform) because of myopia, procrastination, and the tendency to seek instant gratification that comes with time-inconsistent preferences.[18] Government intervention to counter behavioural anomalies is controversial, but is usually justified by arguing that government would be acting in the best long-run interest of individuals. In fact, there are instances in which governments do just that: they outlaw, regulate, or tax such things as addictive substances and, as we have seen, they mandate saving for retirement. They might likewise encourage persons to acquire more education than they otherwise would, although effective implementation of such policies is difficult because success requires individuals actually applying themselves. Thus, there is undoubtedly an element of waste associated with inducing unwilling (and perhaps unable) students to acquire more education.

More important and controversial, two fundamental redistributive issues are involved with education. For one, differences in individuals' human capital give rise to differences in income that an inequality-averse government would want to mitigate, especially to the extent that they are due to unequal endowments. And, this is exacerbated by the fact that accumulation of human capital through higher education is concentrated on a minority of the population, dominated by those who have larger human-capital endowments to begin with and who are more educationally productive. There are, however, serious constraints in pursuing such redistribution fully. In particular, there are incentive problems. Progressive taxation of earnings not only reduces the incentive to accumulate human capital in the first place, but it also reduces the incentive to earn income given the stock of human capital. To the extent that these incentive effects are operative, they reduce the efficiency benefits of encouraging education mentioned above. These incentive effects obviously also restrict the extent of progressivity. In principle, the government might want to redistribute the earnings from accumulated human capital less intensively than those from endowed human capital. The inability to do so directly might provide support for a general incentive to acquire human capital as a part of a progressive income tax system.

The second redistributive objective concerns equality of opportunity, which is one of the few constitutionally sanctioned socio-economic objectives in Canada.[19] Equality of opportunity means different things to different people, but one appealing interpretation of it is to reduce inequalities in the ability to earn income. To achieve this absolutely would be an impossible task, if only because it is impossible to redistribute endowed human capital among persons. The best that can be achieved is to pursue greater equality in the accumulation of human capital. Even this is a difficult task given, as mentioned, the disparities

17. See, for example, the discussion of income-contingent loans in Barr (2005) and of the related concept called a graduate tax by Carmichael (2005).

18. Key elements of behavioural economics and its fiscal implications may be found in Diamond and Vartiainen (2007).

19. Thus, section 36 (1) of the Constitution Act, 1982 says, among other things, ". . . Parliament and the legislatures, together with the government of Canada and the provincial governments, are committed to promoting equal opportunities for the well-being of Canadians."

in the ability to accumulate human capital owing to social and personal factors. A serious policy of equality of opportunity in this sense would involve more than just removing the barriers to access to education, whether financial, social, or circumstantial, so that all persons of a given skill are equally able to add to that skill. It would involve directing educational resources heavily towards those with lower skills so that disparities in skills are mitigated.

Such a proactive interpretation of equality of opportunity as a policy of reducing skill differences as opposed to eliminating opportunities for those of a given skill would certainly be in accordance with the recent literature on equality of opportunity (see Roemer 1998). But, this would obviously involve a very inefficient use of educational resources. For example, it would be very costly in terms of skill enhancement to devote enough resources to enable all low-skilled persons to go to university. It is obviously more efficient to target resources to those who can make the most productive use of them, which presumably involves a minority of the population, which is the case now. The point is that equality of opportunity, to which lip service is often paid, is a very difficult and costly objective to achieve, given the differences in skill with which persons are endowed. Nonetheless, it is a worthy objective to be set against others, including efficiency. At a minimum, one might argue that policies should strive to remove barriers that disadvantaged, but motivated, persons face in acquiring human capital. Presumably, this at least means that persons of a given skill have equal opportunity in developing that skill. One then relies on the income tax system to deal with inequalities involved with differences in income arising from the distribution of skill endowments themselves.

It should be obvious that, even from a conceptual perspective, there are difficult policy issues involved with education. Transferring these issues from principle to practice is equally difficult, and the literature is far from providing definitive answers to educational policy questions. The best we can do is to offer some critical and speculative observations on implications for policy in Canada.

Note first that the tax treatment of human-capital accumulation is quite generous relative to taxable financial assets. To the extent that the cost of education is forgone earnings, such investment is implicitly sheltered from tax in a way that is roughly similar to RRSPs and RPPs (although drawing down accumulated assets occurs before retirement).[20] To use the jargon of tax economists, it is subject to cash-flow taxation. Foregone earnings are implicitly deductible from current income, and the proceeds from the investment—at least to the extent that they take the form of higher income—are taxable. Thus, normal asset income obtained from human-capital accumulation is largely free of tax, although returns higher than normal are certainly taxed. (An important exception is that extra tax will be incurred to the extent that the tax rate on the increased earnings is higher than the tax rate on foregone earnings, something that occurs under a highly progressive rate structure.) Therefore, households that have the requisite skills have an incentive to invest in human capital along with other sheltered assets at the expense of taxable financial assets. That part of human-capital investment that consists of material costs and tuition is treated somewhat less liberally since it is not fully deductible. Instead, it is subject to a partial tax credit, although it is not clear that this is the best option. Consistency in tax would require full expensing of tuition and ancillary costs of education.

20. This point and some of its consequences were explored by Davies and St-Hilaire (1987).

To the extent that there is cash-flow tax treatment of human-capital investment, there is really no need on efficiency grounds to give tax preferences for the cost of borrowing to finance education. Indeed, if tuition and other costs were fully tax deductible, it would not be appropriate to give any interest deduction. Yet, the Registered Educational Savings Plan (RESP) does essentially that: it allows the tax-free accumulation of assets used to finance investments in higher education that is itself largely sheltered.

Cash-flow tax treatment of human-capital investment also has desirable risk-sharing properties, although one could argue that the inability to pool the risk of human-capital investment with that of other assets leaves excessive exposure to risk. Moreover, whereas cash-flow tax systems applying to financial investment by firms can in principle ameliorate cash-flow (liquidity-constraint) problems of investing firms by allowing refundability of risk, in the case of human-capital investment in the form of foregone earnings, this is not the case. These considerations argue strongly in favour of an income-contingent-type loan program to address the combined issues of risk and liquidity constraint. This seems to be another example where economic reasoning has yet to find acceptance among policy-makers.

Perhaps the most important and difficult fiscal issues involve determining what should be the individual student's share of tuition costs. Several issues are involved here, all of which have been alluded to, and none of which admit of a precise quantitative answer. Nonetheless, the principles can at least be used to inform policy. The main argument for a sizable public contribution to higher education is the efficiency one, particularly the externalities associated with both the educational and research functions. Whether this justifies the large share of the financial burden covered by government is debatable. One suspects that this share is driven more by the desire to keep tuition costs low for all students regardless of their means, which is not something that can be supported by either efficiency or equity arguments. On the contrary, the relevant equity arguments, which involve equality of opportunity, would call for much more targeting of public assistance as opposed to what to date has been a largely, though not completely, universal approach.

To expand on that a little, equality of opportunity, even in the weaker sense of enabling persons of a given skill equal opportunity to develop those skills, would dictate compensating persons for disadvantages such as family income. Given the private return to education, it is hard to justify general taxpayers financing the education of able students from middle- and upper-income families. To the extent that one wants to offset liquidity constraints or riskiness involved with financing higher education for these persons, an actuarially fair income-contingent-type loan program would be ideal. Pure assistance should be targeted at the needy to the extent that is possible. The current system of low tuition, subsidized loans, and RESPs does not achieve the desired targeting.

How should such targeting be achieved? Some might argue that the universities themselves should be responsible for targeting. Indeed, in some provinces, tuition increases have been allowed only on the condition that a minimum share of such increased tuition revenue goes to support needy students. This is an unreasonable approach. The universities are not in a position to assess need properly, and moreover are bound to have conflicts of interest in how they do so. To the extent that need is related to family income, the government via the income tax system is in a much better position to do so. It could design something like a refundable education tax credit that is conditional on family income, much like the refundable tax credits it offers for children or for working incomes. Taken together with an actuarially fair income-contingent-type loan program, a refundable tax-credit program would satisfy both the efficiency and equity objectives of higher education.

In fact, the most recent federal budget introduced the Canada Student Grant Program, which is a needs-based grant that depends on family income and lasts for the duration of a student's program. This puts in place the necessary targeted grant for addressing equality of opportunity. As it stands, the size of the grant is insufficient to meet even basic tuition costs. Too much tax assistance is taken up by middle- and upper-income classes rather than being directed first to those that most need it.

Higher-education institutions will no doubt continue to operate their own programs of scholarships and assistance funded out of their own endowments. (Indeed, they could, in principle, also operate their own income-contingent-type loan programs, as Carmichael 2005 has observed.) Fundraising to build up these endowments should certainly be encouraged, given that it is always more efficient to finance services and transfers by voluntary donation than by distortionary tax revenues. However, given the very different ability of different institutions to fund-raise and the fact that social objectives like equality of opportunity are their main mandates, a public backstop program is required.

Finally, in Canada, the federal-provincial dimension cannot be neglected. Of all the major social programs in Canada, higher education is the one where there is the most direct involvement by the federal government in what is otherwise an area of provincial legislative jurisdiction. Despite the blurring of lines of responsibility, this is perhaps inevitable, given that higher education involves shared federal-provincial objectives, and its financing involves a variety of fiscal instruments, some of them directed at institutions, others at students, and yet others at scholars. Given primary provincial responsibility, a case must be made for federal intervention. Various arguments can be made for a federal role, most of them controversial.

First, spending-power arguments might be used in support of federal block transfers to the provinces in support of post-secondary education. Such transfers exist now, but they play no spending-power purpose: they are basically equal per capita transfers to the provinces with no strings attached and no relationship with provincial spending. Moreover, post-secondary transfers are part of the general system of CHT/CST transfers, and although their share is nominally specified, there is nothing to prevent provinces from using the funds for pressing priorities in the area of health care. One could argue that a transfer dedicated to post-secondary education should be carved out of the CST: a Canada Post-secondary Education Transfer (CPET). Such a transfer could play a similar role to those for welfare and health by, for example, encouraging mobility of students and graduates across provinces. As federal transfers for post-secondary education have fallen, so has free mobility. Out-of-province fee differentials now exist and provincial preferences in admission to some programs do, as well. Even without explicit conditions in the past, the mere fact of federal financial support might have induced provinces to maintain non-discriminatory policies in higher-education institutions.

Second, the federal government is well placed to provide some forms of direct student support, particularly those that can be delivered through the income tax system. This includes not only the Canada Student Grants mentioned above, but also an income-contingent loan program. The whole system of tax preferences for post-secondary education could be rationalized by making all costs tax deductible so that financial costs are treated comparably with forgone earnings. The fact that our income tax system is highly harmonized and for most provinces administered by the Canada Revenue Agency facilitates this. Most important, these programs serve interests that are both federal and provincial in nature and do not involve intrusion into provincial jurisdiction.

Finally, federal intervention in support of research can be justified, given that knowledge created through research knows no boundaries. Peer-reviewed basic research grants, inducing overhead costs, and graduate scholarships are reasonable examples and are now well established. Whether the same argument extends to material support through infrastructure or to faculty appointments through the Canada Research Chairs Program, is more debatable. Although the universities no doubt value the support these programs provide, it is not clear that the federal government is best placed to manage such programs, given the basic provincial responsibility for universities.

## Conclusion

We have covered a range of fiscal policy issues, past and present, many of them related to the professional interests of David Dodge. The characterizing features of the issues are that, although they are not excessively difficult to experts, the public typically does not understand them. Prudence or loss aversion may lead to sufficient opposition to reasonable policy prescriptions such that a lazy or populist government will be deterred from undertaking sound policies. There is no easy way to avoid that other than by relying on the integrity of politicians and their advisers in the bureaucracy. We have been fortunate in Canada to have had an outstanding federal bureaucracy, and they can justly take some credit for the fiscal successes we have enjoyed in the past few decades. No small part of the credit goes to David Dodge and his cohort, who were in large part responsible for marshalling comprehensive and sensible fiscal policies through the political process. I expect Canadians take for granted the integrity of the bureaucracy, but it might be a mistake to be too complacent. One can only hope that with the rapid turnover of the federal civil service, the next generation will be as reliable as the one they succeed.

Above all, those of us in the policy research community should also stubbornly insist on basing our policy research and prescriptions on principles and not be deterred by issues of political feasibility. To reiterate an earlier point, when the research program for the Macdonald Commission was being conceived, there was a debate about whether consideration should be restricted to policies that were politically feasible. A decision was made, under the influence of the Director of Research, David Smith, that the research should not be so constrained. Had it been, it is quite likely that free trade would not have been pursued and achieved.

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