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Prudence and Opportunity: A Shadow Federal Budget for 2013

Canada's relatively strong recovery from the 2009 slump is not grounds for complacency. Economic and fiscal risks at home and abroad cloud the outlook. This Shadow Budget protects Canada in the near term by accelerating the federal government's planned return to budget surpluses, and in the longer term with reforms to boost economic growth.

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The Study In Brief

Canadians can be proud of their country's relatively strong recovery from the 2009 slump, but should not be complacent. Canada's fiscal situation is strong only by comparison with the dire situations in other major advanced countries. Our national saving rate is too low to support needed investments. And economic and fiscal risks abroad cloud the outlook. The C.D. Howe Institute's 2013 Shadow Budget protects Canada in the near term by accelerating the federal government's planned return to budget surpluses, and in the longer term with reforms to boost economic growth.

This Shadow Budget builds on the economic and fiscal outlook in the 2012 Fall Update by scheduling an end to budget deficits by fiscal year 2014/15. The key focus of the plan is further control of government spending. It proposes to reduce the number of federal employees from planned levels, and limit mounting compensation costs per employee by raising employee contributions to pension and other under-funded benefits. It would also trim net subsidies to Crown corporations and "tax expenditures" – programs delivered through the tax system.

The Shadow Budget also proposes reforms that have low or zero net costs that will boost Canada's economic dynamism. Among them is a revenue-neutral one-percentage point shift from personal-income to consumption taxation, which will promote income growth and help provincial finances. It also proposes reforms to Equalization and Employment Insurance that will make these programs more supportive of regional development. Other growth promoting measures will liberate trade and investment, level the retirement playing field, and reduce the role of tax considerations in businesses' inter-provincial and international investment decisions.

By building on Canada's recent relative success, this Shadow Budget will protect Canadians from the risks of excessive government borrowing, and promote the private prosperity and public programs that ensure Canadians' economic future.

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With the passage of time since the 2008–2009 crisis and slump, the positive and negative effects of the extraordinary macroeconomic measures many countries took to support their economies are coming into sharper focus.

Extraordinary ease by central banks, including the Bank of Canada, likely prevented a massive series of bank failures that might have precipitated a depression as occurred in the early 1930s. A massive shift toward fiscal deficits, including the elements in the federal government's Economic Action Plan in Canada also helped prevent a collapse of demand.

More than four years later, some problems with these crisis-inspired policies are increasingly evident. While the Bank of Canada has unwound some of its extraordinary measures to provide liquidity, other major central banks have not – indeed, continued aggressive expansion of their balance sheets means they are continuing as major suppliers of credit. The governments of key developed countries, including many in Europe, the United States and Japan (which was already running chronic deficits before the crisis) have market debts at peacetime highs relative to their economies. Their continued high borrowing is undermining private-sector confidence with fear of higher taxes, inflation and defaults.

Canada is in better shape than most countries, but is in no position to be complacent. Absent a shock like those suffered south of the border and in much of Europe, Canadian households have continued to borrow and invest in residential housing at unusually high levels, and Canada's milder recession and quicker recovery, especially in the labour market, may have fostered a sense – as suggested by chronic spending over-runs by most provincial governments (Busby and Robson 2013) – that our relatively good position allows us to be careless with our resources.

Any such sense would be misplaced. Low investment returns mean that the balance sheets of many key institutions – most notably public-sector pension plans – are in far worse shape than they were, and often worse than standard measures suggest. Canada is importing large amounts of saving from abroad. Too much of this inflow is financing consumption, rather than investments that will raise our productivity and foster growing incomes – needed to repay what we are borrowing and prepare for a future in which a larger proportion of Canadians will be retired, and drawing on publicly funded income supports and healthcare.

Canada's relatively good current position provides an opportunity for fiscal policy. A quick return to budgetary balance will free more of Canada's domestic and imported saving to financing much-needed corporate investments.

This Shadow Budget will reach budgetary surplus in 2014/15 – two years prior to the date anticipated in the federal Update of Economic and Fiscal Projections (Fall Update, Canada 2012) last November. It will meet this accelerated target by building on recent efforts to control government

We thank Randy Bauslaugh, Daniel Schwanen and Michael Wilson for ideas, and Scott Clark, Don Drummond, Steve Easson, Rhys Kesselman, Kevin Milligan and Nick Pantaleo, along with other members of the C.D. Howe Institute's Fiscal and Tax Competitiveness Council, for comments. We emphasize that not all reviewers agree with all the recommendations in this Shadow Budget: responsibility for the recommendations and for any errors rests with the authors.

spending. In particular, the number of federal employees will continue to decline and reforms to the financing of employee pension and other post-retirement benefits will tame compensation growth per employee. In addition, net subsidies to Crown corporations will drop to more sustainable levels, while a thorough review for efficiency and effectiveness will trim government expenditures delivered through the tax system.

In conjunction with these trimming measures, this Shadow Budget proposes fiscal policies with no, or negligible, net costs to foster the economic growth needed to support the living standards and public services Canadians aspire to in the future. It initiates a revenue-neutral shift of federal revenue from personal incomes to consumption. It also initiates reviews of transfers to provinces and territories, and labour-market policies, to make them more supportive of growth. Other measures will enhance international trade, and reduce the role of tax considerations in businesses' inter-provincial and international investment decisions.

A Quick Return to Surplus

For almost a decade, a survey of private-sector forecasters has provided the foundation for federal fiscal plans. The Fall Update's projections (summarized in Table 1) reflected the fact that private-sector economists have again reacted to disappointing global conditions by reducing their nominal economic growth projections. These reductions put nominal GDP lower by $21 to $29 billion annually from 2012 to 2016 compared to the projections in the 2012 budget, and lower by $27 to $45 billion annually over that period compared to those in the 2011 budget. These more subdued expectations imply federal revenues lower by some $6 to $8 billion annually from the levels expected in 2012, and lower by $13 to $17 billion annually from the levels anticipated in 2011.

Weaker growth projections have resulted in treasury bill and government bond rates lower than previously forecasted (Table 2). For the government's bottom line, the resulting lower debt-service charges counteract about half of the lower budgetary revenues thrown off by a disappointing economy. The net result was that the Fall Update anticipated a return to surplus in 2016/17, one year later than the 2012 budget.

The deleterious effects of chronic federal government borrowing on confidence and on national saving make this delay in eliminating deficits unwelcome. Canada's relatively robust economy gives it the capacity to accelerate its return to budget balance – desirable in any event and all the more so when other countries, notably the United States, have no credible plans to eliminate their deficits. With fiscal risks worsening elsewhere in the world, too much can still go wrong. Since the 2011 budget, economic disappointments have pushed budgetary revenues down by more than the government's $3 billion contingency buffer. The Fall Update highlighted the risk posed by commodity prices – set in world markets, and sensitive to global growth setbacks – for Canada's terms of trade and budgetary revenues, reporting that the 7 percent overall commodity prices decline since Budget 2012 is the main driver behind an annual $7 billion revenue shortfall over the projection period.

Corporate tax revenues in Canada tend to follow commodity prices (Figure 1). Commodity prices were on a pronounced upward trend until 2007. If the decline since then proves to be a lasting break in the trend, Ottawa would be incapable of balancing its budget over the planning horizon.

This Shadow Budget takes the view that a $3 billion annual provision for risks to the outlook is about right – too large a contingency reserve drives an undesirable wedge between the fiscal plan and results the government can reasonably foresee (Busby and Robson 2013). Our approach to further risk-proofing Canada's fiscal position is therefore to shorten the Fall Update's deficit-elimination horizon.

Table 1: Assumptions and Projections, 2012/13 to 2014/15[a]

	2012/13	2013/14	2014/15
	($ billion except as noted)		
Economic Growth (Percent)			
Real GDP Growth	2.1	2.0	2.5
GDP inflation	1.3	2.0	2.1
Nominal GDP Growth	3.4	4.0	4.7
Federal Revenues			
Taxes on Incomes, Payroll, Consumption and Other Transactions	231.4	243.7	258.0
User Fees and Charges for Government Services and Products[b]	13.2	13.7	14.2
Investment Income[c]	12.8	12.8	12.4
Total Revenues	**257.4**	**270.2**	**284.6**
Federal Expenditures			
Direct Program Expenses	120.8	118.9	118.6
Transfers to Persons and Governments	130.0	135.0	140.6
Gross Debt Charges	29.6	29.8	31.0
Total Expenditures	**280.4**	**283.7**	**290.2**
Fiscal Prudence			
Provision for Prudence	-3.0	-3.0	-3.0
Summary of Federal Revenue, Expenditure and Balance			
Taxes, Fees, and Other Charges	244.6	257.4	272.2
Program Spending and Transfers	-250.8	-253.9	-259.2
Debt Charges Net of Investment Income	-16.8	-17.0	-18.6
Adjustment for Fiscal Prudence	-3.0	-3.0	-3.0
Budgetary Balance Adjusted for Fiscal Prudence	**-26.0**	**-16.5**	**-8.6**

Notes:
(a) Based on Fall Update (Canada 2012).
(b) Includes earnings of consolidated Crown corporations. Excludes the provision for fiscal prudence.
(c) Interest income, net income from enterprise Crown corporations, foreign exchange revenues, and other returns on investment.

Sources: Canada (2012); authors' calculations.

Table 2: Actual 3-month Treasury Bill and 10-year Bond Rates Versus Forecasted Rates in Previous-Year Budgets

	Actual	Budget Forecast from Previous Year	Budget forecast From Second-Previous Year
	(percent)		
2009			
3-month treasury bill rate	0.3	3.8	4.3
10-year bond rate	3.2	4.2	5.2
2010			
3-month treasury bill rate	0.6	1.7	4.5
10-year bond rate	3.2	3.4	4.8
2011			
3-month treasury bill rate	0.9	2.4	3.2
10-year bond rate	2.8	4.3	4.5
2012			
3-month treasury bill rate	0.9	2.5	3.8
10-year bond rate	1.9	4.0	4.9

Source: Federal budget documents.

The Shadow Budget target is a return to balance by the end of fiscal year 2014/15. This accelerated timeframe has the further virtue of bringing the return to surplus ahead of the next currently scheduled date for a federal election in the autumn of 2015 – in other words, doing it within this government's mandate.

Containing Spending

The most important theme in achieving surplus is, consistent with the last three federal budgets, spending restraint. Budget 2012 announced that the government-wide departmental spending review launched a year earlier should, once fully implemented in 2014/15, yield roughly $5.2 billion in ongoing saving. Adding this restraint to the departmental budget freezes announced in the 2010 budget, the Fall Update projects moderate growth in direct program expenses over the planning horizon.

However, more can and should be done. Achieving surpluses by 2014/15 will require further action to limit the growth of federal payrolls, pensions and other post-retirement benefits, rationalize expenditures delivered through the tax system, and trim financial assistance to Crown corporations.

Containing Employee Compensation Growth

The size of Ottawa's workforce and total compensation makes addressing the mounting cost of federal government employment a priority.

Figure 1: Federal Corporate Income Tax Revenues and Commodity Prices, 1986–2012

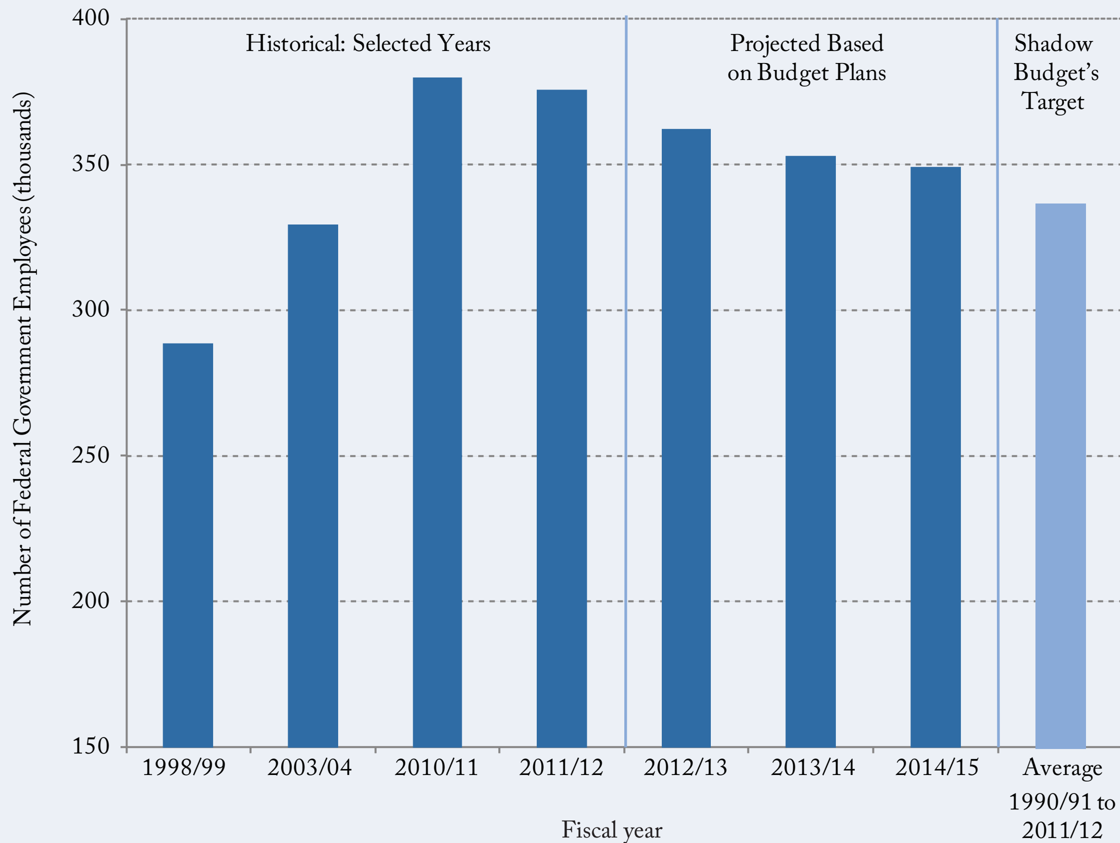
Sources: Federal Fiscal Reference Tables and Bank of Canada's Commodity price Index.

Reducing Numbers of Employees

Ottawa shed 70,000 jobs during the 1990s to help bring the budget back to a sustainable position. Then federal employment rebounded, adding 91,000 jobs to the payroll from 1999/00 to 2010/11, when employment reached 380,000 (PBO 2012). Initiatives in the last three budgets should reduce it to 349,000 by 2014/15, but this figure would still be far above the 1998/99 level, and still higher than the average of 336,400 for the last 22 years (Figure 2; PBO 2012).

This Shadow Budget proposes to remove some 6,000 public service positions over the next two years through a limit on net replacements that will allow departments to replace only about a third of retirements and departures. Departments will have scope to fill critical positions when they become vacant, but will need to find efficiency gains to generate more value per employee. This plan

Figure 2: Number of Full-Time Equivalent Federal Employees, Historical (Selected Years) and Projected



Source: PBO (2012).

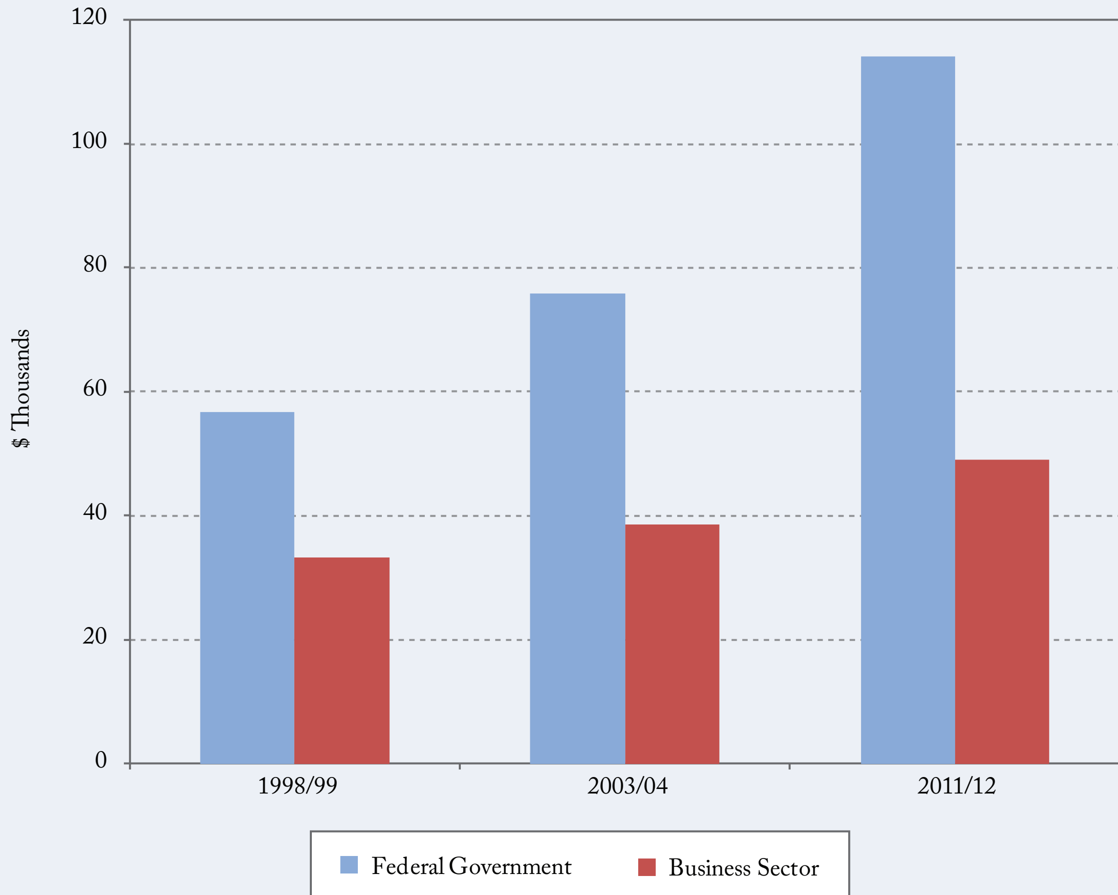
will return the federal workforce to its long-term historical average by 2014/15 (Figure 2).

Controlling Per-Employee Compensation

Ottawa's average cost of employing a full-time worker – wages and salaries plus employer contributions to health, dental, disability, workers' compensation, social security, pension, and other post-retirement benefits – more than doubled from 1998/99, when it was about $56,700 per employee, to 2011/12, when it reached $114,100 per employee.[1] Over the same period, business-sector compensation per worker in Canada rose by less than half, from $33,300 to $49,000 (Figure 3).

1 Measured per-employee compensation would be much higher – some $132,000 in 2011/12 – if Ottawa valued the cost of employee pension and other post-retirement benefits at market rather than assumed interest rates (Robson 2012).

Figure 3: Total Compensation per Employee: Federal Government versus Business Sector, Selected Years



Sources: PBO (2012) and Statistics Canada Table 383-0009.

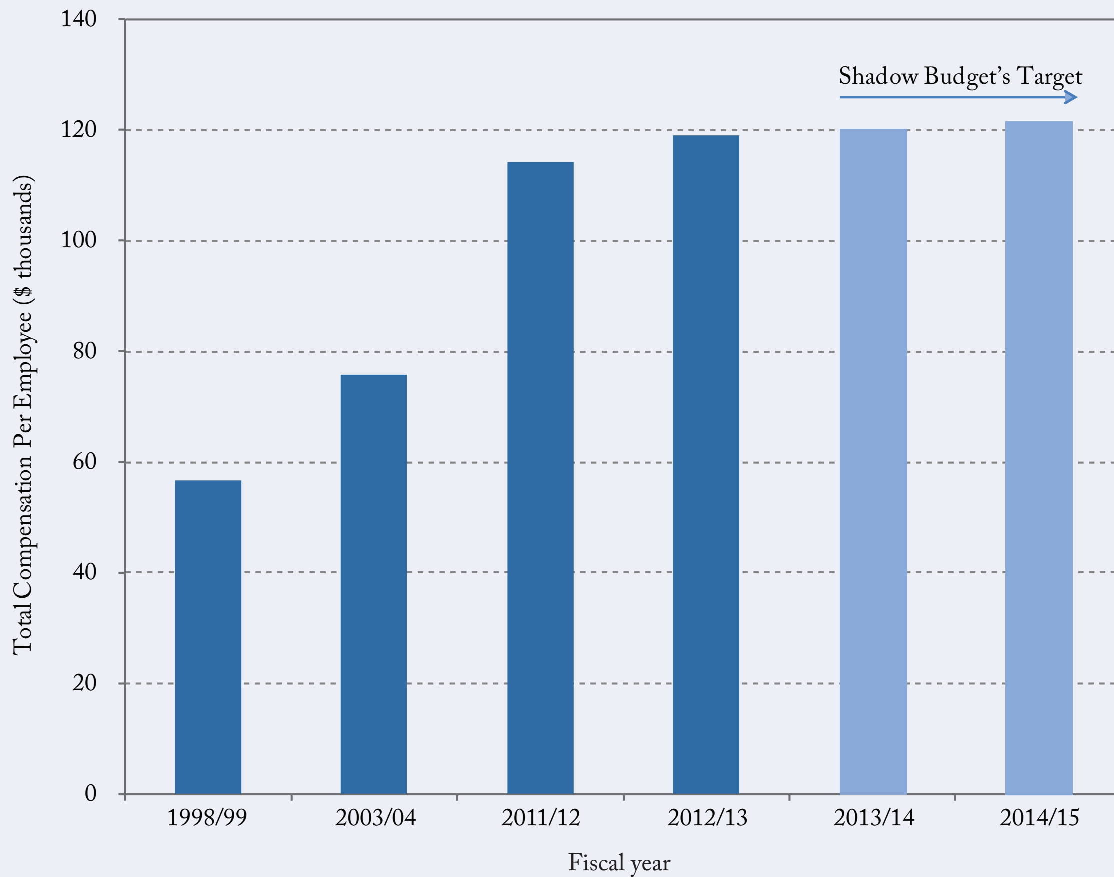
If Ottawa's compensation per worker had increased at the same pace as business-sector compensation during this period, Ottawa's total employment bill would have been some $11.5 billion less in the most recent fiscal year.

Excessive per-employee compensation raises the cost of government services and distorts labour markets, creating problems for the private sector and provincial governments, whose employee unions naturally use advantageous federal precedents in pressing their case.

Curbing Wage and Salary Costs

Based on already negotiated wage settlements, the Parliamentary Budget Officer (PBO) has projected federal wage and salaries to increase 4.5 percent annually in the next two years (PBO 2012). This Shadow Budget moves to restrict per-employee total compensation growth to 1 percent annually for the next two years (Figure 4). Some of that difference will come from constraining wages and salaries currently under negotiations or for which agreements will be expiring. As detailed below,

Figure 4: Total Federal Compensation per Employee, Selected Historical Years and Projected Target



Source: PBO (2012).

however, fairer employer contributions towards deferred benefits will play a key role in reducing the growth of Ottawa's compensation bill.

Fair Contributions to Pension Benefits

The federal government just legislated changes to the pension plans of federal employees and members of parliament (MPs). The contribution rates of employees and MPs themselves to their pension plans will rise and the contributions made by taxpayers will decline accordingly. Deductions from the paycheques of members of the Public Service (PS) plan – the largest federal-employee plan covering most non-uniformed employees – will rise from about 34 percent of the reported cost of their plan last year to 50 percent by 2017. Contributions by members of the Canadian Forces (CF) and Royal Canadian Mounted Police (RCMP) to their plans will rise from about 30 percent to about 44 percent of reported costs. Contributions by MPs will rise from a recent 14 percent to half of the reported cost of their annual pension accruals (Table 3).

Table 3: Current Service Cost and Employee Share of the Cost for PS, RCMP, CF, and MP Pension Plans, 2012

Pension Plan	Current Service Cost				Cost Sharing (Employee Share of the Cost)		
	Total Reported	Contributions: Employees	Contributions: Taxpayers	Fair-Value	Reported 2012	Government Objective 2017	Fair-Value 2012
	(% of pensionable pay)				*(% of current service cost)*		
Public Service (PS)	19.8	6.7	13.1	47.7	33.8	50.0	14.0
Royal Canadian Mounted Police (RCMP)	22.5	6.9	15.5	56.9	30.7	44.0	12.1
Canadian Forces (CF)	23.1	6.5	16.6	60.2	28.1	43.0	10.8
Members of Parliament (MP)	51.5	7.1	44.5	72.1	13.8	50.0	9.8

Notes: Contributions and current service costs are for 2012 before the proposed changes. Fair-value refers to the cost of funding the pension obligations with the asset – the federal government's inflation-indexed bonds – that best matches the liability.

Sources: Authors' calculations based on OCA (2011a, 2011b, 2012a and 2012b), and the RRB yield as of March 31st 2012.

Increasing employee contributions to these plans is appropriate – indeed, this recommendation appeared in the C.D. Howe Institute's Shadow Budget for 2010. However, the estimates of current service cost – the annual increase in retirement wealth of the average participant – that determine the amount to be split between the employer and employees are badly understated in the government's financial statements. Without changes to those estimates, employee contributions after the changes will still be too low, and taxpayer contributions and exposure to the true cost of these plans will still be too high.

The estimates of current service costs that determine contributions depend on the Chief Actuary's projections of the returns on a risky portfolio of assets. But the bulk of the promises made by these federal pension plans are not backed by any assets. And if the returns on what assets do exist differ from the Chief Actuary's projections, those differences have no legal consequence for the pension promises, which are underwritten by taxpayers.

As we have documented elsewhere (Laurin and Robson 2012; Robson 2012), the appropriate way to value these benefits is to ask what someone not in one of these plans would need in a nest egg with a similar risk profile promising a similar retirement. Because these plans' benefits are indexed to inflation and backed by taxpayers, the best match is the federal government's real return bond (RRB). And since the yield on these bonds has been declining,

standing at only 0.51 percent at the end of March 2012, the size of the nest egg needed to match those pensions has gone up.

If each year's addition to benefits in these plans were actually matched by additional RRBs, the estimated costs for the PS, CF, RCMP, and MP plans would range, not from the 19.8 to 51.5 percent of pensionable pay reported, but from 47.7 percent to 72.1 percent of pensionable pay.[2] So employees are only covering about 10 to 14 percent of the fair-value of their pensions (Table 3). Taxpayers, themselves struggling with declining rates of interest to fund their own retirements, are making a commitment to the future pensions of federal employees far greater than reported.[3]

One way to mitigate this cost and risk to taxpayers would be to cap Ottawa's contributions as an employer at 50 percent of the maximum tax-deferred limit available to Canadians saving in RRSPs or DC plans.[4] The rest of the amount needed to fund the plans at their actual current service cost would come from employees. This would greatly limit taxpayers' exposure to pension shortfalls, while ensuring that they pay their fair share of the cost of the federal employee pension benefits, without subsidizing the accumulation of tax-sheltered pension funds at higher contribution rates than available to savers in RRSPs and DC plans.

Funding other federal post-retirement benefits

Ottawa promises a variety of non-pension post-retirement benefits to retired employees – mainly to disabled veterans of the Canadian Forces and the RCMP, and to public service retirees who opt to retain the health and dental plans coverage they had while working – as well as to employees who become eligible for workers' compensation benefits, and to those receiving severance benefits. Ottawa's financial statements put the present value of these benefits at $94 billion as of 31 March 2012 (RGC 2012, p. 2.19).

These obligations are completely unfunded: Ottawa holds no assets to cover the payments when they come due. That they appear in the public accounts at all is commendable – many governments do not record such obligations – but they are buried in the details of net federal debt, and recent declines in interest rates mean that their carrying cost is, like that of federal pensions, understated. Even the understated costs are considerable, however: in 2011/12, Ottawa recorded $4.8 billion in new benefit accruals and $2.9 billion in notional interest charges on past accruals, adding $7.7 billion to program expenses (RGC 2012, p. 2.20).

This budget proposes to begin funding these benefits through contributions by employees and the government as employer. Over time, the two should share the contributions at 50 percent each. To limit the initial impact on net compensation, however, employee contributions will begin at 10 percent of the value of post-retirement benefits accruing annually, with the government initially covering 90 percent. Employee contributions will increase 5 percentage points per year for eight years until they reach 50 percent.

We note further that, like pension wealth for federal employees that accrues beyond what the

2 The same logic would show Ottawa's obligations for employee pensions as of March 2012 not as the reported $231 billion, but as $331 billion, using the RRB yield prevailing at the time (Robson 2012b).

3 In addition, even the understated current service costs reported by the government leads to total contributions to the pension funds above the limit of 18 percent of pay that applies to participants in defined-contribution pension plans and RRSP savers – a clear case of unequal treatment compared to non-federal employees.

4 These two amounts are not precisely the same – DC limits rise one year faster than RRSP limits.

Income Tax Act permits for other Canadians, real or notional returns on funds earmarked for future health-related benefits escape tax. This occurs automatically for federal employees because the federal government does not tax itself. Actually funding these obligations would set a precedent for tax-effective prefunding that taxable employers may desire to imitate. Extending the same tax-deferral opportunity to other Canadians would enhance their ability, in concert with their employers or on their own, to provide for their needs beyond what the rest of the retirement income and publicly funded healthcare cover. Consultations on the appropriate framework for tax-deferred saving to fund health benefits will commence immediately, with a view to implementation with Budget 2014.

Overall Impact

Taken together, the limited replacement of departing employees and slower total per-employee compensation growth of 1 percent per year – achieved mainly through fairer taxpayer contributions to employee pension and other post-retirement benefits – will reduce planned federal expenditures by $2.4 billion in 2013/14 and $4.4 billion in 2014/15.

Review of Tax Expenditures

Canada's *Income Tax Act* contains many provisions designed to reduce or eliminate tax otherwise payable by individuals and corporations depending on such circumstances as level and source of income, employment status, family status, and expenses or charges incurred for various activities.

The government typically reports the impact of these preferences – credits, deductions, exemption, rebates, and deferrals commonly referred to as "tax expenditures" – by netting them against government revenues. Some generally available deductions aimed at defining an appropriate tax base merit this treatment. However, most credits targeted to particular recipients and/or not directly driven by recipients' tax rates are preferences more properly reported as spending. Netting avoids the legislative and public scrutiny of appropriations that public funds normally receive, and generally obscures government's influence over the economy.[5]

The Fall Update responded to criticism along these lines by reclassifying a number of programs as spending rather than reductions in revenue.[6] This Shadow Budget subjects these and like measures to further scrutiny.

Some tax expenditures mainly aim to affect the distribution of the tax burden among diverse taxpayers based on collective values. For example, the tax system may give preferences related to age (such as the Age Credit) or family status (such as the Child Amount) or type of income (such as the favourable treatment provided for employer-paid health insurance, or capital gains for small business shares).

Other provisions, including many recently reclassified as spending, are primarily geared at influencing economic behavior to achieve goals that could be interchangeably pursued through program spending. One example is the small business deduction aimed to support entrepreneurship. This approach can lower administrative costs and make provisions more widely available than grants

5 Commentators have suggested that tax preferences appeal to policymakers because they make program costs less visible and therefore contribute to the growth of governments' fiscal influence over the economy (Burman and Phaup 2011).

6 These include the Working Income Tax Benefit, the Refundable Medical Expense Supplement, the Canadian Film or Video Production Tax Credit, the Film or Video Production Services Tax Credit, and the refundable portions of the Atlantic Investment Tax Credit and the Scientific Research and Experimental Development Tax Credit.

would do – a widely cited reason for providing research and development support through tax preferences, for example. They too, however, escape parliamentary scrutiny and involve a lower level of accountability.

For a given level of recorded government spending, tax expenditures must necessarily cause higher marginal tax rates on non-preferred activities. Since the marginal costs of raising a dollar with higher personal or corporate income tax rates is much greater than a dollar (taking into account tax-induced distortions of behavior), preferences also cost more than their face value (Dahlby and Ferede 2011). The overall return to society from preferences therefore ought to be high enough to compensate for the tax distortions they cause.

Many tax preferences do not meet such a test. Among them: preferences for activities, such as home buying, volunteering, arts and crafts, traveling by public transit, or fitness, that many recipients would have done anyway; preferential taxation of employer-paid benefits that would likely be available to employees in almost as large amounts without it; and preferences that prompt suppliers to increase prices, to which extent they transfer wealth rather than influencing behaviour.

Other preferences distort investment decisions. A prominent example is the federal credit for investment in labour-sponsored venture capital corporations. Labour-sponsored funds have crowded out alternative sources of venture capital (Cumming 2007). Venture capital from private, institutional and government sources promotes innovation and stimulates patentable research more effectively (Fancy 2012); if one accepts that government should support enterprises typically funded by venture capital, better channels exist.

This Shadow Budget proposes a panel of academics and tax experts to evaluate all tax preferences and report those that fail the tests of economic efficiency and cost effectiveness. Eliminating such preferences will help the federal government's bottom line in the near term and support faster economic growth over time. The government will phase out those that do not pass the tests. The elimination of some of the tax preferences mentioned above – such as the non-taxation of employer-paid health benefits, child fitness and arts tax credits, tax credit for investment in labour-sponsored venture capital corporations, the lifetime capital gains exemption for small business shares, the small business deduction, and the public transit tax credit – would have yielded more than $3 billion of additional tax revenue in 2012. The overall target for this exercise is $3 billion by 2014/15.

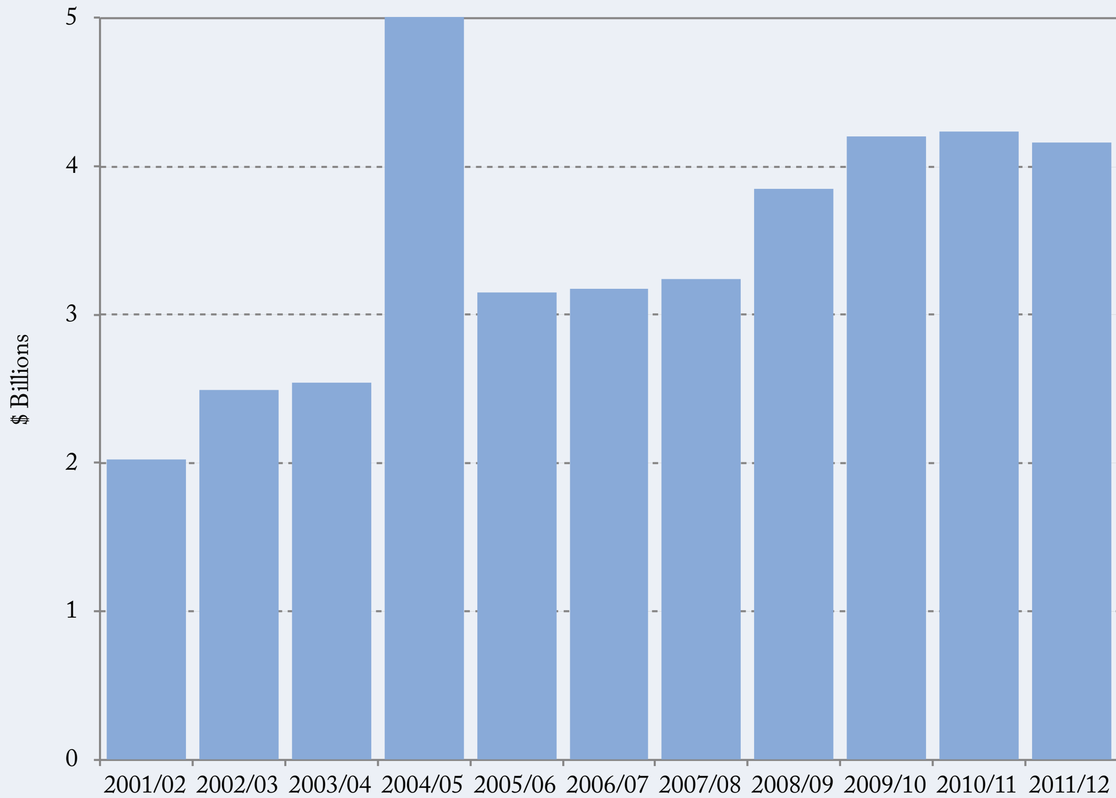
Scaling Back Financial Assistance to Crown Corporations

Crown corporations, such as the Canadian Broadcasting Corporation, Atomic Energy of Canada Limited, and VIA Rail, rely on annual funding from the government to support their regular activities. Financial assistance to them has risen markedly since 2001/02 (Figure 5). The rationale for undertaking these activities through a Crown corporation rather than regular government operations is their commercial environment, which creates a presumption that Crown corporations ought not to perpetually draw on public funds.

Last year's departmental program review is expected to reduce spending on Crown corporations by more than $250 million per year in total by 2014/15. The longer-term goal should be to put all federal Crown corporations on a self-sufficient basis for their market-oriented activities. This budget therefore initiates a three-year phase-out of half of Crown corporation net subsidies, which would scale back their overall level closer to that of 10 years ago. The additional savings during the projection period from this phase-out will be $0.8 billion in 2013/14 and $1 billion in 2014/15.

The low-returns environment described earlier is increasing Crown corporations' need for funds because these organizations have defined-benefit pension plans similar to those of federal government employees, and are required to fund

Figure 5: Net Federal Subsidies to Crown Corporations, 2001/02 to 2011/12



Note: Third-party expenditures net of third-party revenues for Crown corporations whose financial statements are consolidated with the annual financial results of the government.

Source: Public Accounts of Canada, various years.

them to the level that would allow them to pay benefits as if they held the federal government's RRBs as assets. These pension obligations loom very large, competing with capital investments and other priorities central to the Crown corporations' purposes. To create more flexibility in managing their pension plans, this Shadow Budget proposes two changes.

First, it proposes to amend the *Pension Benefits and Standards Act* to let the Superintendent of Financial Institutions take all interests into account when approving potential changes to a pension plan, so that changes agreed to by the parties – for the sake, say, of ensuring the viability of an enterprise – would not get stymied by inflexible regulation.

Second, it proposes to introduce legislation similar to that recently pioneered by New Brunswick (Steele 2012), which would permit these plans to convert their benefits to target benefits contingent on funding. Such flexibility would permit Crown corporations to reduce their near-term pension contributions, and ease the impact of smaller annual subsidies on their operations.

Table 4: Fiscal Projections with Spending Restraint Measures

	2012/13	2013/14	2014/15
		($ billion)	
Baseline Projections (Table 1)			
Projected Revenues	257.4	270.2	284.6
Projected Expenditures	-280.4	-283.7	-290.2
Adjustment for Fiscal Prudence	-3.0	-3.0	-3.0
Budgetary Balance before Initiatives	**-26.0**	**-16.5**	**-8.6**
Spending Restraint Initiatives			
Containing Employee Compensation Growth		2.4	4.4
Review of Tax Expenditures		1.5	3.0
Scaling Back Financial Assistance to Crown Corporations		0.8	1.0
Total		**4.7**	**8.4**
Change to Debt Charges		0.2	0.6
New Budgetary Balance	**-26.0**	**-11.6**	**0.4**
Accumulated Deficit	609.4	621.0	620.5
as % of GDP	*33.4*	*32.8*	*31.3*

Sources: Table 1 above; authors' calculations.

Cumulative Impact on the Bottom Line

These spending restraint measures will drive the return to budget balance by 2014/15 (Table 4). Thereafter, tight control on spending growth combined with economic growth should ensure healthy budget balances to pay down debt accumulated during the stimulus years and fund growth-friendly initiatives, thus promoting confidence and strength in the Canadian economy.

Promoting Growth

Because Canada is in a better position than many other advanced economies, our fiscal policy can balance progress toward surplus with measures directly oriented toward increasing economic growth. Fiscal policy needs to encourage innovation, business investment, training and education, saving, and work. We need regionally focused income support programs that promote growth, greater openness to the world, and taxes that reduce administrative complexity and decisions driven by tax rather than economic considerations.

Shifting the Taxation Base from Personal Income to Consumption

An well-structured tax system finances the desired level of public spending with low distortionary

costs to the economy and society. Taxpayers respond to taxes and tax changes. Corporate income taxes affect business investment decisions, while personal income taxes influence individual decisions to work, save, and invest in training and education. Taxes on income also affect the location of economic activity. The higher the tax rates, the higher the incentive to avoid them.

Income taxes create a larger economic burden than broad-based consumption taxes (Dahlby and Ferede 2011; Baylor and Beauséjour 2004). Individuals at the upper-end of the income scale who already face high marginal tax rates are particularly likely to react to tax changes, and they have been the target of recent hikes enacted in Quebec and Ontario and currently proposed in British Columbia.

A recent Finance Canada study (Canada 2010) estimates that the top 10 percent of income earners – those who reported $60,000 or more – respond to a 1 percent change in their after-tax income at the margin with a change of 0.19 percent in their taxable income.[7] The top 1 percent of income earners – those who reported $150,000 or more – are nearly four times as sensitive, with a response of 0.72. So the provincial personal tax hikes will hurt federal tax revenues since the federal and provincial governments share the same income bases.

The federal government is in a position to repair some of this damage, by shifting its own tax mix away from relatively damaging personal income taxes and toward less problematic consumption taxes. This Shadow Budget proposes a revenue-neutral tax point transfer from the personal income tax (PIT) to consumption by reducing all federal PIT rates by 1 percent and raising the GST rate by an equivalent 1 percent.

A static calculation suggests that this shift will be cost-neutral for the federal government (Table 5). The stimulative effect of lower income taxes on labour force participation and work effort, saving and investment, however, means that more economic activity, and more federal revenue, can be expected over time. The additional revenue anticipated for the federal government would contribute to the early achievement of a budget surplus. The government could address distributional concerns about raising consumption taxes while cutting income taxes by using some of this money to enhance the GST credit, but this Shadow Budget proposes no such change, because the GST credit did not fall when the GST rate dropped from 7 percent to 5 percent, so this rebalancing would still leave the overall tax system more redistributive than it was before the GST rate cut. The growth-enhancing impact will also produce about $800 million per year of additional revenues for provincial governments – amounts they can use to accelerate their own fiscal consolidations, without further damaging increases to either personal or business tax rates.

Mitigating Distortions in Regionally Focused Programs

A significant portion of the federal government's program spending aims to reduce the impact of variations in incomes across Canada on public services and living standards in different provinces. Recent divergent trends in regional prosperity and fiscal capacity (Figure 6) are straining these programs, and highlighting the need to ensure that they do not needlessly inhibit growth.

Equalization Review

Federal transfers to provincial governments will total $58.6 billion in 2012/13. Of these, the Equalization program, with an envelope of $17.8

7 After tax income in this context is the individual's net-of-tax rate – one minus his or her marginal tax rate.

Table 5: Fiscal Estimations for a One Percentage Point Transfer from Federal Personal Income Tax to Consumption Tax (GST), 2014

Federal Government	*($ billion)*
Static fiscal cost of 1 percentage point rate reduction for all federal PIT thresholds[a]	-6.8
Net receipts from one percentage point increase of GST rate	6.7
Additional tax revenues from changes in behaviour[b]	1.0
Net federal fiscal benefit	0.9
Provincial Governments	*($ billion)*
Increase in the national taxable personal income base as a result of taxpayers' behavioural response to tax changes[b]	4.4
Additional tax revenues from increase in the taxable income base	0.8

Notes:
(a) Statutory PIT rates reduced to 14, 21, 25, and 28 percent, respectively, with non-refundable tax credit rate and charitable donations tax credit rates adusted accordingly.
(b) Behavioural response simulated based on elasticity coefficients derived from Canada (2010). Taxpayers earning less than $60,000 are assumed not to react, while the sensitivity of taxpayers earning from $60,000 to $80,000 is close to nil. Above that threshold, the coefficient increases gradually to reach 0.72 at $150,000 or more. Tax revenue changes also include an estimate of the adverse distortionary impact of the GST on consumption, based on the short-term elasticity coefficient found in Dahlby and Ferede (2011).

Source: Authors' calculations using Statistics Canada's SPSD/M, v. 20.0. Responsibility for use and interpretation rests with the authors.

billion,[8] has the explicit goal of letting all provinces provide reasonably comparable levels of public services at reasonably comparable levels of taxation, a principle set out in Canada's *Constitution Act*.

The Equalization formula adopted in 2007 introduced a 10-province standard for calculating Equalization entitlements. Provinces with fiscal capacities above the average of the 10 provinces receive no payments; those under the average receive payments intended to bring them up to the average.[9] As provincial income disparities grow, so do Equalization payments. Ontario, which had never before received them, started receiving Equalization payments in 2009/10.

At around the same time, the federal government introduced two limits to manage its exposure to the program's escalating costs. A growth ceiling specifies that total Equalization payments cannot grow faster than the economy. An individual cap provides that a recipient province's fiscal capacity

8 Includes Territorial Formula Financing.

9 Provincial fiscal capacities are computed by calculating the bases for taxes on personal income, corporate income, consumption and real property, applying the Canada-wide average tax rate to each, and then adding 50 percent of actual revenues from natural resources.

Figure 6: Gross Domestic Product (GDP) per Capita and Fiscal Capacity as per Equalization Tax Bases, 2011/12

Sources: Statistics Canada and Québec (2011).

including equalization payments cannot exceed the average of all recipient provinces' fiscal capacities.[10] The growth ceiling and the individual cap have saved Ottawa a cumulative $15 billion since 2009/10.

These changes have exacerbated a long-standing criticism of Equalization. The program was already problematic for discouraging growth-oriented fiscal policies, because recipient provinces stood to lose Equalization payments if their fiscal capacity

10 This can arise because some equalization-receiving provinces have more revenue arising from natural resources than the average of the recipient provinces.

rose. Smart (2007) found that Equalization-receiving provinces had higher income tax rates, likely because the Equalization program partially compensated them for the resulting economic damage and lost taxable income.[11] Provinces heavily dependent on government-owned hydro generation may prefer to subsidize users because half of any distributed profits from market-level prices would reduce Equalization payments.

The growth ceiling exacerbates this problem. If a recipient province improves its relative fiscal capacity, its entitlement will not only fall by the amount dictated by the 10-province formula. The ceiling means that the entitlement gains for the other provinces must be financed by a still larger fall in payments to the province whose position improved. This Shadow Budget proposes to launch an expert review of the Equalization program with a mandate to recommend changes that will make the program more supportive of growth, put its treatment of natural resource income onto a more principled basis, and keep its total cost manageable.

Eliminating Regionally Differentiated EI Rules

The Employment Insurance (EI) program has too many objectives. Past governments have succumbed to the temptation to make benefits more readily available in certain regions, which diverts the program from its goal of cushioning Canadians against involuntary, temporary and unanticipated loss of income, and can exacerbate regional unemployment (Busby et al. 2009). As currently designed, the program has encouraged EI dependency for many workers and discouraged migration of potential workers to areas where job prospects are brighter (Busby and Gray 2011).

This budget proposes to phase out regionally differentiated entrance requirements and benefit periods. By 2014/15, the minimum qualification threshold for EI will be 560 hours worked, for a minimum benefit period of 22 weeks across the country, so that the system treats Canadians equally regardless of location and does not discourage migration in search of work. Since the premium rate will adjust over time to balance the impact of the changes on benefits, the impact on the bottom line will be small in the first year and negligible over the projection period. To facilitate the transition of people in higher unemployment regions to areas of greater opportunity, the federal government will improve the collection and dissemination of data on job opportunities and requirements (Bergevin 2013; Advisory Panel on Labour Market Information 2009).

Leveling the Retirement Saving Playing Field

Increasing longevity and low investment returns are putting many Canadians' hopes of a secure retirement at risk. Policy can help in various ways – notably by letting Canadians who wish to save more and longer for retirement do so without encountering tax-related obstacles. This Shadow Budget proposes to change a number of age-related provisions that discourage people from saving, particularly those that disadvantage some Canadians relative to others depending on their work status and access to pension plans.

At present, the Pension Income Tax Credit is available to recipients of pension annuities before age 65, but only at age 65 to recipients of funds from other vehicles, such as life income funds, Registered Retirement Income Funds (RRIFs) and

11 Equalization reduces the marginal cost of funds for personal and corporate income taxes, a measure of the efficiency cost of taxation (Dahlby and Ferede 2011).

RRSPs. This budget will extend the credit to all such income, regardless of age. It will also extend the same spousal income-splitting opportunities available to registered pension plan members to users of these other vehicles.

Group RRSPs currently have tax disadvantages compared to defined-contribution pension plans. This Shadow Budget will improve their situation by letting sponsors and/or participants deduct some administrative expenses currently levied against plan assets from outside income, and by removing federal payroll taxes from employer contributions. These changes will have very small impacts on federal revenue during the projection period.

Life expectancy in Canada has been increasing by between one and two years per decade since the 1960s. Current age limits related to retirement do not adequately reflect this change. For example, Canadians and their employers must currently stop contributing to tax-deferred retirement saving vehicles at age 71, which is the age at which users of these vehicles must start drawing down their wealth. This budget proposes to increase this age to 72 on 1 January 2014, and begin increasing it by one month for every six-month interval after that. This change will have a small negative impact on federal personal income-tax collections.

The existing mandatory withdrawal schedule for RRIFs puts increasing numbers of seniors, who are living longer and earning less on their investments, at risk of outliving their tax-deferred savings. At age 94, RRIF holders must begin withdrawing 20 percent of their balances every year, while age 90 is a key age restricting guaranteed or fixed-term prescribed annuity contracts. These ages will also rise by one year on 1 January 2014, and begin increasing at a rate of one month every six-month interval after that. This change will have a very small negative impact on federal revenue.

Pooled Registered Pension Plans (PRPPs) – a new federal tax-assisted retirement savings vehicle – could improve the pension landscape by encouraging innovation, providing coverage to employees not covered under workplace pension plans, and improving investment outcomes through pooling of risks, economies of scale and lower-cost, third-party administration. PRPPs can build on an existing infrastructure of financial service providers that could help ensure that low-cost options are widely available quickly.

The PRPP model, however, will not reach its full potential without important changes to the tax environment. Money purchase arrangements – such as defined-contribution (DC) retirement plans, group RRSPs, and now PRPPs – cannot provide retirement benefits in the form of a monthly pension insured for life, unless a life annuity is purchased from an outside provider. Market rates can be unattractive, so PRPPs should be allowed to pool the mortality risk of participants and provide low-cost self-insured target monthly pensions.

But even if annuitization is purchased on an individual or group basis outside the plan, contribution limits need reform to accommodate those retirement plans. Members of defined-benefit plans, such as most federal employees, enjoy contribution room far in excess of the majority of workers not in those plans (Pierlot 2011) – indeed, as shown in Table 3, federal employees (and their employer on their behalf) put aside 20 percent of their pay or more every year to fund their future retirement pension, and at fair-market value, they would have to save more than 47 percent of pay. PRPP members should get the same lifetime accumulation room based on the limits available to public-sector employees so that they, too, could fund for themselves a monthly pension based on average of final or best career earnings, with catch-up room to fund deficits resulting from experience losses (Pierlot and Laurin 2012).

In addition, low- to middle-income earners not covered by a workplace pension plan and likely to join a PRPP are most at risk of facing seniors' benefit clawbacks on their pension income in retirement. The resulting all-in effective tax and clawback rate for these workers when they retire

will exceed a punitive 50 percent. Over a lifetime, these workers would be better off in Tax-Free Savings Accounts (TFSAs), which would make the tax burden on their lifetime savings lower (Pierlot and Laurin 2012).

Therefore, this Shadow Budget will amend federal tax rules governing PRPPs to allow TFSA-style saving within PRPPs for those who wish to use it, subject to distinct but integrated tax-deferred and tax-prepaid lifetime accumulation limits, and make it possible for PRPPs to pay self-insured target pensions to its participants.

Adopting a Formal Corporate Group Taxation Regime

Finance Canada recently held consultations on Canada's approach to corporate group taxation, with a view to replacing the current relatively restrictive system with one that allows formal profit and/or loss sharing among eligible members of a corporate group. Allowing the transfer of profits and losses among domestic members of a corporate group for federal and provincial tax purposes would lower many administrative and transaction costs, treat different types of corporations more evenly, make Canada's corporate taxes more internationally competitive, and reduce the influence of tax considerations on business decisions about where and whether to operate (Laurin 2009).

Discussions with stakeholders and provincial/territorial governments are still under way, but some of the reservations about the new system reflect a desire to collect provincial revenues under the current restrictive approach that exact a disproportionate economic cost. This budget therefore proposes to begin implementing a new system on 1 January 2015. Because companies already shift income across provincial boundaries through other means, the net revenue impact from this reform should be small.

Taxation of Interest Payments Received from Active Business Income of Foreign Affiliates

Canada exempts from taxation eligible dividends paid from active income of foreign affiliates in countries with which Canada has a Tax Information Exchange Agreement, to avoid double-taxing dividends already taxed abroad. By contrast, interest payments, rents and royalties received by Canadian shareholders from abroad are taxable in Canada, since they are not usually taxed in the source jurisdiction.

Financial innovation is blurring the traditional distinction between debt and equity, however. Hybrid instruments, treated as debt in one country and equity in another, let businesses minimize their foreign tax burdens on foreign capital investments (Advisory Panel 2008). One popular hybrid exists in Luxembourg, where the stock of Canadian foreign direct investment has grown from $0.3 billion in 2005 to almost $14 billion in 2011. The cost and administrative burden of establishing and running foreign financing companies absorb resources that could be deployed more productively in Canada. Exempting from tax not just dividends but also interest payments paid by foreign affiliates – as suggested by the Advisory Panel on Canada's System of International Taxation (2008) – would reduce the impact of tax considerations on business decisions, at small cost to federal government revenues.

Tariffs on Imported Manufactures and Products

The links between openness to the world and prosperity are well known, and evident throughout Canadian history. Canadian farmers and fishers, manufacturers and, increasingly, producers of services, need to be able to sell, operate and partner abroad more easily. The Shadow Budget announces several measures that, as part of Canada's Global Commerce Strategy, will make the benefits of international flows of goods, services, capital and

ideas more of a positive force for Canadian living standards.

The agreements Canada is pursuing within the Trans-Pacific Partnership, with the European Union, India and others, as well as regulatory and border cooperation with the United States, will give Canadian exporters, big and small, significantly easier access to economies which, in the aggregate, are far more than 20 times larger than Canada's own. These new opportunities are an important component of the growth strategy underpinned by this budget.

To help Canadian firms compete, and uniquely among the G-20, Canada has been moving unilaterally towards eliminating its customs tariffs on inputs and machinery and equipment used in Canadian manufacturing. This strategy, introduced in the 2009 budget and further developed in the 2010 budget, will result in Canadian businesses saving over $410 million annually in customs duties on inputs, once it is fully implemented in 2015.

This Shadow Budget also responds to the call in the recent Senate report, *The Canada-USA Price Gap*, for reducing, as much as possible, the discrepancy in import tariffs on consumer goods between Canada and the United States. High Canadian customs tariffs across a range of consumer goods, some of which are not even produced in Canada, force Canadian consumers to pay more than they should on a wide range of goods – a highly distorting type of tax.

The agreements and initiatives just mentioned will help lower those costs. Part of this relief will occur through the lowering of customs duties and other barriers that have sheltered some producers at home from competition, enabling them to charge Canadians significantly higher prices than otherwise.

Trade negotiations in progress, when implemented, will increase the number of products available duty-free to Canadians. To encourage Canada's trade partners on this road, Canada stands ready, beyond actions already taken and the prospective results of agreements under negotiation, to review and increase the number of Canadian tariff lines subject to zero Most-Favored National (MFN) tariff – the rate applying to countries with which Canada does not have a free trade agreement. Canada will also reduce the applied over-the-quota tariff rate on supply-managed commodities by 50 percentage points, to encourage producers in these sectors to adapt to a more competitive environment that enhances Canadian productivity and benefits consumers.

Since 1974, Canada has provided preferential access to its markets through a general preferential tariff (GPT) program, which eliminates tariffs on some $15 billion per year of imports into Canada. As part of the regular decennial review of this program, Canada has given notice that, in 2014, a number of countries that have become large, globally competitive exporters and/or have reached middle-income status will no longer receive preferences under the GPT status. This review is intended to make access to Canada's markets fairer, reserving preferences for countries that need assistance the most.

This Shadow Budget pledges that any increase in revenue resulting from the removal of certain countries from GPT status will be effectively returned to consumers in the form of lower across-the-board MFN tariffs. Countries affected have, or will in the fullness of time have, the opportunity to eliminate tariffs by engaging in free trade negotiations with Canada or through multilateral negotiations.

Building on Strength

Canada's relatively robust performance since the crisis and slump should be a source of pride, not an excuse for complacency. Economic and fiscal problems abroad are profound, creating risks of weak demand for Canadian exports and sudden wariness among lenders. Our national saving rate is too low to finance the investments needed for a more prosperous future.

This Shadow Budget builds on our economic and fiscal advantages to ensure that excessive government borrowing does not undermine private-sector confidence, and that federal fiscal and related policies promote economic growth, thereby underwriting the private prosperity and public programs Canadians want for themselves, and for those who come after them.

References

Advisory Panel on Canada's System of International Taxation. 2008. "Final Report." Ottawa: Finance Canada.

Advisory Panel on Labour Market Information. 2009. "Working Together to Build a Better Labour Market Information System for Canada." Final Report. May.

Baylor, M., and L. Beauséjour. 2004. "Taxation and Economic Efficiency: Results from a Canadian CGE Model." Department of Finance. November.

Bergevin, Philippe. 2013. "Who Is Still Standing in Line? Addressing a Mismatch of Skills and Jobs in the Canadian Labour Market." E-Brief. Toronto: C.D. Howe Institute. March.

Burman, Leonard E., and Marvin Phaup. 2011. "Tax Expenditures, the Size and Efficiency of Government, and Implications for Budget Reform." NBER Working Paper No. 17268. August.

Busby, Colin, Alexandre Laurin, and David Gray. 2009. "Back to Basics: Restoring Equity and Efficiency in the EI Program." E-Brief. Toronto: C.D. Howe Institute. August.

Busby, Colin, and David Gray. 2011. "Mending Canada's Employment Insurance Quilt: The Case for Restoring Equity." Backgrounder. Toronto: C.D. Howe Institute. November.

Busby, Colin, and William B.P. Robson. 2013. *Canada's 2012 Fiscal Accountability Rankings*. Commentary. Toronto: C.D. Howe Institute. February.

Canada. 2010. "The Response of Individuals to Changes in Marginal Income Tax Rates." Tax Expenditures and Evaluations. Department of Finance.

———. 2012. "Update of Economic and Fiscal Projections." Department of Finance. November.

Cumming, Douglas. 2007. *Financing Entrepreneurs: Better Canadian Policy for Venture Capital*. Commentary. Toronto: C.D. Howe Institute. May.

Dahlby, Bev, and Ergete Ferede. 2011. *What Does it Cost Society to Raise a Dollar of Tax Revenue? The Marginal Cost of Public Funds*. Commentary. Toronto: C.D Howe Institute. March.

Fancy, Tariq. 2012. "Can Venture Capital Foster Innovation in Canada? Yes, but Certain Types of Venture Capital Are Better than Others." E-Brief. Toronto: C.D. Howe Institute. September.

Laurin, Alexandre. 2009. *Cleaning Up the Books: A Proposal for Revamping Corporate Group Taxation in Canada*. Commentary. Toronto: C.D Howe Institute. March.

Laurin, Alexandre, and William B.P. Robson. 2012. "Federal Employee Pension Reforms: First Steps – on a Much Longer Journey." E-Brief. Toronto: C.D. Howe Institute. November.

Office of the Chief Actuary (OCA). 2011a. "Actuarial Report on the Pension Plan for the Members of Parliament as at 31 March 2010." Ottawa: Office of the Superintendent of Financial Institutions. March.

———. 2011b. "Actuarial Report on the Pension Plan for the Canadian Forces, Regular Force, as at 31 March 2010." Ottawa: Office of the Superintendent of Financial Institutions Canada.

———. 2012a. "Actuarial Report on the Pension Plan for the Public Service of Canada, as at 31 March 2011." Ottawa: Office of the Superintendent of Financial Institutions Canada.

———. 2012b. "Actuarial Report on the Pension Plan for the Royal Canadian Mounted Policy, as at 31 March 2011." Ottawa: Office of the Superintendent of Financial Institutions Canada.

Parliamentary Budget Officer (PBO). 2012. "The Fiscal Impact of Federal Personnel Expenses: Trends and Developments." December.

Pierlot, James. 2011. *Legal for Life: Why Canadians Need a Lifetime Retirement Saving Limit*. Commentary. Toronto: C.D. Howe Institute. October.

Pierlot, James, and Alexandre Laurin. 2012. *Pooled Registered Pension Plans: Pension Savior – or a New Tax on the Poor*? Commentary. Toronto: C.D. Howe Institute. August.

Québec. 2011. "Update on Federal Transfers." 2011-2012 Budget. Department of Finance.

Receiver General for Canada (RGC). 2012. *Public Accounts of Canada 2011-2012*. Volume 1. November.

Robson, William B.P. 2012. *Ottawa's Pension Abyss: The Rapid Hidden Growth of Federal-Employee Retirement Liabilities*. Commentary. Toronto: C.D. Howe Institute. December.

Smart, Michael. 2007. "Raising Taxes through Equalization." *Canadian Journal of Economics* 40 (4): 1188-1212.

Steele, Jana. 2012. "New Brunswick's Innovative Answer to Pension Reform." *Benefits Canada*. September 26.

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