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Challenges, Growth and Opportunity: A Shadow Federal Budget for 2015

Staying in the black is the first order of business for Ottawa in this Shadow Budget, which also sets out actions to promote economic growth and individual prosperity.

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The Study In Brief

The 2015 edition of the C.D. Howe Institute's annual Shadow Federal Budget lays out a prudent fiscal course in the face of a challenging world economic environment, bolstering the confidence of Canadians in the sustainability of their public finances. It supports economic growth with tax changes and investments that support business investment and job creation. And it enhances opportunities for Canadians by investing in their skills for the workplace and better preparing them for retirement.

The first order of business for this Shadow Budget is to prevent a slide back into red ink. Recent world commodity market swings makes near-term economic growth and fiscal revenue forecasts more uncertain. Doubling the amounts set aside for prudence, selling the government's remaining interest in airport leases, and containing the cost of federal government operations, will protect the budget surplus and strengthen the balance sheet. Measures to improve the transparency of federal finances through a restatement of Ottawa's obligations for employee pensions, and supplementary information on the present value of future taxes on tax-deferred savings, will facilitate the adoption of more forward-looking fiscal policies.

Strong and sustainable economic growth requires policies to promote adjustment to changing market conditions and deploy Canada's physical and technological resources where they will do the most good. Measures to boost Canada's economic dynamism include creating a more efficient payments system, reviewing capital consumption allowances, and ensuring that Crown financial corporations have a clearly articulated mandate complementary to private lending institutions.

Fresh infrastructure spending – $1.7 billion – is devoted to national air and rail transportation networks, two areas where federal involvement is uniquely appropriate, and where important economic benefits can be reaped.

On the tax side, the introduction of an allowance for corporate equity investments (on a revenue neutral basis) in the computation of corporate income taxes will improve the environment for business investment and reduce distortions toward debt-financed investments. As for innovation and technology adoption, the introduction, as several countries already have, of a "patent box" will encourage the commercialization and use of innovative ideas developed in Canada.

Canadians' economic prosperity depends in large part on the opportunities they have to develop their knowledge and skills, to deploy them during their work lives, and to save and draw down savings once their work lives are over. This Shadow Budget takes several steps to improve and protect these opportunities, including boosting funding for benchmarking the performance of education systems, expanding eligibility for tax preferences on pension income and retirement savings, and eliminating mandatory minimum drawdowns from Registered Retirement Income Funds (RRIFs) and similar accounts. The plan for confronting the fiscal challenges ahead, promoting growth and ensuring better opportunities for Canadians will be cost-effective, leaving the budget in surplus.

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In 2015 and beyond, fiscal and economic difficulties abroad will create challenges for Canadians. Confronting those challenges successfully will require a sound fiscal framework, economic policies that promote growth and measures to create opportunities for Canadians. This Shadow Budget addresses these three critical needs.

Problems abroad will generate headlines in Canada in 2015 and the rest of this decade. Some of those problems contain important lessons. Fiscal challenges in Europe and elsewhere illustrate the dangers of excessive government borrowing: Canadians have already seen government bankruptcies as close by as Detroit, and writedowns on a larger scale are possible. Unbalanced investment and pessimism in the private sector are constraining the growth of productive capacity and demand in many of Canada's trading partners – problems Canadians wish to avoid.

These fiscal and economic difficulties elsewhere could provoke financial market turmoil at times. This Shadow Budget will ensure that the federal government stays on a prudent path: by protecting the budget surplus and bolstering the federal government's balance sheet, it will help shelter Canadians from potential swings in world financial markets.

The adverse impact on commodities of weaker world growth highlights the importance of policies to help workers and investors adjust to changing opportunities. This Shadow Budget takes steps to improve the outlook for economic growth in Canada. It will promote saving and investment, improve the incentives for commercializing innovations and investing in infrastructure and improve the efficiency of Crown financial corporations.

Ensuring that Canadians can adjust and thrive in a rapidly changing economic environment is the third major task addressed in this Shadow Budget. It outlines measures to help Canadians put their education, skills and talents to work, and enjoy economic security once they have left the workforce.

Financial and Fiscal Sustainability

The latest federal fiscal projections (Canada 2014) announced the end of post–financial crisis budget deficits in Ottawa. In the past, a return to budgetary surpluses has often prompted looser spending – not a good idea when the prospect of tax hikes and debt defaults is clouding the outlook in so many countries, and when Canada also faces major demographic pressures on public finances in the years ahead. Accordingly, this Shadow Budget lays out a prudent fiscal course, and introduces measures to improve the transparency of federal finances and facilitate more forward-looking fiscal policy.

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Prudent Projections

As in past years, the Shadow Budget uses as its baseline the economic and fiscal projections from the Department of Finance's most recent "Update of Economic and Fiscal Projections" (Canada 2014), published last November. The projections are based on inputs from private sector forecasters, with adjustments to reflect changes in economic conditions and to provide a cushion to protect the bottom line from unpleasant surprises.

The fall in world crude oil prices since the third quarter of 2014 prompted such an adjustment in the November Update. The Update anticipated that crude oil prices would be about one-sixth lower than those prevailing when the survey of private sector economists was completed in September 2014, and that federal revenues would be reduced by $2.5 billion per year over the forecast horizon, starting in 2015. Since the Update, however, crude oil prices have fallen further. At the time of writing, West Texas Intermediate (WTI) oil was slightly above $50 per barrel on the New York Mercantile Exchange, some two-fifths below the Update's projections. Over time, less expensive energy will have important positive effects on the Canadian economy, including higher disposable incomes and spending on consumer goods, lower production costs and more robust growth abroad, with concomitant higher demand for Canada's non-energy exports. In the near term, however, lower oil prices will have a negative effect on economic activity, depressing output in the energy sector and hurting Canada's terms of trade.

Calculations using the sensitivity of revenues to oil prices in the Update suggest that, if oil prices persist at their current level, federal tax revenues would be reduced by almost $5.5 billion per year over the planning horizon – about twice the $3 billion per year set aside for contingencies. For this reason, this Shadow Budget applies an additional $3 billion to the normal $3 billion budgetary contingency reserve, for a total cushion of $6 billion per year. Such a cushion would be comfortable given that the market expects crude oil prices to rise – the one-year WTI crude oil futures price is about $10 higher than the current spot price – and given that the Canadian dollar exchange rate has fallen by about US$0.07 since the Update. Any unused amounts of fiscal prudence will reduce the federal debt.

In addition, on April 6, 2015, the federal government announced the sale of all of its remaining shares in General Motors, a remnant of the early 2009 bail out and the ensuing conversion of loans to GM into common and preferred shares. Since a provision for net proceeds on future asset sales had already been budgeted, no change to our baseline appears to be required as a result of this divestiture.[1]

The additional fiscal prudence moves the projected bottom line for planning purposes from a $1.9 billion surplus in fiscal year 2015/16 to a deficit of $1.1 billion, followed by a smaller surplus of $1.3 billion the following fiscal year (Table 1). Ensuring that the federal government adds to, rather than subtracts from, Canada's wealth is a

1 The recent divestiture of the federal government's remaining shares in General Motors will earn net proceeds of about $0.5 billion calculated against its last valuation as of March 31st, 2014, and about $1.2 billion against its valuation as of March 28th, 2013. Those are rough estimates since the actual value of the deal has not yet been released at the time of writing. Since the projections in the November 2014 Update already include a $1.2 billion provision for net proceeds from future asset sales (the provision is calculated from 2013 base values since it was announced and budgeted first in the 2013 November Update), the net proceeds from the sale roughly offset the value of the provision. Therefore, no change to our baseline projections appears to be required as a result of the recently announced divestiture.

Table 1: Assumptions and Projections, Fiscal Years 2014/15 to 2016/17[a]

	2014/15	2015/16	2016/17
	($ billion except as noted)		
Economic Growth (*percent*)			
Real GDP growth	2.4	2.6	2.4
GDP inflation	1.9	1.6	2.0
Nominal GDP growth	4.4	4.3	4.4
Federal Revenues			
Taxes on incomes, payroll, consumption and other transactions	252.3	267.2	279.2
User fees and charges for government services and products[b]	11.7	12.1	12.8
Investment income[c]	16.6	18.2	18.6
Total revenues	**280.6**	**297.5**	**310.6**
Federal Expenditures			
Direct program expenses	114.1	115.7	118.5
Transfers to persons and governments	138.7	148.2	154.4
Gross debt charges	27.7	28.7	30.4
Total expenditures	**280.5**	**292.6**	**303.3**
Fiscal Prudence			
Provision for prudence	–6.0	–6.0	–6.0
Summary of Federal Revenue, Expenditure and Balance			
Taxes, fees, and other charges	264.0	279.3	292.0
Program spending and transfers	–252.8	–263.9	–272.9
Debt charges net of investment income	–11.1	–10.5	–11.8
Adjustment for fiscal prudence	–6.0	–6.0	–6.0
Budgetary balance adjusted for fiscal prudence	**–5.9**	**–1.1**	**1.3**

Notes:
(a) Based on November Update (Canada 2014).
(b) Estimated figures, includes earnings of consolidated Crown corporations; excludes the provision for fiscal prudence.
(c) Estimated figures, including interest income, net income from enterprise Crown corporations, foreign exchange revenues and other returns on investment.

Sources: Canada (2014); authors' calculations.

key discipline and an important contribution to Canadians' economic confidence. Accordingly, preventing a slide back into the red is the first order of business for this Shadow Budget.

Sustainable and Competitive Compensation Management

Like any prudent household or business, the federal government must look first to its own spending, and particularly to spending on operations, when considering how to improve its annual balance. Excluding debt charges, about two-thirds of Ottawa's budget is money transferred to individuals and other levels of government under programs such as Old Age Security, employment insurance benefits, the Canada Child Tax Benefit, the Canada Health Transfer and fiscal equalization. Of the one-third of expenses remaining – direct program expenses financing the operations of government, Crown corporations, external services and capital expenditures – more than 55 percent (about $45 billion) represents the cost of employee compensation.

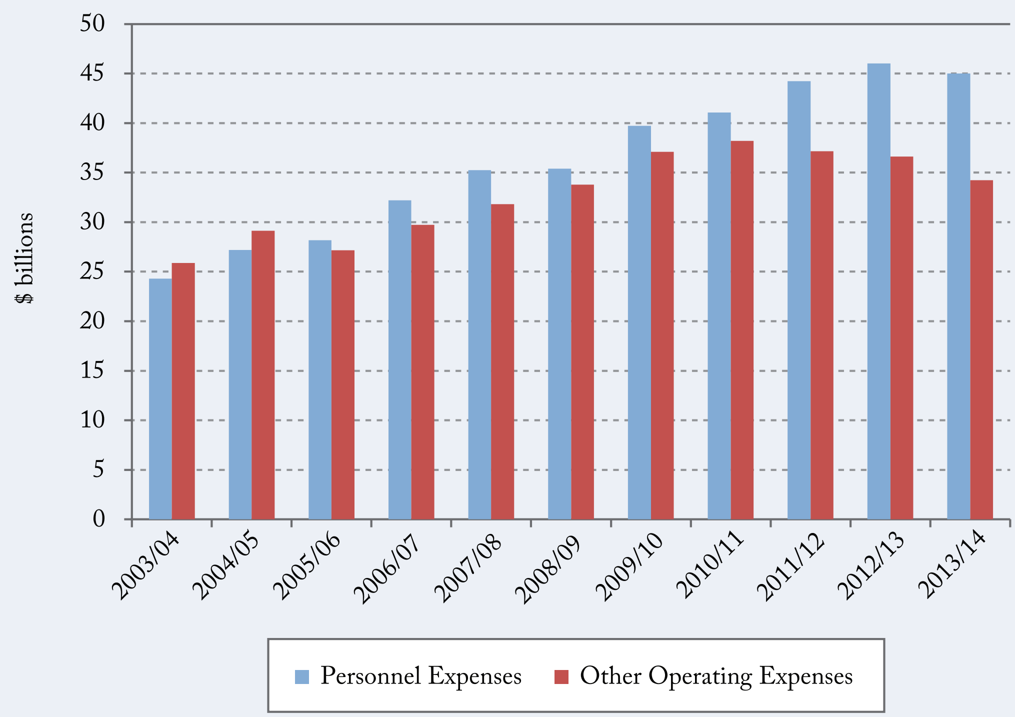
Ten years ago, employee compensation made up about half of Ottawa's direct program expenses. Since then, compensation costs have risen by $20.5 billion, while other direct program expenses have risen by just $9.5 billion. Over the past three years, while compensation has continued to grow, budgetary freeze and program reviews have reined in operating expenses, excluding compensation, by $4 billion (Figure 1). Federal departments and agencies have absorbed any collectively bargained wage increases by reducing other operating expenses.

A second round of operating spending freeze, announced in September 2013, is now in effect: operating expenses are projected unchanged through to the end of fiscal year 2015/16. Freezing the operating budgets of departments requires them to use their existing resources more efficiently, but it is not a complete strategy. It does nothing directly to alleviate the pressure of rising employment costs on departmental budgets. As a result, those costs can absorb funds that would otherwise be available for other goods and services essential to government operations, including such basics as rents, leases and utilities.

Since 1997, employee compensation per hour of work – which includes current cash compensation plus employer contributions to health, dental, disability and pension plans – in the federal government has grown faster than that in the private sector, even after allowing for the credentials and job classifications of federal employees. In 1997, average total compensation was $23 per hour for professional, scientific and technical services jobs, $25 per hour for finance and insurance jobs and $33 per hour for government services jobs. By 2013, average compensation in these fields had grown to $38, $40 and $64 per hour, respectively. Although many federal occupations require relatively advanced qualifications, a margin greater than 60 percent in total compensation costs between federal government employees and others employed in professional, scientific and technical services industries is nevertheless startling (Figure 2).

A comprehensive review of compensation in the federal public sector released in November 2006 by the Treasury Board Secretariat compared wages and salaries of federal employees to private sector benchmarks. It found that federal government wages and salaries (excluding pensions and benefits) were slightly higher than those in the private sector. The report concluded that, once the higher cost of pensions and other non-cash benefits is added to salaries, compensation in the federal public sector

Figure 1: Ottawa's Program Expenses on Personnel and Other Operations, Fiscal Year 2003/04 to 2013/14



Source: Public Accounts of Canada; authors' calculations.

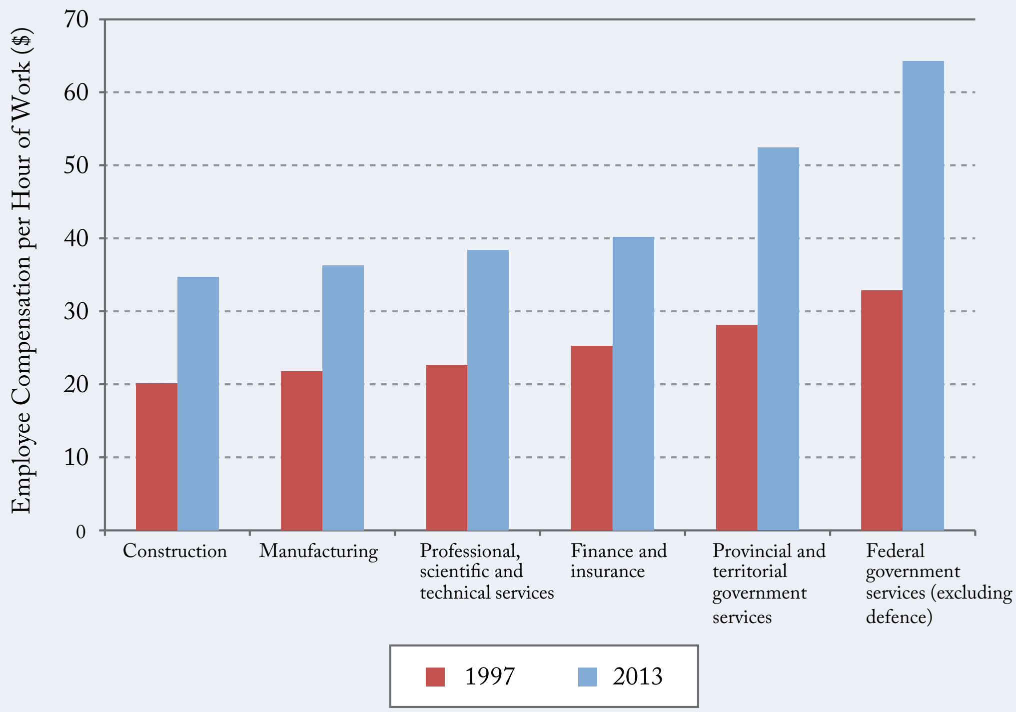
is ahead of private-sector benchmarks (Hamilton 2014a).[2]

The federal government's contributions toward the cost of pension and other post-retirement benefits represented about 25 percent of wages and salaries paid in 2013/14, while contributions for other benefits, such as health, dental and disability, was about 5 percent of the payroll.[3] Thus, the overall cost of employee benefits represented about 30 percent of wages and salaries, on average. Added to that are the associated costs of pension and other future benefits plan amendments, investment losses

2 Although some observers note that the wage premium for federal employees is larger at lower and mid-level positions, and warn that narrowing the premium overall would hurt Ottawa's ability to retain talent at higher levels, we note that the federal government's pension plan – which, as we explore in the following paragraphs, is more generous than commonly understood – is a final-salary scheme that compensates senior positions very generously. The federal government does not have a serious retention problem for its senior employees until they reach the age at which they are eligible for their pensions – at which point they usually do leave. A more sensible compensation structure would neither incent people so overwhelmingly to stay until they become eligible for their pensions, nor incent them so strongly to leave after they become eligible.

3 Estimate from data provided in the Expenditure Review of Federal Public Sector Compensation Policy and Comparability, 2006.

Figure 2: Average Total Employee Compensation per Hour of Work, Various Sectors, 1997 and 2013



Source: Statistics Canada, CANSIM database, table 383-0031.

and variations in the value of liabilities for future benefits. These cost adjustments, resulting from the divergence of actual experience from expectations, are amortized over the remaining service of the employees involved, and appear as annual charges to taxpayers. In 2013/14, they represented an additional 20 percent of federal wages and salaries. In total, the costs of benefits and adjustments represent about 50 percent of the payroll for federal employees – so total average hourly compensation in the federal government services sector exceeds that of comparable private sector industries by a large margin (Figure 2).

To contain compensation costs, therefore, Ottawa should pay special attention to the management of its employee benefits, particularly pension and other post-retirement benefits. Two recent initiatives – the reform of the sick leave management system and the move to equal-cost sharing of retirees' health benefits – are expected to save billions of dollars in future personnel expenses. On top of these initiatives, Ottawa should deal with the surging cost of its pension obligations, which are responsible for a large share of the difference between federal and business sector compensation, and represent a significant budget risk for future taxpayers.

Recent changes to the pension plans of federal employees – a gradual rise in employee contributions and a higher normal retirement age for new hires – will lower future cost pressures on employee pensions somewhat. These reforms are small, however, beside the huge fiscal burden that already exists as a result of pension obligations to federal employees. Unlike most public sector pension plans, in which current employees – and, in a few cases, even retirees – share the risks that demographic and economic factors create for pensions, the entire cost of guaranteeing the benefits promised by federal pension plans is underwritten by taxpayers. This makes federal pensions equivalent to a long-term federal debt obligation.

As we have documented elsewhere (Laurin and Robson 2014; Robson 2012), someone not in a federal pension plan would need to fund a similar retirement – or, alternatively, to hedge against his or her liability for federal pensions as a taxpayer – by investing in the federal government's real return bonds (RRBs). At the time of writing, the yield on RRBs is not much above 0.1 percent, reflecting the extraordinarily low yields lenders are willing to accept for relatively high-quality credit. Yet, accrued pension obligations are valued for accounting and compensation purposes using expected returns on a risky portfolio of assets at a much higher rate of 4.1 percent. Taxpayers thus are effectively guaranteeing plan participants a 4.1 percent long-term real rate of return at a time when other Canadians must accept a 0.1 percent "guarantee if they seek one or, alternatively, must bear significant investment risks in pursuit of a 4.1 percent real rate of return" (Hamilton 2014b). This taxpayer guarantee is valuable, yet its cost is ignored in public-sector accounting standards and the federal government's pension valuations.

If accrued benefits in federal employee pension plans were matched by the issuance of actual RRBs, the costs for the Public Service (PS), Canadian Forces (CF) and RCMP plans would range, not from the reported 20 to 24 percent of pensionable pay, but from 43 to 53 percent of pensionable pay. Taxpayers are themselves struggling with low rates of return as they save for their own retirements, and are hampered by limits under the *Income Tax Act* on their own tax-deferred saving – 18 percent of pensionable earnings up to around $25,000. So it is troubling that the actual commitment taxpayers are making to the future pensions of federal employees is far greater than reported.

Taxpayers' exposure to pension shortfalls should be limited, to avoid subsidizing the accumulation of tax-sheltered pension funds at higher contribution rates than available to savers in Registered Retirement Savings Plans (RRSPs) and defined-contribution (DC) plans. Accordingly, this Shadow Budget introduces measures 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, or 9 percent of pensionable earnings. The rest of the amount needed to fund the plans at their actual cost will come from employees.

Taxpayer contributions to the PS, CF and RCMP pension plans are expected to be 11.2, 14.9 and 13.3 percent of pay, respectively, in fiscal year 2015/16, and 10.5, 14.3 and 12.6 percent of pay, respectively, in 2016/17, with total contributions to these plans amounting to around $3.4 billion per year. Reducing Ottawa's contributions to 9 percent of pay across the board will result in annual expense savings of about $0.9 billion in 2015/16 and $0.7 billion in 2016/17. With this shift in funding risk, plan participants will have a greater stake in the sustainability of federal pension plans and in potential future changes – for example, further increases in the retirement age. The federal government therefore will open discussions about how to create a shared governance structure that builds on the positive experiences of jointly governed plans elsewhere in Canada's public sector.

A More Complete and Transparent Federal Government Balance Sheet

The reported federal debt – or accumulated deficits – is the sum of outstanding market debt (mainly treasury bills and bonds), the estimated current value of employee pension obligations and other retiree benefits and the estimated value of accounts payable and other accrued liabilities, minus the estimated value of financial and non-financial assets. Other than market-traded debt securities and some financial assets, the values of all other components are best estimates subject to accounting standards. The estimates of two of these elements are understated: the value of Ottawa's obligations for employee pensions, and the current value of Ottawa's financial assets in the form of future tax receivable.

Obligations for Employee Pensions

Declining rates of return make a given future payment more expensive to fund. Thus, lower interest rates have boosted the value of federal deferred compensation. The Public Accounts show Ottawa's obligation for employee pensions – net of the assets that have accumulated since these plans began operating on a partially funded basis in 2000 – at $153 billion at the end of fiscal year 2013/14, but a market-based valuation yields a deficit of $244 billion at that date.[4] This restatement increases the total value of federal liabilities from $1,001 billion to $1,092 billion (Table 2).

Deferred Taxes Payable

Much of Canadians' savings for retirement is held in tax-deferred registered accounts such as RRSPs, DC pension plans and other pension funds. Taxpayers receive a personal income tax deduction for money invested in these plans (and employer contributions to pension plans are not taxed), so that income saved for future consumption does not trigger an immediate tax liability. If personal income taxes have already been deducted on payroll and remitted by an employer, taxpayers may receive a tax refund when they file. So, in a given year, reported government tax revenues are lower than they would have been without the tax deferral.

But taxes deferred are still owed. Accounts such as RRSPs, administered by third-party financial institutions, are registered with the federal government. The funds in them will be taxed as ordinary income when withdrawn or when distributed to beneficiaries, showing up as personal income tax revenues in future years. So the federal government has an unreported asset: the future stream of revenues that will be generated by withdrawals of funds accumulated in RRSPs and pension plans (Robbins and Veall 2002).

Statistics Canada's 2012 Survey of Financial Security estimated the market value of assets held by Canadians in employer-sponsored registered pension plans at $1,871 billion, and assets held in RRSPs and other similar plans at $959 billion. In total, about $2,830 billion is held in tax-deferred registered pension and savings accounts, from which, in 2014, about $104.8 billion was withdrawn. These drawdowns generated about $13.5 billion in federal personal income tax, and reduced income-tested federal transfers to persons by about $7.7 billion, improving the bottom line by a total of $21.2 billion. The federal government thus recouped about 20 cents per dollar withdrawn.[5] On that basis, the present value to the federal government of tax-deferred asset accumulations is roughly 20 percent of $2,830 billion, or $566 billion (Table 2).

This is a conservative estimate. First, the estimate of the stock of tax-deferred asset accumulation is for 2012; it will have grown since then. Second, the estimate implicitly assumes that the rate of return on tax-deferred investments will equal the

4 Based on the RRB rate of 0.91 percent as of the end of 2013/14. More details on the methods used can be found in Robson and Laurin (2014a) and prior annual updates in this series.

5 Authors' calculations performed using Statistics Canada's Social Policy Simulation and Database Model, v. 21.0.

Table 2: Reported and Restated Federal Consolidated Statement of Financial Position, Fiscal Year 2013/14

	Reported		Restated
		$ billions	
Liabilities			
Bonds, treasury bills and other interest-bearing debt instruments	665		665
Employee net pension obligations	153	*+91*	244
Other employee and veteran future benefits	71		71
Accounts payable and other liabilities	111		111
Total liabilities	**1,001**		**1,092**
Financial assets			
Foreign exchange accounts	72		72
Loans, investments and advances	118		118
Cash and cash equivalents	31		31
Taxes receivable and other accounts receivable	97		97
Total financial assets	**318**		**318**
Net debt	***682***		***773***
Non-financial assets			
Land, buildings, infrastructure, machinery and equipment, vehicles, leasehold improvements and assets under construction	62		62
Inventories and prepaid expenses	8		8
Total non-financial assets	**70**		**70**
Accumulated deficit	***612***		***703***
Memo item			
Present value of tax deferrals in registered accounts	0	*+566*	566
Net Position including deferred taxes	**612**		**137**

Source: Public Accounts of Canada; authors' calculations interest rate on government debt. Since a portion of the assets is invested in riskier and more volatile securities than federal bonds, the stock of assets might grow at a more rapid pace than the federal interest rate, in which case the present value of future taxes on drawdowns would be greater. Because returns from risk taking, and taxes payable on those returns, should be booked only when realized (Hamilton 2014b), the conservative number is a better one for augmenting understanding of the federal government's financial position.

Thus, the present value to the federal government of the assets in tax-deferred accounts should be shown as a supplement to the Public Accounts. The federal government's statement of revenue and expenditure treats the tax deferred on contributions as revenue foregone and tax on drawdowns as ordinary revenue, and the balance sheet reflects that treatment. A useful supplement to this information, though, would reflect the reality that a portion of the wealth sitting in registered accounts is effectively an obligation to the federal government. A contribution reduces current personal income tax revenue, but increases the stock of future tax payable – so the current-year net cost is much less than is now recorded. Showing this accumulation of future tax payable as a contingent government asset would change the general perception around tax deferred investments and the policy affecting them.[6]

For illustrative purposes, in Table 2, we show both the $91 billion increase in federal pension liabilities and the $566 billion addition of deferred tax. This supplementary information suggests that the accumulated deficit currently reported somewhat overstates the stress on the federal government's fiscal position. Although this is encouraging, and forms a key backdrop for some changes in the tax treatment of retirement saving later in this Shadow Budget, we stress that the deferred-tax asset is contingent. A strong annual bottom line and effective management of the rest of the federal government's balance sheet remain key tasks for federal economic policy.

Selling Federal Assets

Until 1992, Transport Canada owned and operated all airports in Canada with regularly scheduled passenger flights. Over the following decade, the federal government transferred the operation, but not the ownership, of airports it designated nationally significant to Airport Authorities – non-profit, non-share-capital corporations. In compensation for bequeathing capital assets to the Authorities, the federal government introduced ground leases, for which the Authorities pay rent. Since their respective transfer dates, the major Airport Authorities have paid $5.3 billion (in 2012 dollars) in rent.

The rent Airport Authorities pay raises costs for travellers. Moreover, because rent is levied on total revenues – as opposed to profits, the tax base of the corporate income tax – it reduces the incentive for airports to pursue such sources of income as rental of retail space, which could defray costs for travellers. The non-share-capital structure of Airport Authorities has other disadvantages: it raises the cost of borrowing by the Authorities, and it makes unclear to whom airport managers are responsible and accountable.

As a long-term solution to these issues, the federal government will sell its remaining interest in the airport leases. Dachis (2014) estimates potential current values of federal rent payment as anywhere between $6 and $42 billion, depending on future revenue growth and discount rates. Private bidders

6 We recommend publishing these figures as a supplement to the formal financial statements, rather than as part of them, because they are contingent – changes in tax rates, for example, would change their value.

might be willing to pay more if they believed they could exploit additional revenue opportunities or exert better cost control than do the Airport Authorities. Benefits will accrue to future travellers and, if the auction of an individual airport results in a purchase price above the net current value of future rent payments, taxpayers will be better off collecting anticipated future revenues now.

Accordingly, this Shadow Budget will initiate an auction of airport leases, beginning with airports that will attract interest and a good price. The first airports for consideration will be Vancouver and Calgary, whose leases the government will sell in fiscal year 2015/16, with Winnipeg and Edmonton following in 2016/17. The federal government will realize at least $2.8 billion in 2015/16 and $1.1 billion in 2016/17 from this process (Dachis 2014).

Encouraging Growth

The recent volatility in world crude oil prices is a stark reminder of Canada's need for resiliency in the face of external economic shocks. Along with measures to help individuals adjust, strong and sustainable economic growth requires policies to promote adjustment and deploy Canada's physical and technological resources where they will do the most good.

Fiscal and economic government policy needs to support work, investment in human and physical capital and innovation, and reduce the amount of unnecessary resources spent on administration and compliance with government regulations. This Shadow Budget therefore launches several initiatives to solidify Canada's economic foundations and boost its economic dynamism.

Reforming the Taxation of Capital Income

Taxes on business income ultimately must be paid by people – either employees, through lower wages, consumers, through higher prices, or investors, through lower returns on their saving. To the extent that taxes on business income reduce shareholder returns, they adversely affect capital investment: someone with savings to lend who faces different investment opportunities with similar risk profiles will favour the opportunity with the highest expected after-tax rate of return. Alternatively, when facing investment opportunities that offer equivalent expected after-tax rates of return, the investor will choose the opportunity with the lowest risk profile.

Corporate income taxes affect business behaviour in other ways, including financing decisions. Canada's corporate income tax lets businesses deduct interest related to debt-financed investments, but not dividends related to equity-financed investments. Although the dividend tax credit and the partial inclusion of capital gains in personal taxes provide some relief for corporate-level taxes paid on income received by individuals, this tax asymmetry hurts the economy in several ways. Especially when investors are tax exempt, as is the case with pension funds, and therefore cannot take advantage of the provisions to alleviate corporate-level taxation, the asymmetry might induce excessive borrowing. It likely impedes investment by companies with limited access to collateral capital, such as small businesses or companies with intangible assets. It also encourages cross-border tax planning that creates no economic value, and complicates enforcement through such mechanisms as thin capitalization rules (Advisory Panel 2008).

To reduce the magnitude of these tax-induced distortions, this Shadow Budget will adopt an allowance for corporate equity (ACE), as many experts have proposed (Boadway and Tremblay 2014; Laurin and Robson 2012; Milligan 2014). The ACE recognizes the opportunity cost of equity financing by providing a deduction related to a normal return in computing taxable profits, thus taxing only profits that exceed normal returns

Box 1: How Taxes on Returns Can Distort Investment Decisions

Consider a Canadian pension fund that is making a choice between two investment opportunities. It could buy low-risk-rated bonds from a foreign government with an expected annual net-of-tax financial return of 5 percent, or it could invest in a manufacturing plant expected to earn a before-tax annual rate of return of 8.4 percent. Suppose the marginal effective tax rate (METR) on the manufacturing investment is 59.6 percent (as calculated in Found, Dachis, and Tomlinson 2014). That tax bite reduces the expected after-tax return on the manufacturing plant to 5 percent. Since the manufacturing plant investment presents a riskier profile for equivalent expected after-tax returns, the investor likely will forego the Canadian capital project and invest in the lower-risk foreign investment option. In this example, an allowance for corporate equity would reduce the METR on the manufacturing investment by 17 percentage points, reducing the distortion that favours the investment in government bonds.

(Mirrlees et al. 2011).[7] Eliminating tax on normal profits will greatly reduce the tax bite on new marginal business investment, making physical investment in Canada more attractive to foreign and domestic investors relative to alternatives such as lending to government or physical investment abroad (Box 1).

One objection to adopting an ACE is that, other things being equal, it will reduce the size of the corporate tax base, requiring a higher statutory tax rate to collect the same amount of revenue. In a world where capital is internationally mobile, higher statutory rates are harmful (Klemm 2006). In the current environment of low real interest rates and low inflation, however, the ACE will use a relatively low interest rate in its calculation, reducing the value of the deduction.

Moreover, offsetting factors will further reduce any potential revenue loss. Higher after-tax returns will mean higher dividends and capital gains taxed domestically at the personal level. The ACE will also tax dividend income more favourably than wages for business owners and more favourably than interest income for investors. Maintaining the current integration of personal and corporate income taxes thus will require proportional increases in the capital gains inclusion rate and decreases in the dividend tax credit, further recouping revenue at the individual level. Corporate income base-broadening measures – for instance, the elimination of the small business tax deduction along with a proportional increase in the corporate capital gains inclusion rate – will help to offset almost all of the remaining tax loss.

To provide time for the design and implementation of these offsetting measures, the ACE will be phased in gradually. Especially after taking account of its positive impact on investment and economic activity, the net impact on federal revenues during the projection period likely will be negligible.

7 The allowance is calculated by multiplying shareholders' equity by an appropriate nominal interest rate. The rate must be low enough to ensure corporations pay taxes in full on their economic profits.

Ongoing Review of Capital Consumption Allowances

Ensuring that businesses can write assets down for tax purposes over the period that corresponds to their economic lives helps avoid tax-driven distortions in investment. It is also an ongoing challenge, since many factors – notably, changes in technology – can make past assumptions about the life of assets obsolete.

Since the mid-2000s, the federal government has made fresh efforts to ensure that capital consumption allowance rates correspond to the economic lives of assets, and discussions with interested parties and experts are continuing. This Shadow Budget commits to a formal rolling review of various asset categories, intended to ensure that the categorization of assets in classes and the write-off periods for each class are up to date. To mitigate uncertainty over the results of the review and potential negative effects on investment decisions, the federal government, over the next three years, commits to adjust depreciation rates only when the evidence suggests that a faster write-off is warranted. Thus, no class of assets, including those now covered by accelerated capital consumption regimes, will experience slower effective write-offs over that period than those currently prevailing.

Once the ACE is fully implemented, capital consumption allowances will lose their relevance. A faster write-off of assets will reduce the stock of equity and lead to a lower allowance for corporate equity in later years. On a net current value basis, the benefits from earlier depreciation will be exactly offset by a lower ACE in future years (Klemm 2006).

Improving the Adoption and Commercialization of Canadian Research and Development

Despite generous research and development (R&D) tax credits, Canada still enjoys too little business investment in innovative processes, as evidenced by a recent decline in the aggregate number of patent applications to the Canadian Intellectual Property Office. Overall, less than 15 percent of patents filed in Canada involve a Canadian inventor. There is ample room for more domestic innovation with intended application and potential commercialization in Canada (Brydon et al. 2014).

One way to address this deficiency is to adopt, as several countries already have, a tax regime known as a "patent box," which reduces the normal corporate tax rate for income derived from patents and, potentially, from other income derived from intellectual property, thus encouraging the adoption, commercialization and use of innovative ideas. This Shadow Budget thus will adopt a new incentive model for R&D along these lines, as suggested by Pantaleo, Poschmann, and Wilkie (2013). A reduced corporate income tax rate will apply to qualifying income derived from R&D conducted in Canada. Integrating current Scientific Research and Experimental Development tax incentives when computing qualifying income will limit the fiscal cost of the patent box. Relying on fiscal cost estimates from the United Kingdom, and scaling by relative size of gross domestic product, we estimate the annual revenue cost will be roughly $0.4 billion beginning in fiscal year 2016/17, rising to about $1.2 billion annually at maturity in 2019/20.

Eliminating the Federal Excise Tax on Aviation Gasoline and Jet Fuel

The federal government and most provinces levy an excise tax on aviation gasoline and jet fuel. The federal aviation fuel tax was introduced in the 1970s to finance aviation infrastructure and Air Canada, and is now 4 cents per litre. The fuel tax receipts are no longer linked to any services Ottawa provides or to aviation infrastructure it finances (Dachis 2014). The extra charge is now a distorting tax.

Through a practice known in the industry as "tankerage," an airline can minimize its excise tax burden "by loading extra fuel in a low-tax jurisdiction, but at the cost of carrying extra weight in-flight and therefore burning more fuel. Airlines engage in this practice if the cost of burning more fuel is less than the additional cost of taxes upon refuelling, but the economic cost of the distortion in terms of wasted fuel and environmental harm can be substantial" (Dachis 2014, 6-7).

This Shadow Budget will eliminate the federal excise tax on aviation gasoline and jet fuel starting in fiscal year 2015/16, which will benefit Canadian consumers and make the entire Canadian aviation supply chain more efficient. The revenue loss will be less than $100 million per year.

Creating a More Efficient Payments System

Two recent reviews of the Canadian payments system – by the federal Task Force for the Payments System Review (2011) and the Canadian Payments Association (2008) – have identified important gaps between the performance of the system, especially regarding business users, and emerging standards. Payments processing and accounting reconciliation for businesses are slower, less robust and more expensive than current technology allows. Additionally, both consumers and businesses have expressed dissatisfaction with the speed of transaction confirmation and funds availability, particularly when compared to other countries (Dubrovinsky 2014).

Two different systems, the Large Value Transfer System (LVTS) and the Automated Clearing and Settlement System (ACSS), handle interbank payments. Although the LVTS has some standardized accounting data automation, the lower-value ACSS is more limited. This Shadow Budget sets the stage for moving interbank transfers that currently flow through the ACSS into the LVTS. This change will improve payments processing for Canadian businesses, with benefits throughout the economy and to Canada's global competitiveness. At the same time, the LVTS needs upgrading to emerging international standards for speed and reliability.

Much of the cost of these initiatives will be borne by the private sector participants who benefit from the clearing and settlement system and whose input is critical to its design and operation. However, because the pervasive importance of the payments system to Canada's economy creates a public good element, and to offset some increase in financial costs that users of the ACSS might encounter in switching to the LVTS, the federal government will contribute to the investment in the improved LVTS.

Building Infrastructure

Government spending on public infrastructure can yield economic benefits greater than the monetary cost of the project. Transportation and telecommunication infrastructure, for example, reduces the private costs of exchanging goods, services and ideas, and of working, which create economic opportunities and welfare gains that might surpass infrastructure building and maintenance costs.

The federal government already spends billions of dollars annually on infrastructure projects through two channels. First, there are capital assets owned and operated by the federal government – infrastructure on reserves, ports, harbours, ferries, park land, office buildings, and federal bridges and roads, for example. The costs of these projects are amortized over long periods, which means that their costs raise annual spending only gradually in small increments as the value of capital assets slowly depreciates.

Second, the federal government transfers large amounts to provinces, territories and municipalities to support infrastructure projects in these jurisdictions. Through the Gas Tax Fund, the Goods and Services Tax Rebate for Municipalities, the Building Canada Fund and other programs, the federal government has committed over $5 billion per year in subsidies for such infrastructure projects for fiscal years 2014/15 to 2023/24 – a large increase from the $1 billion in annual subsidies that were typical a decade ago. Although federal participation in these projects reflects the existence of national benefits from some local and regional infrastructure projects, many of the public goods and positive externalities of these investments are enjoyed primarily, or even entirely, at the local and provincial levels. This Shadow Budget therefore proposes to hold the line on this support, devoting fresh infrastructure spending to areas where the national interest makes federal involvement uniquely appropriate.

Two such areas are infrastructure serving international transactions, such as air and marine transport, and the movement of people and goods across provincial borders. In the former area, this Shadow Budget proposes to invest $750 million to keep Canada's air transportation infrastructure at the forefront of world standards. In the second area, the budget commits an additional $900 million to passenger rail, as a step toward putting VIA Rail's commercially viable operations on a self-sustaining basis. These capital investments will be amortized over the useful life of the assets or recouped in the event of privatization.

Crown Lenders

Three federal Crown corporations operate in the financial sector: the Business Development Bank of Canada, Export Development Canada and Farm Credit Canada. The justification for government involvement in lending is failures in credit markets – the existence of risks, for example, that private lenders cannot price properly or diversify against. Crown lenders do not receive ongoing financial subsidies: the support they get from the government is mainly through their lower cost of capital – since taxpayers stand behind them in the event of losses bigger than their retained earnings can cover – and because they pay no corporate income tax.

There is an inevitable tension in government-backed lending, because financially sustainable Crown lenders need to operate according to commercial principles, including paying a dividend to taxpayers, and thus they potentially compete with private institutions. Following the recommendations of Bergevin and Poschmann (2013), this Shadow Budget will ensure that Crown financial corporations have a clearly articulated mandate complementary to private institutions, the extent of which will be clearly disclosed in annual reports.

This requirement is particularly relevant to Farm Credit Canada, which has no legislative requirement to complement private lenders, and, in practice, competes straightforwardly with them. The complementarity mandates of all Crown financial corporations will also be better defined in guidelines and, more important, better reflected in practice. For example, these Crown corporations should access government funding at commercial market rates or, alternatively, adopt a lending threshold of prime business rates plus 300 basis points, below which they will not offer financing. Finally, all Crown financial corporations will be regulated by the Office of the Superintendent of Financial Institutions, reviewed regularly, and subject to sunset clauses in their relevant legislations.

Promoting Individual Opportunities

Canadians' economic prosperity depends in large part on the opportunities they have to develop their knowledge and skills, to deploy them during their work lives and to save and draw down savings once their work lives are over. This Shadow Budget takes several steps to improve lifelong personal well-being and fulfilment.

Supporting Assessments of Student Achievement

The federal government has little direct role in the elementary and secondary education of young Canadians, but it plays a vital role in benchmarking the performance of Canadian education against other countries. International comparisons such as the Organisation for Economic Co-operation and Development's Programme for International Student Assessment and the International Association for the Evaluation of Educational Achievement's Trends in International Mathematics and Science Study provide unique insights into the relative performance of Canadian students and correlations with such factors as socioeconomic background and school characteristics. Financial support from the federal government has permitted an expansion of the sample of Canadian students participating in these studies sufficient to allow the results in individual provinces to be compared with one another and with those in other countries. Among other merits, these comparisons are a powerful spur to improvement.

Domestically, the federal government supports the Council of Ministers of Education's Pan-Canadian Assessment Program (PCAP). This program also allows Canadians to benchmark the performance of provincial education systems against one another. Until now, one drawback of the PCAP is that its assessments occur on a three-year cycle. An annual cycle would improve the information provided by these assessments dramatically, since year-to-year changes would allow better evaluation of changes to curriculum and other provincial innovations.

This Shadow Budget will boost funding for these initiatives over the next five fiscal years, to support continued sampling at the subnational level in the international tests and to move the PCAP onto an annual cycle. In this way, the federal government will make a cost-effective contribution to the quality of Canadian elementary and secondary education, while respecting provincial jurisdiction over delivery.

Enhancing Education for First Nations Students

The federal government will continue to work with the First Nations toward a new education strategy to support on-reserve education, with the objective of raising student achievement on-reserve to the standards achieved elsewhere. Providing equal per-student resources on-reserve will require substantial increases in funding over time, a process that needs to be accompanied by substantial improvements in the measurement of the knowledge and skills of on-reserve students, including in the PCAP. Anticipating progress in ongoing discussions with First Nations, this Shadow Budget provides additional funding for on-reserve education, committing a total of $1.2 billion over the next four fiscal years, at a rate of $300 million per year.

Improving Financial Assistance for Postsecondary Education

Many studies (for example, Boothby and Drewes 2010; Moussaly-Sergieh and Vaillancourt 2009) have documented the positive effect of postsecondary education on personal lifetime earnings, an effect that reflects its contribution to productivity and prosperity for the national economy. Educational achievement among children of low-income parents also improves social mobility, contributing to reducing income disparity.

Tuition and education/textbook tax credits channel some $1.6 billion annually in federal support toward postsecondary education. These credits benefit students who have tax payable, and unused credit amounts (above the value of tax payable) can be carried forward to future years or transferred to a parent, grandparent or spouse. Although they are intended to encourage postsecondary education by lowering the cost of attending, these credits might not work well in the case of students from lower-income families, for whom the financial benefits they provide are available only after they have finished their education and have enough taxable income to claim them.

Following the advice of Neill (2013), this Shadow Budget will transform the tuition and education/textbook tax credits into benefits paid to students immediately after they file their tax returns. This change will alter the timing both of benefits paid and of the fiscal cost: credit amounts currently carried forward will be paid out immediately. In the longer term, the net present value cost – which depends on the time-value of money and the length of carry-forwards – of the initiative will be small, and even accounting for positive effects on student enrolment, likely will be smaller than the potential societal benefits.

Improving Labour Market Information

Once Canadians are out in the workforce, good labour market information can help them connect with employers and deploy their skills in more rewarding ways. In 2009, the Advisory Panel on Labour Market Information – a group established by the Forum of Labour Market Ministers in July 2008 to provide advice on Canada's labour market information system – released its final report, which made about 70 specific recommendations classified under 14 broad headings. In November 2014, federal and provincial labour ministers agreed to work together to improve the quality of labour market information available to Canadians and to provide better access to data.

Some of the Advisory Panel's proposals, such as making Statistics Canada data available free of charge, have been adopted; others have not. One proposal deserving of federal and provincial governments' attention, and requiring their cooperation, would be to improve the educational information collected and made available to current and prospective students – a key example is provision of information about returns to various forms of education enjoyed by today's workers.

The costs of these proposals, at $21 million initially and $49 million annually, are modest in relation to the potential economic benefits from a better functioning labour market. This Shadow Budget therefore will revisit the Advisory Panel's report with a view to implementing its proposals.

Eliminating Regionally Differentiated Employment Insurance

The existing employment insurance program encourages dependency for many workers and discourages migration to areas where job prospects are brighter (Busby, Laurin, and Gray 2009). Longer benefit payout periods in areas with higher unemployment rates perpetuate seasonal and structural unemployment, providing incentives for people to remain in places where job prospects are relatively poor.

This Shadow Budget will phase out regionally differentiated entrance requirements and benefit periods and adopt coast-to-coast uniform requirements, tied to the national unemployment rate to add a countercyclical income stabilization element to the program. It will phase in uniform national entrance requirements and benefit periods over a few years: low unemployment regions and high-unemployment regions will see their requirements converge to a uniform national mid-point.

In the short term, the reform might involve some incremental federal spending, as the number of laid-off workers in low-unemployment regions who will gain in terms of access and benefit generosity might outnumber others from high-unemployment regions. Over the long run, however, the fiscal costs of this reform will be close to zero, because more generous benefits in some regions will be offset by falling costs of periodic claimants in others. As well, increased labour mobility will reduce the incidence of structural unemployment. To cover these transitional costs, the Shadow Budget includes $400 million in fiscal year 2015/16 and $300 million in 2016/17.

Removing Federal Payroll Taxes from Employer Contributions to Group RRSPs

The majority of Canadians, and the vast majority of those who work in the private sector, do most of their retirement saving in RRSPs. Many employers support this saving by organizing group RRSPs, and many match at least part of their employees' contributions. Relative to DC pension plans and pooled registered pension plans (PRPPs), however, group RRSPs have some tax disadvantages that lack any policy justification and impair the ability of Canadians in these plans to save as cost effectively as their counterparts in other vehicles.

Accordingly, this Shadow Budget will let group RRSP sponsors and/or participants deduct some administrative expenses currently levied against plan assets from outside income. Since employers' contributions to employees' accounts are more likely to be locked in, and are therefore more akin to pension plan contributions than employee contributions that might be withdrawn before retirement, the budget will also relieve employers' contributions to group RRSPs from payroll tax (Robson 2010). These changes will have very little effect on federal revenue during the projection period, but will help alleviate a severe disadvantage for most private sector retirement savers, and ensure that more of households' foregone consumption adds to their own wealth, rather than in government coffers.

Reviewing Deductions, Credits and Transfers Delivered through the Personal Tax System

The recent controversy over income splitting highlights the degree to which changes in personal income taxes since the late 1980s have blurred the line between (i) measures intended to ensure people with equal capacity to pay tax pay equal tax, and (ii) measures intended to redistribute from those with more capacity to pay to those with less. Relatedly, the line distinguishing measures that reduce tax payable from transfer payments delivered through the tax system has also become blurred. As a result, it is increasingly hard for taxpayers and even experts to see how various measures affect people's well-being and behaviour. Indeed, since a major transfer as the Goods and Services Tax Credit is treated as a reduction in tax payable – which it is not – measures of the federal government's total revenue and expenditure are not as meaningful as they could be.

As a first step toward simplifying and rationalizing the increasingly complex personal tax and transfer system, this Shadow Budget will review the structure and reporting of personal tax and transfer provisions. The initial goal is a more meaningful presentation of how much tax Canadians are actually paying and what kinds of transfer payments the federal government is providing them. This presentation will prepare the ground for the longer-term objectives of reducing complexity and confusion, ensuring that federal taxes and transfers are more transparent and better aligning the system with the goals of fairness and efficiency.

Increasing the Cut-off Age for Tax-Deferred Retirement Saving

Life expectancy in Canada has been increasing by roughly two years per decade since the 1960s, but current age limits related to retirement do not reflect this change adequately. Canadians (and their employers) now must stop contributing to tax-deferred retirement saving vehicles at age 71, which is also the age at which users of these vehicles must start drawing down their wealth.

The Shadow Budget will increase the age at which contributions to tax-deferred retirement saving vehicles must end to 72 on January 1, 2016, and begin increasing it at a rate of one month per six-month interval after that. Among other advantages, this change could encourage older Canadians to stay in the workforce longer.

Eliminating Mandatory Drawdowns from RRIFs and Similar Vehicles

Since 1992, holders of Registered Retirement Income Funds (RRIFs) and similar accounts must withdraw minimum amounts annually, a percentage distribution dictated by an age-related formula that rises until holders must withdraw at least 20 percent each year. These rules have not kept pace with the rise in life expectancy since 1992, and do not reflect the declines in yields on high-quality investments that have occurred since then. Consequently, RRIF holders now can expect constant and gradual erosion in the purchasing power of tax-deferred savings in their retirement years. Many face a significant risk of outliving their savings (Robson 2008; Robson and Laurin 2014b).

Since the assets in RRIFs and similar accounts will become taxable upon the death of the account holder or his or her spouse, partner or beneficiary, minimum withdrawals could disappear entirely. As noted above, these deferred taxes are already an obligation to the government: eliminating mandatory withdrawals will affect the timing of the tax payments, but will have minimal fiscal impact in terms of the present value. This Shadow Budget will eliminate the *Income Tax Act* rules mandating minimum yearly drawdowns from RRIFs and similar accounts, which will also remove the need for future updates as longevity, yields and possibly other circumstances change again. This reform will help seniors self-insure against the risk of living longer, and might also promote later retirement.

Extending Pre-age-65 Eligibility for Pension Income Credits and Income Splitting

Currently, the Pension Income Tax Credit and pension income splitting are available to recipients of pension annuities before age 65, but only at age 65 to recipients of funds from other retirement saving vehicles, such as life income funds, RRIFs and RRSPs. This Shadow Budget will make these tax provisions available to all such income, regardless of the recipient's age.

Pulling It All Together

The plan for confronting fiscal challenges ahead, promoting growth and ensuring better opportunities for Canadians, as outlined in this section, will be cost effective, leaving the budget in balance with up to $6 billion set aside for fiscal prudence that could, if not needed, be used to pay down the debt (Table 3).

Although federal fiscal policy cannot prevent events abroad that might affect Canada's financial markets and economy in 2015 and beyond, it can help Canadians adapt when necessary and pursue their livelihoods whatever the international environment. This Shadow Budget ensures a sound fiscal framework at the federal level, bolstering confidence in the sustainability of Canada's public finances. It promotes economic growth with tax changes and investments that support investment and job creation. And it enhances opportunities for Canadians investing in their skills, deploying those skills in the workforce and preparing for retirement. Whatever the world brings in 2015 and beyond, this Shadow Budget will help protect Canadians and equip them to thrive.

Table 3: Fiscal Projections with Shadow Budget Initiatives, Fiscal Years 2014/15 to 2016/17

	2014/15	2015/16	2016/17
		($ billion)	
Baseline projections (Table 1)			
Projected revenues	280.6	297.5	310.6
Projected expenditures	–280.5	–292.6	–303.3
Adjustment for fiscal prudence	–6.0	–6.0	–6.0
Budgetary balance before initiatives	**–5.9**	**–1.1**	**1.3**
Shadow Budget initiatives			
Cap Ottawa's employee pensions' contribution rate		–0.9	–0.7
Introduce a more complete and transparent federal government balance sheet		-	-
Sell federal assets (airport leases)		–2.8	–1.1
Gradually implement an allowance for corporate equity, with proportional reforms to capital gains and dividend taxation, and the Small Business Deduction		-	1.0
Review capital consumption allowances		-	-
Improve the tax treatment of intellectual property income		-	0.4
Eliminate the federal excise tax on aviation gasoline and jet fuel		0.1	0.1
Introduce a more efficient payments system		-	0.1
Build infrastructure		0.1	0.1
Introduce Crown lenders' complementarity mandates		-	-
Support assessments of student achievement		-	-
Enhance education for First Nations students		0.3	0.3
Transform the tuition and education/textbook tax credits		0.1	0.1
Improve labour market intelligence		0.1	0.1
Eliminate regionally differentiated employment insurance		0.4	0.3
Remove federal payroll taxes from employers' contributions to group RRSPs		0.1	0.1
Increase the age at which contributions to tax-deferred retirement saving vehicles must stop		-	0.1
Eliminate the age schedule of mandatory withdrawal for RRIFs		-	-
Expand eligibility to the Pension Income Tax Credit and pension income splitting		0.1	0.1
Total		**–2.4**	**1.0**
New budgetary balance	**–5.9**	**1.3**	**0.3**
Accumulated deficit	618.8	617.5	617.2
as % of GDP	*31.3*	*30.2*	*28.9*

Sources: Table 1; authors' calculations.

References

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

Bergevin, Philippe, and Finn Poschmann. 2013. *Reining in the Risks: Rethinking the Role of Crown Financial Corporations in Canada*. Commentary 372. Toronto: C.D. Howe Institute. February.

Boadway, Robin, and Jean-François Tremblay. 2014. *Corporate Tax Reform: Issues and Prospects for Canada*. Mowat Research Report 88. Toronto; University of Toronto, School of Public Policy & Governance, Mowat Centre. April.

Boothby, Daniel, and Torben Drewes. 2010. "The Payoff: Returns to University, College and Trades Education in Canada, 1980 to 2005." E-Brief 104. Toronto: C.D. Howe Institute. August.

Brydon, Robbie, Nicholas Chesterley, Benjamin Dachis, and Aaron Jacob. 2014. "Measuring Innovation in Canada: The Tale Told by Patent Applications." E-Brief 191. Toronto: C.D. Howe Institute. November.

Busby, Colin, Alexandre Laurin, and David Gray. 2009. "Back to the Basics: Restoring Equity and Efficiency in the EI Program." E-Brief 84. Toronto: C.D. Howe Institute. August.

Canada. 2014. "Update of Economic and Fiscal Projections." Ottawa: Department of Finance. November.

Canadian Payments Association. 2008. "Issues Paper: Review of Bill Payments in Canada." Ottawa: Canadian Payments Association, Policy and Research Division. February.

Dachis, Benjamin. 2014. *Full Throttle: Reforming Canada's Aviation Policy*. Commentary 398. Toronto: C.D. Howe Institute. January.

Dubrovinsky, Mati. 2014. "A Speedier and More Efficient Payments System for Canada." E-Brief 190. Toronto: C.D. Howe Institute. November.

Found, Adam, Benjamin Dachis, and Peter Tomlinson. 2014. "The 2014 C.D. Howe Institute Business Tax Burden Ranking." E-Brief 187. Toronto: C.D. Howe Institute. October.

Hamilton, Malcom. 2014a. *Evaluating Public-Sector Pensions: Are Federal Public Servants Overpaid?* Commentary 405. Toronto: C.D. Howe Institute. April.

———. 2014b. *Evaluating Public-Sector Pensions: How Much Do They Really Cost?* Commentary 403. Toronto: C.D. Howe Institute. March.

Klemm, Alexander. *Allowances for Corporate Equity in Practice*. IMF Working Paper 259. Washington, DC: International Monetary Fund. November.

Laurin, Alexandre, and William B.P. Robson. 2012. *Achieving Balance, Spurring Growth: A Shadow Federal Budget for 2012*. Commentary 344. Toronto: C.D. Howe Institute. March.

Milligan, Kevin. 2014. *Tax Policy for a New Era: Promoting Economic Growth and Fairness*. Benefactors Lecture. Toronto: C.D. Howe Institute. November.

Mirrlees, James, et al. 2011. *Tax by Design*. Oxford: Oxford University Press.

Moussaly-Sergieh, Karim, and François Vaillancourt. 2009. "Extra Earning Power: The Financial Returns to University Education in Canada." E-Brief 79. Toronto: C.D. Howe Institute. May.

Neill, Christine. 2013. *What You Don't Know Can't Help You: Lessons of Behavioural Economics for Tax-Based Student Aid*. Commentary 393. Toronto: C.D. Howe Institute. November.

Pantaleo, Nick, Finn Poschmann, and Scott Wilkie. 2013. *Improving the Tax Treatment of Intellectual Property in Canada*. Commentary 379. Toronto: C.D. Howe Institute. April.

Robbins, Jenna, and Michael R. Veall. 2002. "Future Taxes on Pension Savings as a Government Asset." Backgrounder. Toronto: C.D. Howe Institute. October.

Robson, William B.P. 2008. "A Better Riff on Retirement: The Case for Lower Minimum Withdrawals from Registered Retirement Income Funds." E-Brief 58. Toronto: C.D. Howe Institute. July.

———. 2010. "Cutting through Pension Complexity: Easy Steps Forward for the 2010 Federal Budget." Backgrounder. Toronto: C.D. Howe Institute. February.

———. 2012. *Ottawa's Pension Abyss: The Rapid Hidden Growth of Federal-Employee Retirement Liabilities*. Commentary 370. Toronto: C.D. Howe Institute. December.

Robson, William B.P., and Alexandre Laurin. 2014a. *Ottawa's Hidden Deficit: The Widening Gap between Federal Government Pension Liabilities and Assets*. Commentary 406. Toronto: C.D. Howe Institute. April.

———. 2014b. "Outliving Our Savings: Registered Retirement Income Funds Rules Need a Big Update." E-Brief 175. Toronto: C.D. Howe Institute. June.

Task Force for the Payments System Review. 2011. *Moving Canada into the Digital Age – Final Report*. Ottawa: Department of Finance.

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