Tax Expenditures and Evaluations 2012



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Preface

The Department of Finance has published tax expenditures for personal and corporate income taxes as well as for the Goods and Services Tax (GST) since 1994. Beginning in 2000, the tax expenditure report has been separated into two documents. This document, *Tax Expenditures and Evaluations*, is published annually. It provides estimates and projections for broadly defined tax expenditures as well as evaluations and analytical papers addressing specific tax measures. This year's edition includes a profile of Tax-Free Savings Account holders as well as a methodological paper on the tax expenditures in respect of accelerated deductions of capital costs.

The second document, *Tax Expenditures: Notes to the Estimates/Projections*, is a reference document which presents the objective of each tax expenditure and explains how the estimates and projections are calculated. This document is published periodically and the 2010 edition is available on the Department of Finance website.

Part 1

Tax Expenditures: Estimates and Projections



INTRODUCTION

The principal function of the tax system is to raise the revenues necessary to fund government expenditures. The tax system can also be used directly to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. These measures are often described as "tax expenditures" because they achieve policy objectives at the cost of lower tax revenue.

To identify and estimate tax expenditures, it is necessary to establish a "benchmark" tax structure that applies the relevant tax rates to a broadly defined tax base—e.g. personal income, business income or consumption. Tax expenditures are then defined as deviations from this benchmark. Reasonable differences of opinion exist about what should be considered part of the benchmark tax system and hence about what should be considered a tax expenditure.

This report takes a broad approach and includes estimates and projections of the revenue loss associated with all but the most fundamental structural elements of the tax system, such as the progressive personal income tax rate structure. This includes not only measures that may reasonably be regarded as tax expenditures but also other measures that may be considered part of the benchmark tax system. The latter are listed separately under "Memorandum Items." For instance, the Dividend Tax Credit is listed under this heading because its purpose is to reduce or eliminate the double taxation of income earned by corporations and distributed to individuals through dividends. Also included under this heading are measures where data limitations do not permit a separation of the tax expenditure and benchmark components of the measure. This approach provides information on a full range of measures.

A more detailed discussion of how the estimates and projections of the tax expenditures are calculated is available in the 2010 edition of *Tax Expenditures: Notes to the Estimates/Projections*.

CAVEATS

Care must be taken in interpreting the estimates and projections of tax expenditures presented in this document for the following reasons:

- The estimates and projections are intended to indicate the potential revenue gain that would be realized by removing individual tax measures. They are developed assuming that the underlying tax base would not be affected by removal of the measure. However, this is an assumption that is unlikely to be true in practice in some cases, as the behaviour of beneficiaries of tax expenditures, overall economic activity and other government policies could change along with the specific tax provision.
- The cost of each tax measure is determined separately, assuming that all other tax provisions remain unchanged. Many of the tax expenditures do, however, interact with each other such that the impact of several tax provisions at once cannot generally be calculated by adding up the estimates and projections for each provision.
- The federal and provincial income tax systems interact with each other to varying degrees. As a result, changes to tax expenditures in the federal system may have consequences for provincial tax revenues. In this publication, however, any such provincial effects are not taken into account—that is, the tax expenditure estimates and projections address strictly the federal tax system and federal tax revenue.



• The tax expenditure estimates and projections presented in this document are developed using the latest available taxation data. Revisions to the underlying data as well as improvements to the methodology can result in substantial changes to the value of a given tax expenditure in successive publications. In addition, estimates and projections for some tax measures, such as the partial inclusion of capital gains, are particularly sensitive to economic parameters and hence may also differ significantly from one publication to the next.

WHAT'S NEW IN THE 2012 REPORT

New tax measures were introduced and others modified in Budget 2012. Changes affecting tax expenditures are described below.

Personal Income Tax

Overseas Employment Tax Credit

The Overseas Employment Tax Credit will be phased out over four taxation years, beginning with the 2013 taxation year. During the phase-out period, the factor that is applied to an employee's qualifying foreign employment income in determining the employee's Overseas Employment Tax Credit is reduced from 80% to 60% for the 2013 taxation year, 40% for the 2014 taxation year and 20% for the 2015 taxation year. The Overseas Employment Tax Credit will be eliminated for the 2016 and subsequent taxation years.

Mineral Exploration Tax Credit for Flow-Through Share Investors

The Mineral Exploration Tax Credit is a reduction in tax, available to individuals who invest in flow-through shares, equal to 15% of specified mineral exploration expenses incurred in Canada and transferred to flow-through share investors. The credit was introduced on a temporary basis in 2000 and has generally been extended on an annual basis since then. Budget 2012 extended eligibility for the credit for an additional year to flow-through share agreements entered into on or before March 31, 2013. Under the one-year "look-back" rule, funds raised with the benefit of the credit in 2013, for example, can be spent on eligible exploration up to the end of 2014.

Salary of the Governor General of Canada

Following consultations between the Governor General and the Government, both agreed that the income tax exemption for the Governor General's salary should end and that the Governor General's salary paid under the *Governor General's Act* should be subject to tax in the same manner as the salary of other Canadians. This measure applies to the 2013 and subsequent taxation years. The tax expenditure for the non-taxation of income from the Office of the Governor General of Canada is therefore eliminated starting in the 2013 taxation year.



Corporate Income Tax

Atlantic Investment Tax Credit

The Atlantic Investment Tax Credit is a 10% credit available for certain investments in new buildings, machinery and equipment used in the Atlantic region and the Gaspé Peninsula. Currently, the credit supports investments in farming, fishing, logging, manufacturing and processing, oil and gas, and mining. Budget 2012 announced the phase-out of the Atlantic Investment Tax Credit for assets primarily used in oil and gas, and mining activities. Subject to certain grandfathering provisions, the credit will be reduced to 5% for such assets acquired in 2014 and 2015 and to 0% for assets acquired after 2015.

Scientific Research and Experimental Development (SR&ED) Investment Tax Credit

To support the key objectives identified by the Expert Review Panel on Research and Development, Budget 2012 proposed several changes to the SR&ED tax incentive program to make it simpler, as well as more cost-effective and predictable. In particular:

- Capital will be removed from the base of eligible SR&ED expenditures, as it is considered the most complex component of this base. This change will be effective for capital expenditures incurred on or after January 1, 2014.
- The general SR&ED investment tax credit rate will be reduced to 15% from 20% on January 1, 2014.
- The prescribed proxy amount, which taxpayers can elect to use to claim SR&ED overhead
 expenditures, will be reduced from 65% to 55% of the salaries and wages of employees who are
 directly engaged in SR&ED activities in Canada. This change will be fully implemented on
 January 1, 2014.
- The profit element will be removed for arm's length third-party contracts for the purpose of the calculation of SR&ED investment tax credits. To this end, effective January 1, 2013, only 80% of the amount of a third-party contract is eligible for the credit.

Corporate Mineral Exploration and Development Tax Credit

Budget 2012 announced the phase-out of the Corporate Mineral Exploration and Development Tax Credit. This credit applies to both grass-roots exploration and pre-production mine development expenditures in Canada in respect of diamonds, base and precious metals, as well as industrial minerals that become base or precious metals through refining.

The credit applies at a rate of 10% for pre-production exploration expenses incurred in 2012, and at a rate of 5% for such expenses incurred in 2013. The credit will not be available for pre-production exploration expenses incurred after 2013. For pre-production development expenses, the credit is 10% in 2012 and 2013, 7% in 2014 and 4% in 2015, subject to grandfathering provisions. The credit will not be available for pre-production development expenses incurred after 2015. Assets acquired before 2016, as part of a grandfathered project, will be eligible for the 10% credit rate.



Goods and Services Tax

Travellers' Exemption Thresholds

To streamline the processing of Canadian residents returning to Canada, the personal duty-free and tax-free exemption limits were increased in Budget 2012 for lengths of absence greater than 24 hours effective June 1, 2012. For lengths of absence between 24 and 48 hours, the exemption limit increased to \$200 from \$50; for lengths of absence between 48 hours and 7 days, the exemption limit increased to \$800 from \$400; and for lengths of absence over 7 days, the exemption limit increased to \$800 from \$750. There remains no exemption for same-day travel.

Reclassifications Reflecting the Adoption of the New Accounting Standard for Tax Revenues

Beginning with the 2012–13 fiscal year, the Government has adopted the new accounting standard regarding tax revenues issued by the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants. Notably, the new standard provides guidance as to whether payments made through the tax system or reductions in taxes payable should be classified as either reductions in tax revenues or as transfer payments. Under the new standard, some tax credits that were previously recorded as a reduction in tax revenues have been reclassified as transfer payments under direct program spending. 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 that portion of the Atlantic Investment Tax Credit and the Scientific Research and Experimental Development Investment Tax Credit that is eligible to be refunded.

As a result of this new accounting standard, the tax credits that have been reclassified as transfer payments are no longer considered tax expenditures. However, to facilitate access to information on these credits and comparison with other tax expenditures, estimates and projections for these tax credits will continue to be presented as memorandum items, in a new category "Refundable Tax Credits Classified as Transfer Payments." The non-refundable portions of the Atlantic Investment Tax Credit and the Scientific Research and Experimental Development Investment Tax Credit are still considered tax expenditures and are shown separately in Table 2.

THE TAX EXPENDITURES

Tables 1 to 3 provide tax expenditure values for personal income tax, corporate income tax and the GST for the years 2007 to 2012. Values for the years 2007 to 2010 are generally based on tax data supplied by the Canada Revenue Agency, or are calculated from data supplied by Statistics Canada and other government departments and agencies. Values for the 2011 and 2012 projections are usually determined from the historical relationship between a tax expenditure and relevant economic variables. These economic variables are generally based on the forecast presented in the November 13, 2012 *Update of Economic and Fiscal Projections*. See Chapter 1 of the 2010 edition of *Tax Expenditures: Notes to the Estimates/ Projections* for additional details on the methodology.

Tax expenditures in each table are grouped according to functional categories. This grouping is provided solely for presentational purposes and is not intended to reflect underlying policy considerations.



All estimates and projections are reported in millions of dollars. The letter "S" ("small") indicates that the absolute value of the tax expenditure is less than \$2.5 million, "n.a." signifies that data are not available to support a meaningful estimate/projection, and a dash means that the tax expenditure is not in effect. The inclusion in the report of items for which estimates and projections are not available reflects the intention to provide information on measures included in the tax system even if it is not always possible to provide their revenue impacts. Work is continuing to obtain quantitative estimates and projections where possible.

Changes in the estimates and projections from those in last year's report, as well as variations from year to year, may result from a number of factors, including legislative changes, changes in the economic variables affecting the tax expenditures, the availability of new data, and methodological improvements. Legislative changes affecting the estimates and projections are described in *Tax Expenditures: Notes to the Estimates/Projections*, in the "What's New in the 2012 Report" section of this publication and in the notes to the tables.

Broad-based changes to the tax system may affect tax expenditure estimates and projections to the extent that these changes modify the effective tax rates otherwise faced by taxpayers under the benchmark tax system. A reduction (increase) in the effective tax rate under the benchmark tax system will generally result in lower (higher) tax expenditure estimates and projections. During the period covered by this publication, estimates and projections were affected, to varying degrees, by the following changes:

- For personal income tax expenditures, the introduction or enhancement of broad-based non-refundable tax credits, including the credit for the Basic Personal Amount, the Age Credit and the Child Tax Credit, had the effect of reducing the estimates and projections for most tax expenditures.
- For corporate income tax expenditures, the recent reductions in the general corporate income tax rate (from 21% to 19.5% on January 1, 2008, 19% on January 1, 2009, 18% on January 1, 2010, 16.5% on January 1, 2011, and 15% on January 1, 2012), as well as the elimination of the 4% corporate surtax (equivalent to a 1.12% corporate income tax rate reduction) on January 1, 2008, had the effect of reducing the estimates and projections for most tax expenditures, with a few exceptions such as investment tax credits.
- For GST expenditures, the reduction in the GST rate from 6% to 5% on January 1, 2008 had the effect of reducing the estimates and projections for most tax expenditures. The GST/HST Credit, however, was not affected by this rate reduction.



Table 1
Personal Income Tax Expenditures*
(\$ millions)

_	Estimates			Projections		
	2007	2008	2009	2010	2011	2012
Charitable Donations and Political Contributions						
Charitable Donations Tax Credit (excluding donations of assets eligible for capital gains exemption) ¹	2,345	2,270	2,020	2,160	2,250	2,335
Donations of publicly listed securities						
Charitable Donations Tax Credit	165	90	98	110	115	120
Non-taxation of capital gains	50	27	29	33	34	35
Total tax expenditure	215	115	130	145	150	155
Donations of ecologically sensitive land						
Charitable Donations Tax Credit	6	9	8	5	7	6
Non-taxation of capital gains	S	3	3	S	S	S
Total tax expenditure	8	11	11	7	9	7
Donations of cultural property						
Charitable Donations Tax Credit	22	21	20	18	16	16
Non-taxation of capital gains	7	7	6	6	5	5
Total tax expenditure	30	27	26	24	21	21
Political Contribution Tax Credit ²	20	31	23	22	32	23
Culture						
Assistance for artists	S	S	S	S	S	S
Children's Arts Tax Credit ³	_	_	_	_	35	35
Deduction for artists and musicians	S	S	S	S	S	S
Education						
Adult basic education—deduction for tuition assistance	5	5	5	5	5	5
Apprentice vehicle mechanics' tools deduction	3	4	5	5	5	5
Education Tax Credit ⁴	210	215	200	205	210	215
Textbook Tax Credit ⁴	41	42	38	39	40	41
Tuition Tax Credit ⁴	250	255	255	270	290	295
Transfer of Education, Textbook and Tuition Tax Credits	480	485	520	525	540	545
Carry-forward of Education, Textbook and Tuition Tax Credits ⁵	425	540	480	490	500	505
Exemption of scholarship, fellowship and bursary income	37	41	39	40	43	44
Registered Education Savings Plans ⁶	170	155	165	160	165	155
Student Loan Interest Credit	71	63	44	45	47	49

^{*} The elimination of a tax expenditure would not necessarily yield the full tax revenues shown in the table. See the 2010 edition of *Tax Expenditures: Notes to the Estimates/Projections* for a discussion of the reasons for this.



Table 1 (cont'd) **Personal Income Tax Expenditures**(\$ millions)

	Estimates				Projections	<u> </u>
	2007	2008	2009	2010	2011	2012
Employment						
Canada Employment Credit	1,835	1,905	1,915	1,960	2,015	2,085
Child care expense deduction	750	790	810	850	890	935
Deduction for income earned by military and police deployed to high-risk international missions	35	36	36	37	38	38
Deduction of home relocation loans	S	S	S	S	S	S
Deduction of other employment expenses	970	990	930	965	1,005	1,045
Deduction for tradespeople's tool expenses	4	4	3	3	3	4
Deduction of union and professional dues	705	755	755	785	820	860
Deferral of salary through leave of absence/sabbatical plans	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Disability supports deduction	S	S	S	S	S	S
Employee benefit plans	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Employee stock option deduction ⁷	1,155	760	430	675	755	785
Moving expense deduction	125	125	105	110	115	120
Non-taxation of certain non-monetary employment benefits	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Non-taxation of strike pay	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Northern residents deductions ⁸	150	160	160	165	165	165
Overseas Employment Credit ⁹	64	78	72	73	75	75
Tax-free amount for emergency service volunteers	14	14	14	14	12	12
Volunteer Firefighters Tax Credit ¹⁰	_	_	-	_	15	15
Family						
Adoption Expense Tax Credit	3	S	3	3	3	3
Caregiver Credit	84	90	97	100	105	105
Child Tax Credit	1,445	1,470	1,470	1,495	1,520	1,555
Deferral of capital gains through transfers to a spouse, spousal trust or family trust	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Family Caregiver Tax Credit ¹¹	_	_	-	-	_	160
Infirm Dependant Credit	5	5	5	5	5	6
Spouse or Common-Law Partner Credit ¹²	1,240	1,225	1,385	1,410	1,425	1,440
Eligible Dependant Credit ¹²	755	750	785	785	790	800
Inclusion of the Universal Child Care Benefit in the income of an eligible dependant ¹³	_	_	_	5	5	5



Table 1 (cont'd) **Personal Income Tax Expenditures**(\$ millions)

	Estimates				Projections		
	2007	2008	2009	2010	2011	2012	
Farming and Fishing							
Lifetime capital gains exemption for farm							
and fishing property	385	385	320	325	375	385	
Cash basis accounting	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Deferral of capital gains through intergenerational rollovers of family farms, family fishing businesses and commercial woodlots	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Deferral of income from destruction of livestock	S	S	S	S	S	S	
Deferral of income from sale of livestock during drought, flood or excessive moisture years	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Deferral of income from grain sold through cash purchase tickets	35	45	-10	-10	65	15	
Deferral through 10-year capital gain reserve	S	S	S	S	S	S	
Exemption from making quarterly tax instalments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agrilnvest (farm savings account) ¹⁴	S	20	15	20	25	25	
Agri-Québec (farm savings account) ¹⁵	_	_	_	_	5	5	
Flexibility in inventory accounting	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Fax treatment of the Net Income Stabilization Account ¹⁶							
Deferral of tax on government contributions	S	S	S	_	_	_	
Deferral of tax on bonus and interest income	S	S	S	_	_	_	
Taxable withdrawals	S	S	S	-	_	_	
Federal-Provincial Financing Arrangements							
_ogging Tax Credit	S	S	S	S	S	S	
Quebec Abatement	3,520	3,605	3,415	3,665	3,900	4,090	
Transfer of income tax points to provinces	17,450	17,585	16,260	17,385	18,515	19,395	
General Business and Investment							
\$200 capital gains exemption on foreign exchange transactions	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
\$1,000 capital gains exemption on personal-use property	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Accelerated deduction of capital costs	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Deduction of carrying charges incurred to earn income	1,270	1,200	920	995	1,105	1,120	
Deferral through use of billed-basis accounting by professionals	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Deferral through five-year capital gain reserve	15	10	S	S	S	5	
Investment tax credits	20	20	17	16	17	18	
Flow-through share deductions	435	215	165	260	280	290	



Table 1 (cont'd) **Personal Income Tax Expenditures**(\$ millions)

_	Estimates			Projections			
	2007	2008	2009	2010	2011	2012	
General Business and Investment (cont'd)							
Mineral Exploration Tax Credit for flow-through share investors 17	150	45	70	110	100	100	
Reclassification of expenses under flow-through shares 18	-4	-10	-11	-3	-5	-3	
Partial inclusion of capital gains ¹⁹	5,740	2,995	2,445	3,715	3,975	4,155	
Taxation of capital gains upon realization	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Tax-Free Savings Account ²⁰	_	_	65	165	155	305	
Small Business							
Lifetime capital gains exemption for small business shares	585	620	475	545	595	605	
Deduction of allowable business investment losses	20	30	35	35	35	35	
Deferral through 10-year capital gain reserve	S	S	S	S	S	S	
Labour-Sponsored Venture Capital Corporations Credit	120	120	125	130	140	145	
Non-taxation of provincial assistance for venture investments in small businesses	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Rollovers of investments in small businesses	10	10	5	4	5	5	
Health							
Children's Fitness Tax Credit	90	105	110	115	115	120	
Disability Tax Credit	585	635	620	650	680	705	
Medical Expense Tax Credit ²¹	915	995	1,000	1,095	1,190	1,270	
Non-taxation of business-paid health and dental benefits	2,535	2,620	2,810	2,935	3,165	3,390	
Income Maintenance and Retirement							
Age Credit ²²	1,810	1,840	2,295	2,360	2,480	2,605	
Deferred Profit-Sharing Plans	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Non-taxation of certain amounts received as damages in respect of personal injury or death	18	20	20	19	21	23	
Non-taxation of Guaranteed Income Supplement and Allowance benefits ²³	170	175	89	100	120	120	
Non-taxation of investment income from life insurance policies ²⁴	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Non-taxation of RCMP pensions/compensation in respect of injury, disability or death	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Non-taxation of social assistance benefits ²⁵	145	165	145	155	160	160	
Non-taxation of up to \$10,000 of death benefits	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	



Table 1 (cont'd) **Personal Income Tax Expenditures**(\$ millions)

	Estimates			Projections		
	2007	2008	2009	2010	2011	2012
Income Maintenance and Retirement (cont'd)						
Non-taxation of veterans' allowances, income support benefits, civilian war pensions and allowances, and other service pensions (including those from Allied countries)	S	S	S	S	S	S
Non-taxation of veterans' disability pensions and support for dependants	150	150	135	140	140	135
Non-taxation of veterans' Disability Awards	11	19	22	31	35	39
Non-taxation of workers' compensation benefits	655	695	620	655	690	630
Registered Disability Savings Plans ²⁶	_	S	S	S	3	4
Pension Income Credit	975	990	965	995	1,025	1,055
Pension income splitting	840	850	865	905	955	1,005
Registered Pension Plans ²⁷						
Deduction for contributions	9,425	9,835	11,945	12,200	12,505	12,750
Non-taxation of investment income	14,865	6,730	7,145	10,190	10,460	10,590
Taxation of withdrawals	-6,795	-6,830	-6,605	-7,395	-7,830	-8,350
Net tax expenditure	17,495	9,735	12,485	14,995	15,135	14,990
Registered Retirement Savings Plans ²⁷						
Deduction for contributions	7,400	7,240	7,005	7,230	7,420	7,555
Non-taxation of investment income	9,415	3,825	4,085	6,755	6,940	7,295
Taxation of withdrawals	-5,035	-4,825	-4,375	-5,120	-5,235	-5,480
Net tax expenditure	11,780	6,240	6,715	8,865	9,125	9,370
Supplementary information: present-value of tax-assisted retirement savings plans ²⁸	9,080	9,105	10,150	10,500	10,880	11,205
Saskatchewan Pension Plan	S	S	S	S	S	S
Treatment of alimony and maintenance payments	87	92	93	94	95	95
U.S. Social Security benefits ²⁹	S	S	S	S	S	S
Other Items						
Deduction for certain contributions by individuals who have taken vows of perpetual poverty	S	S	S	S	S	S
Deduction for clergy residence	82	82	85	86	87	88
First-Time Home Buyers' Tax Credit ³⁰	_	_	120	105	105	110
Home Renovation Tax Credit ³¹	_	_	2,265	_	_	_
Non-taxation of capital gains on principal residences ³²	5,285	3,015	3,785	4,140	4,790	4,495
Non-taxation of income from the Office of the Governor General of Canada ³³	S	S	S	S	S	S
Non-taxation of income of status Indians and Indian bands earned on reserve	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Special tax computation for certain retroactive lump-sum payments	S	S	S	S	S	S
Public Transit Tax Credit	110	135	140	145	150	155



Table 1 (cont'd)

Personal Income Tax Expenditures

(\$ millions)

	-	Estimates			Projections	
	2007	2008	2009	2010	2011	2012
Memorandum Items						
Avoidance of Double Taxation						
Dividend gross-up and credit ³⁴	3,015	3,405	3,805	3,830	4,255	4,240
Foreign Tax Credit	780	750	660	670	725	735
Non-taxation of capital dividends	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Loss Offset Provisions						
Capital loss carry-overs ³⁵	330	145	230	425	375	380
Farm and fishing loss carry-overs	15	15	11	14	15	15
Non-capital loss carry-overs	70	55	56	56	62	63
Social and Employment Insurance Programs Canada Pension Plan and Quebec Pension Plan						
Employee-Paid Contribution Credit	2,750	2,875	2,815	2,910	3,025	3,150
Non-taxation of employer-paid premiums	4,445	4,650	4,520	4,685	4,895	5,095
Employment Insurance and Quebec Parental Insurance Plan						
Employee-Paid Contribution Credit ³⁶	945	955	960	990	1,060	1,140
Non-taxation of employer-paid premiums	1,865	1,885	1,870	1,935	2,075	2,225
Refundable Tax Credits Classified as Transfer Payments ³⁷						
Canada Child Tax Benefit ³⁸	9,420	9,368	9,753	10,013	10,049	n.a.
Refundable Medical Expense Supplement	110	120	130	135	140	145
Working Income Tax Benefit ³⁹	455	480	1,025	1,055	1,075	1,105
Other						
Basic Personal Amount ⁴⁰	26,015	26,205	27,880	28,655	29,560	30,740
Deferral through capital gains rollovers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Non-taxation of lottery and gambling winnings	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Non-taxation of allowances for diplomats and other government employees posted abroad	29	33	39	42	44	44
Partial deduction of meals and entertainment expenses	150	150	175	185	190	190

Notes:

The tax expenditures associated with the Charitable Donations Tax Credit on donations of publicly listed securities, ecologically sensitive land and cultural property are presented separately. The estimates and projections presented on this line reflect the Charitable Donations Tax Credit associated with all other donations. The total tax expenditure for the Charitable Donations Tax Credit would take into account all relevant components.

The higher levels for this tax expenditure in 2008 and 2011 are due to contributions in respect of the 40th and 41st general elections.

This measure was introduced in Budget 2011, effective 2011. The lower value for this tax expenditure relative to the cost presented in Budget 2011 reflects a lower-than-expected take-up of the measure.

These tax expenditures relate to amounts earned and claimed in the year by students (i.e., neither transferred nor carried forward).

For a given year, this tax expenditure represents the value of Education, Textbook and Tuition Tax Credits earned in past years and used in that year. The tax expenditure does not include the pool of unused Education, Textbook and Tuition Tax Credits that have been accumulated but will be deferred for use in future years.

The amount of the tax expenditure for this measure has been adjusted downwards for all years, reflecting improvements in data and methodology.

⁷ This measure was changed in Budget 2010, effective March 4, 2010.



- Budget 2008 enhanced this measure, effective 2008.
- The phase-out of this measure was announced in Budget 2012. See the "What's New in the 2012 Report" section for details.
- This measure was introduced in Budget 2011, effective 2011. The decrease in the value of the tax expenditure for the tax-free amount for emergency service volunteers in 2011 reflects the introduction of the Volunteer Firefighters Tax Credit.
- This measure was introduced in Budget 2011, effective 2012. An enhanced amount of \$2,000 can be claimed for an infirm dependant under one of the existing dependency-related credits (i.e., Spouse or Common-Law Partner Credit, Eligible Dependant Credit, Child Tax Credit, Caregiver Credit or Infirm Dependant Credit).
- ¹² Budget 2009 enhanced the credit, effective 2009.
- ¹³ This measure was introduced in Budget 2010, effective 2010.
- 14 This measure was introduced in Budget 2007. In December 2007, agreements were signed with the provinces to implement the program and the disbursement of funds began.
- ¹⁵ This measure was introduced in Budget 2011, effective 2011.
- The Net Income Stabilization Account (NISA) and the Canadian Farm Income Program were replaced by the Canadian Agricultural Income Stabilization Program, with the effect that government contributions under NISA ceased as of December 31, 2003. All funds in participant accounts were paid out by March 31, 2009. Tax expenditure estimates reflect the wind-down schedule.
- ¹⁷ This credit was extended in Budget 2012 and is set to expire on March 31, 2013. See the "What's New in the 2012 Report" section for details.
- The amount of the tax expenditure for this measure is negative for 2007 and subsequent years because the positive tax expenditure associated with new spending in those years is more than offset by the negative tax expenditure resulting from reclassifications that occurred in previous years.
- 19 This tax expenditure does not take into account the tax value of current-year capital losses applied against previous-year capital gains.
- The increase in this tax expenditure in 2012 reflects the recovery in equity markets following their relatively poor performance in 2011 as well as the annual increase in the Tax-Free Savings Account contribution room. For more details, refer to the paper "Tax-Free Savings Accounts: A Profile of Account Holders" included in Part 2 of this report.
- Budget 2010 made expenses incurred for purely cosmetic procedures ineligible for the credit (effective after March 4, 2010). Budget 2011 removed the \$10,000 limit on eligible expenses that can be claimed under the Medical Expense Tax Credit in respect of a dependent relative, effective 2011.
- ²² Budget 2009 increased the Age Credit amount by \$1,000, to \$6,408 from \$5,408, effective 2009.
- The decline in this tax expenditure in 2009 is mainly explained by the increase in non-tax-paying seniors due to increases in the Basic Personal Amount and other non-refundable credits relevant to seniors (such as the Age Credit).
- Although this measure provides tax relief for individuals, it is implemented through the corporate income tax system. Tax expenditure amounts are shown under "Investment income credited to life insurance policies" in Table 2.
- ²⁵ The decline in this tax expenditure in 2009 mainly reflects the Budget 2009 increase in the Basic Personal Amount and related amounts.
- ²⁶ This measure was introduced in Budget 2007, effective 2008.
- Estimates and projections vary from those in last year's report due to changes in estimated levels of assets, contributions, investment income, capital gains/losses and withdrawals. In general, tax expenditure estimates and projections will be higher in years in which assets grow strongly, reflecting the tax forgone on that investment income, and lower in years in which assets grow slowly or decline.
- The present-value estimates reflect the lifetime cost of a given year's contributions. This definition is different from that used for the cash-flow estimates and thus the two sets of estimates are not directly comparable. Further information on how these estimates are calculated is contained in the paper "Present-Value Tax Expenditure Estimates of Tax Assistance for Retirement Savings," which was published in the 2001 edition of this report. The present-value estimates do not reflect the potential effect of Tax-Free Savings Accounts on the average tax rate used to calculate the present value of the forgone tax on investment income.
- This measure was changed in Budget 2010, effective January 1, 2010.
- This measure was introduced in Budget 2009, effective January 28, 2009.
- 31 This temporary measure was introduced in Budget 2009 for the 2009 tax year only. See note 46 of Table 1 in the 2010 edition of this report for details.
- The estimates and projections for this tax expenditure reflect the cyclicality of the housing market and its impact on the number of residence resales and on the average price of residences. Estimates and projections are based on housing market data and resale forecasts provided by Canada Mortgage and Housing Corporation and the Canadian Real Estate Association. Data on major additions and renovations obtained from Statistics Canada are used to estimate the average amount of capital expenditures on principal residences, which reduces the estimated amount of capital gains.
- This exemption was ended in Budget 2012, effective 2013. See the "What's New in the 2012 Report" section for details.
- The estimates and projections include the revenue impact associated with both the enhanced Dividend Tax Credit, mainly applicable to dividends from large businesses, and the basic Dividend Tax Credit applicable to other dividends, mostly from small businesses. Budget 2008 introduced reductions in the enhanced Dividend Tax Credit rate and gross-up factor beginning in 2010 to mirror the general corporate income tax reductions introduced in the
- 35 This tax expenditure represents the revenue impact resulting from the application of prior years' capital losses against net capital gains realized in the current year
- 36 Effective in 2010, a tax credit is also provided in respect of premiums paid by a self-employed individual under the Employment Insurance Act.
- ³⁷ As a result of the new accounting standard regarding tax revenues issued by the Public Sector Accounting Board, tax credits that have been reclassified as transfer payments under the new standard are no longer considered tax expenditures, but are shown separately as memorandum items. See the "What's New in the 2012 Report" section for more details.
- ³⁸ This tax expenditure is presented on a fiscal year basis as reported in the *Public Accounts of Canada* (e.g., the amount for 2011 corresponds to the expenditure reported in the *Public Accounts of Canada* for the 2011–12 fiscal year, ending March 31, 2012).
- ³⁹ Budget 2009 enhanced this measure, effective 2009.
- The Basic Personal Amount was increased by amounts over and above the inflation protection provided by full indexation in Budget 2009, effective 2009.



Table 2
Corporate Income Tax Expenditures*
(\$ millions)

		Esti	Proje	Projections		
	2007	2008	2009	2010	2011	2012
Charitable Donations, Gifts, Charities and Non-Profit Organizations						
Deductibility of charitable donations ^{1,2}	455	430	325	390	360	345
Donations of publicly listed securities						
Deductibility of donations ³	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Non-taxation of capital gains	55	107	36	63	65	55
Total tax expenditure	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Donations of ecologically sensitive land						
Deductibility of donations	3	4	13	S	5	6
Non-taxation of capital gains	22	4	13	S	S	5
Total tax expenditure	25	8	26	3	5	10
Donations of cultural property						
Deductibility of donations	8	7	4	25	6	12
Non-taxation of capital gains	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total tax expenditure	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deductibility of gifts of medicine	S	S	S	S	S	S
Deductibility of gifts to the Crown	S	S	S	S	S	S
Non-taxation of registered charities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Non-taxation of non-profit organizations (other than registered charities) ²	175	150	130	140	125	75
Culture						
Non-deductibility of advertising expenses in foreign media	S	S	S	S	S	S
Federal-Provincial Financing Arrangements						
Income tax exemption for certain provincial and municipal corporations	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Transfer of income tax points to provinces	2,070	1,725	1,900	2,050	2,405	2,480
Logging Tax Credit	18	5	4	9	10	10
General Business and Investment						
Accelerated deduction of capital costs	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Capital Gains						
Deferral through five-year capital gain reserve	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Partial inclusion of capital gains	5,450	4,670	2,990	3,540	4,520	4,640
Taxation of capital gains upon realization	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

^{*} The elimination of a tax expenditure would not necessarily yield the full tax revenues shown in the table. See the 2010 edition of *Tax Expenditures: Notes to the Estimates/Projections* for a discussion of the reasons for this.



Table 2 (cont'd)

Corporate Income Tax Expenditures
(\$ millions)

_		Esti	Proje	ections		
	2007	2008	2009	2010	2011	2012
General Business and Investment (cont'd)						
Non-Refundable Investment Tax Credits						
Atlantic Investment Tax Credit ⁴						
Earned and claimed in current year	100	60	70	90	80	95
Claimed in current year but earned in prior years	170	75	25	30	75	110
Earned in current year but carried back to prior years	3	S	7	28	12	11
Total tax expenditure	273	137	102	148	167	216
Scientific Research and Experimental Development Investment Tax Credit ⁴						
Earned and claimed in current year	880	805	815	840	885	910
Claimed in current year but earned in prior years	965	720	730	805	850	875
Earned in current year but carried back to prior years	95	170	100	105	110	110
Total tax expenditure	1,940	1,695	1,645	1,750	1,845	1,895
Apprenticeship Job Creation Tax Credit						
Earned and claimed in current year	51	60	52	50	58	58
Claimed in current year but earned in prior years	3	9	10	11	14	14
Earned in current year but carried back to prior years	3	5	4	6	4	4
Total tax expenditure	57	74	66	67	76	76
Investment Tax Credit for Child Care Spaces	S	S	S	S	S	S
Small Business						
Deduction of allowable business investment losses ²	13	18	17	17	29	27
Low tax rate for small businesses ⁵	4,050	4,365	4,305	4,140	3,835	2,935
Non-taxation of provincial assistance for venture investments in small businesses	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
International						
Exemption from tax of income earned by non- residents from the operation of a ship or aircraft in international traffic	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Exemption from tax for international banking centres ⁶	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.



Table 2 (cont'd)

Corporate Income Tax Expenditures
(\$ millions)

_	Estimates			Proje	Projections	
	2007	2008	2009	2010	2011	2012
International (cont'd)						
Exemptions from non-resident withholding tax						
Dividends ⁷	1,345	2,290	1,300	1,750	1,850	1,905
Interest	2,070	1,300	1,675	1,450	1,535	1,580
Rents and royalties	295	295	320	340	360	370
Management fees	110	125	160	150	160	160
Non-taxation of life insurance companies' foreign income	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tax treatment of active business income of foreign affiliates of Canadian corporations and deductibility of expenses incurred to invest in foreign affiliates	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sectoral Measures						
Farming						
Cash basis accounting	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deferral of income from destruction of livestock	S	S	S	S	S	S
Deferral of income from sale of livestock during drought, flood or excessive moisture years	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deferral of income from grain sold through cash purchase tickets ²	26	30	-9	-7	40	16
Flexibility in inventory accounting	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Agricultural co-operatives—patronage dividends paid as shares	3	7	5	4	9	9
Agrilnvest (farm savings account) ⁸	_	3	S	3	3	3
Agri-Québec (farm savings account) ⁹	_	_	_	_	S	S
Exemption for farmers' and fishers' insurers	4	S	5	7	7	7
Natural Resources						
Corporate Mineral Exploration and Development Tax Credit ¹⁰	24	23	21	24	60	38
Deductibility of contributions to a qualifying environmental trust ¹¹	S	S	S	S	5	S
Earned depletion	5	3	S	11	S	4
Flow-through share deductions	120	75	70	70	70	60
Reclassification of expenses under flow-through shares ¹²	-3	-4	-3	S	S	S
Other Sectors						
Exemption from branch tax for transportation, communications, and iron ore mining corporations	6	38	6	44	41	28
Low tax rate for credit unions	73	83	79	74	62	47
Surtax on the profits of tobacco manufacturers ⁶	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.



Table 2 (cont'd)

Corporate Income Tax Expenditures
(\$ millions)

_		Estir	Proj	Projections		
	2007	2008	2009	2010	2011	2012
Other Items						
Deductibility of countervailing and						
anti-dumping duties	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deductibility of earthquake reserves	S	S	S	S	S	S
Deferral through use of billed-basis accounting by professional corporations	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Holdback on progress payments to contractors	59	63	32	29	38	36
Investment income credited to life	200	070	075	200	205	200
insurance policies	280	270	275	260	285	280
Tax status of certain federal Crown corporations ⁶	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Memorandum Items						
Avoidance of Double Taxation—Integration of Personal and Corporate Income Tax						
Investment corporation deduction	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Refundable capital gains for investment and mutual fund corporations	435	89	51	185	185	185
Refundable taxes on investment income of private corporations						
Additional Part I tax ¹³	-2,155	-2,345	-1,790	-1,775	-2,465	-2,865
Part IV tax	-3,080	-4,680	-3,265	-2,735	-3,140	-3,365
Dividend refund	6,095	8,165	6,115	5,240	5,875	6,295
Net tax expenditure	860	1,140	1,060	730	270	65
Loss Offset Provisions						
Capital loss carry-overs						
Net capital losses carried back	210	535	430	280	86	115
Net capital losses applied to current year ²	810	385	215	440	435	430
Farm and fishing loss carry-overs						
Farm and fishing losses carried back	13	14	17	14	12	10
Farm and fishing losses applied to current year ²	35	34	50	53	63	53
Non-capital loss carry-overs						
Non-capital losses carried back	2,165	6,170	3,425	2,700	1,935	1,480
Non-capital losses applied to current year ²	4,770	3,895	4,625	4,000	4,285	3,985
Refundable Tax Credits Classified as Transfer Payments ¹⁴						
Atlantic Investment Tax Credit	12	12	12	14	15	15
Scientific Research and Experimental Development Investment Tax Credit				1,600	1,700	1,745
Canadian Film or Video Production Tax Credit	1,365 210	1,545 220	1,535 225	225	235	1,745 245
Film or Video Production Tax Credit	210 95	100	225 85	225 95	100	2 4 5 105
riiii oi video Production Services Tax Credit	90	100	00	95	100	105



Table 2 (cont'd)

Corporate Income Tax Expenditures

(\$ millions)

		Estimates			Projections	
	2007	2008	2009	2010	2011	2012
Other						
Deferral through capital gains rollovers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Deduction for intangible assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Partial deduction of meals and entertainment expenses	340	305	265	255	260	260
Patronage dividend deduction	475	435	345	290	375	345

Notes:

- 1 This tax expenditure excludes the deductibility of charitable donations of ecologically sensitive land and cultural property. The estimates and projections presented on this line reflect the deductibility of all other charitable donations. The total tax expenditure for the deductibility of charitable donations would take into account all relevant components.
- 2 Changes in the estimates and projections for this tax expenditure from those in last year's report partly reflect methodological improvements.
- 3 There are no data available that allow this tax expenditure to be separated from the "deductibility of charitable donations" category. Therefore, the value of this tax expenditure is included under "deductibility of charitable donations."
- Estimates and projections of the tax expenditure in respect of the refundable portion of this credit are shown separately under "Refundable tax credits classified as transfer payments" (see note 14). These amounts were included in the line "Earned and claimed in current year" in previous editions of this report. The total amount of tax assistance provided by this credit is the sum of its non-refundable and refundable components. Estimates and projections for these two components are preliminary. Changes to this measure were announced in Budget 2012. See the "What's New in the 2012 Report" section for more details
- ⁵ The amount of this tax expenditure reflects the impact of Budget 2009, which increased the amount of small business income eligible for the lower tax rate, and the 2007 Economic Statement, which accelerated the rate reduction announced in Budget 2006. The reduction in the tax expenditure between 2008 and 2012 partly reflects the reduction in the general corporate income tax rate.
- ⁶ For confidentiality reasons, estimates and projections for this tax expenditure are not published.
- 7 This category includes the tax expenditure attributable to the exemption of estate and trust income distributions, including distributions by income trusts.
- 8 This measure was introduced in Budget 2007. In December 2007, agreements were signed with the provinces to implement the program and the disbursement of funds began.
- 9 This measure was introduced in Budget 2011. See the "What's New" section of the 2011 edition of this report for details.
- 10 The phase-out of this measure was announced in Budget 2012. See the "What's New in the 2012 Report" section for more details.
- The measure was expanded in Budget 2011 to include trusts that are required to be established to fund reclamation costs associated with pipelines, applicable to trusts established after 2011. No impact on the tax expenditure is anticipated from these changes until 2015. See the "What's New" section of the 2011 edition of this report for details.
- The amount of the tax expenditure for this measure is negative for 2007 and subsequent years because the positive tax expenditure associated with new spending in those years is more than offset by the negative tax expenditure resulting from reclassifications that occurred in previous years.
- This item includes the additional 63/4% refundable tax on investment income as well as the Part I tax paid on investment income in excess of the benchmark rate.
- As a result of the new accounting standard regarding tax revenues issued by the Public Sector Accounting Board, tax credits that have been reclassified as transfer payments under the new standard are no longer considered tax expenditures, but are shown separately as memorandum items. See the "What's New in the 2012 Report" section for more details. The estimates and projections for the Atlantic Investment Tax Credit and the Scientific Research and Experimental Development Investment Tax Credit are preliminary.



Table 3
GST Tax Expenditures*

(\$ millions)

	Estimates			Proje	Projections	
	2007	2008	2009	2010	2011	2012
Status Indians and Aboriginal Self-Governments						
Non-taxation of personal property of status Indians						
and Indian bands on reserve	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Refunds for Aboriginal self-governments	5	5	5	5	5	5
Business						
Exemption for domestic financial services	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Exemption for ferry, road and bridge tolls	20	15	15	20	20	20
Exemption and rebate for legal aid services	25	20	25	25	25	25
Ion-taxability of certain importations	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Rebate for foreign visitors ¹	20	_	_	_	_	_
Rebate for foreign conventions and tour packages ¹	5	10	10	10	10	10
Small suppliers' threshold	180	155	150	160	165	170
Zero-rating of agricultural and fish products						
and purchases	S	S	S	S	S	S
Zero-rating of certain purchases made by exporters	S	S	S	S	S	S
Charities and Non-Profit Organizations						
Exemption for certain supplies made by charities						
and non-profit organizations	845	755	775	800	825	850
Rebate for registered charities	295	270	260	255	265	280
Rebate for qualifying non-profit organizations	70	70	70	70	70	75
Education						
Exemption for educational services (tuition)	510	450	480	505	530	555
Rebate for book purchases made by qualifying						
public institutions	25	25	25	20	20	20
Rebate for colleges	85	75	80	100	100	100
Rebate for schools	415	360	370	360	360	360
Rebate for universities	245	220	225	260	260	260
lealth Care						
Exemption for health care services	585	545	570	600	630	660
Rebate for hospitals	525	485	515	560	560	555
Zero-rating of medical devices	190	170	180	185	195	205
Zero-rating of prescription drugs	720	645	675	705	735	770
louseholds						
Exemption for child care and personal services	135	120	130	135	140	150
SST/HST Credit	3,490	3,555	3,645	3,775	3,865	4,180
ravellers' exemption ²	105	125	150	170	190	200
Zero-rating of basic groceries	3,540	3,105	3,290	3,390	3,535	3,690

The elimination of a tax expenditure would not necessarily yield the full tax revenues shown in the table. See the 2010 edition of *Tax Expenditures:* Notes to the Estimates/Projections for a discussion of the reasons for this.



Table 3 (cont'd)

GST Tax Expenditures

(\$ millions)

	Estimates			Proje	ctions	
	2007	2008	2009	2010	2011	2012
Housing						
Exemption for sales of used residential housing and other personal-use real property	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Exemption for residential rent (long-term)	1,295	1,195	1,230	1,265	1,305	1,345
Rebate for new housing	850	735	620	620	585	625
Rebate for new residential rental property	60	60	55	55	50	55
Municipalities						
Exemption for municipal transit	165	150	155	160	165	170
Exemption for water and basic garbage collection services	240	220	230	235	240	250
Rebate for municipalities	1,805	1,745	1,890	2,070	2,000	1,985
Memorandum Items						
Recognition of Expenses Incurred to Earn Income						
Rebate to employees and partners	95	80	75	70	75	80
Other						
Partial input tax credits for meals and entertainment expenses	150	130	130	135	140	145

Notes:

The Visitors' Rebate Program was replaced by the Foreign Convention and Tour Incentive Program effective April 1, 2007. The estimate for the rebate for foreign visitors does not include amounts credited by suppliers at the point of sale.

² This is the first time this measure is included in this report. The measure was modified in Budget 2012. See the "What's New in the 2012 Report" section for details.

Part 2

Tax Evaluations and Research Reports



Tax-Free Savings Accounts: A Profile of Account Holders

INTRODUCTION

In order to reduce the taxation of savings and improve incentives for Canadians to save, Budget 2008 introduced the Tax-Free Savings Account (TFSA)—a flexible, registered, general-purpose account that allows Canadians to earn tax-free investment income. Starting in 2009, Canadian residents age 18 and older have been eligible to contribute to a TFSA.

The TFSA has already become a popular savings vehicle. By the end of 2011, approximately 8.2 million Canadians had opened a TFSA, and financial assets held in TFSAs were valued at over \$62 billion.

This paper uses administrative account data for the first three years of the program to analyze the profile of individuals who have opened a TFSA, focusing primarily on participation and contribution trends. This exercise is useful in that it allows for a better understanding of the short-term impact of the program and of its beneficiaries, which provides some early indications of the longer-term benefits of the program. An empirical assessment of the long-term impact of TFSAs on savings behaviour would require much longer time series on individual savings and other economic variables following the introduction of the TFSA in 2009, and is therefore not within the scope of this paper.

Some salient points emerging from the analysis are:

- TFSAs are a popular means of savings for individuals across all income levels. In particular, individuals with incomes below \$80,000 accounted for about 80% of all TFSA holders and TFSA contributions in 2011.
- Overall, over 30% of adult tax filers had a TFSA in 2011. With respect to age, TFSA participation rates are relatively stable between ages 25 and 49, and generally increase with age thereafter, with take-up among seniors being especially strong.
- Low-income seniors have also been taking advantage of the TFSA. In 2011, Guaranteed Income Supplement (GIS) recipients represented about 6% of TFSA holders, and their TFSA participation rate was 23%—3 percentage points higher than that of low-income individuals in general.

The strong initial take-up of the TFSA indicates that it is already a key component of Canadians' personal finance planning. Growth in the use of TFSAs is expected to continue to be strong over the short- to medium-term as more investors learn of the benefits of saving in a TFSA, and to eventually stabilize as the program matures.

This paper is organized as follows. The first section describes the TFSA, including the principal rules governing the accounts. The second section provides summary statistics, highlighting how the TFSA has matured in its first three years of existence. The third section analyzes the profile of TFSA holders, focusing on participation rates and the distribution of account holders and contributions. The fourth section examines trends in unregistered savings since the introduction of the TFSA. The final section presents the conclusions of the review.



DESCRIPTION OF THE TFSA

The TFSA, which came into effect at the beginning of 2009, is a flexible, registered, general-purpose account that allows Canadians 18 years of age and older to earn tax-free investment income, including interest, dividends and capital gains. TFSAs are widely available to Canadians through banks, credit unions, life insurance companies and trusts. A social insurance number is required to register an account.

Contributions to a TFSA are not tax-deductible but investment income earned in a TFSA and withdrawals are tax-free. The tax assistance provided by the TFSA is, in many ways, a mirror image of that provided through the Registered Retirement Savings Plan (RRSP), for which contributions are tax-deductible but both the contributions and the investment earnings are taxable upon withdrawal.

When the TFSA was introduced, the annual contribution limit was set at \$5,000 per individual, indexed to inflation in \$500 increments. The annual contribution limit was \$5,000 from 2009 to 2012. Due to indexation, the TFSA annual contribution limit increased to \$5,500 starting in 2013.

An individual's unused TFSA contribution room is carried forward and accumulates in future years. In addition, the full amount of withdrawals is added to the individual's contribution room for the following calendar year to ensure that there is no loss in a person's total tax-free savings room.

In recognition of the fact that couples often make their savings decisions and plan for their financial security on a joint basis, individuals can provide funds to their spouse or common-law partner for them to invest in their TFSA. TFSA assets are generally transferable to the TFSA of a spouse or common-law partner upon death.

The TFSA provides improved savings opportunities for low- and modest-income individuals because, in addition to the tax savings, neither the income earned in a TFSA nor withdrawals from it affect eligibility for federal income-tested benefits and credits, such as the Canada Child Tax Benefit, the Goods and Services Tax/Harmonized Sales Tax (GST/HST) Credit, the Age Credit, and Old Age Security and GIS benefits.

The TFSA also provides seniors with a tax-assisted savings vehicle to meet any ongoing savings needs, even after they reach the age of 71 and are required to convert their registered retirement savings into a retirement income vehicle.

A TFSA is generally permitted to hold the same investments as an RRSP. The RRSP qualified investment rules accommodate a broad range of investments including mutual and exchange-traded funds, publicly traded securities, government and corporate bonds, guaranteed investment certificates (GICs) and savings deposits.



SUMMARY OF THE TFSA DATA

To enable the Canada Revenue Agency (CRA) to determine contribution room and monitor compliance, TFSA issuers (i.e., the financial institutions administering the accounts) are required to file annual information returns. These returns include total contributions, total withdrawals, and the fair market value of the accounts at the end of the year. Financial institutions do not report to the CRA on the type or composition of assets held in TFSAs or on the investment income earned in the accounts, although the latter can be estimated.

Final data are available for years 2009 and 2010. For 2011, the analysis presented in this paper reflects preliminary TFSA account information records available as of June 2012.

By the end of 2011, approximately 8.2 million Canadians had opened a TFSA compared to about 6.7 million and 4.9 million at the end of 2010 and 2009, respectively (Table 1).

Table 1 **TFSA Summary Statistics, 2009–2011**

	2009	2010	2011
Number of accounts ¹ (millions)	5.3	7.8	9.8
Number of individuals with a TFSA (millions)	4.9	6.7	8.2
Total annual contributions (\$ millions)	19,063	25,402	30,711
Average contribution per TFSA holder (\$)	3,926	3,769	3,727
Total annual withdrawals (\$ millions)	1,957	4,957	8,128
Average withdrawal per TFSA holder (\$)	403	736	986
Total end-of-year fair market value (\$ millions)	18,243	40,707	62,006
Average end-of-year fair market value per TFSA holder (\$)	3,757	6,039	7,525
Estimated investment income/loss ² (\$ millions)	1,137	2,019	-1,285

An individual may hold more than one TFSA, similar to other tax-assisted savings vehicles.

Total annual contributions to TFSAs have been on an upward trend, increasing from about \$19 billion in 2009 to over \$25 billion in 2010 to over \$30 billion in 2011. Over the same three-year period, annual RRSP contributions averaged about \$34 billion. Therefore, only three years after its introduction, the TFSA has approached the RRSP in terms of contribution flows even though TFSA contributions are drawn from after-tax dollars whereas RRSP contributions are made from pre-tax dollars.¹

Although TFSA holders sustained a net investment loss at the aggregate level in 2011, about three-quarters of TFSA holders had positive investment income in that year.

While the comparison provides perspective on the relative significance of the TFSA in terms of personal savings, it is important to note that the base of potential contributors is larger for the TFSA than the RRSP since all residents aged 18 and over accumulate TFSA contribution room, whereas individuals may contribute to their RRSPs only to the extent that they earn income to generate contribution room. In addition, individuals cannot contribute to their RRSPs beyond the calendar year in which they turn 71 (or, for contributions to spousal or common-law partner RRSPs, beyond the calendar year in which their spouse or common-law partner turns 71). Also, the rules for establishing maximum annual contribution limits differ between the two savings vehicles.



Total TFSA annual contributions have increased over time since in each new year there are both additional contributions from individuals who contributed to TFSAs in prior years and contributions from new participants who can use their annual limits in addition to their carried-forward contribution room.

The average contribution per TFSA holder has varied slightly each year, ranging from \$3,926 in 2009 to \$3,727 in 2011. In general, it is expected that average annual contributions would be somewhat higher in the early years of the program since TFSA holders can finance their contributions from both their existing stock of unsheltered savings—which individuals would seek to gradually shift into TFSAs—and the flow of new savings for the year.

The average withdrawal has more than doubled from \$403 in 2009 to \$986 in 2011. The increase in withdrawals reflects the accumulation of funds in the accounts as well as the flexibility of the TFSA rules, which allow individuals to withdraw funds at any time and re-contribute the funds beginning the following year.

A strong flow of positive net contributions has led to a steady increase in assets held in TFSAs. At the end of 2011, accounts held \$62 billion in assets as measured by their fair market value (FMV), which translates into an average end-of-year FMV of \$7,525 per TFSA holder. By comparison, RRSPs, which have been in existence since 1957, held assets valued at about \$842 billion at the end of 2011. The TFSA regime is still in its infancy such that its total asset value should continue to steadily increase as it matures.

It is estimated that, in aggregate, individuals earned about \$1.1 billion and \$2.0 billion of investment income in their TFSAs in 2009 and 2010, respectively.³ In 2011, account holders sustained a net aggregate loss of about \$1.3 billion in their TFSAs. This loss, which is due to realized and unrealized capital losses, reflects the relatively poor performance of Canadian and global equity markets over the 2011 calendar year. Since many account holders principally hold risk-free assets such as savings deposits or GICs, about three-quarters of account holders had positive investment income in 2011.

Aggregate TFSA investment income is the key component for estimating the TFSA tax expenditure. A description of the methodology employed to calculate the TFSA tax expenditure is reported in the annex. The tax expenditure figures for the TFSA are reported in Table 1 in Part 1 of this publication.

TFSA PARTICIPATION RATES AND PROFILE OF ACCOUNT HOLDERS

While the TFSA data can be used to compute summary statistics, they do not provide information on the profile of TFSA holders. The profile of TFSA holders and the participation rates are analyzed using income tax data.

Statistics Canada, Pension Satellite Account, 2011. This figure also includes assets held in Registered Retirement Income Funds and locked-in retirement accounts.

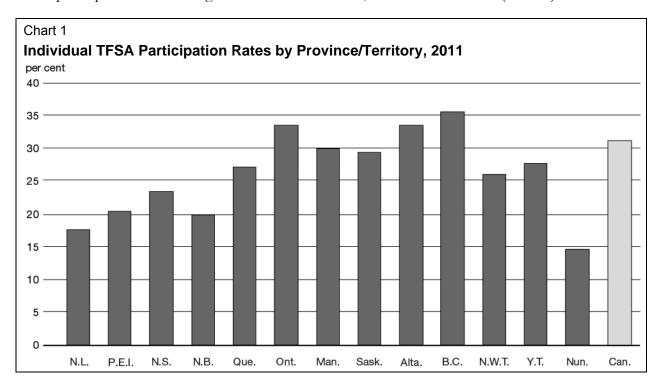
While investment income earned on assets held in a TFSA is not reported by financial institutions, it can be estimated by subtracting net annual contributions from the annual change in the fair market value of the assets. The investment returns include interest and dividend income, as well as net realized and unrealized capital gains and losses.



TFSA Participation Rates

Over the first three years of the program, a broad base of Canadians took advantage of the TFSA. Overall, the number of TFSA holders as a proportion of adult tax filers (or the participation rate) has risen over time, increasing from 19% in 2009 to 26% in 2010 and to 31% in 2011.

In 2011, TFSA participation rates among the provinces and territories ranged from 15% to 36%. TFSA participation rates are highest in British Columbia, Alberta and Ontario (Chart 1).



TFSA participation rates were 33% for females and 29% for males in 2011. Given the positive relationship between age and TFSA participation (see below), one factor influencing the higher female participation rate could be differences in age composition between the genders which reflect the higher life expectancy of females. In addition, as noted above, individuals can provide funds for their spouse's or common-law partner's TFSA contribution. Couples seem to be taking advantage of this option—about 162,000 spouses or common-law partners (of which almost 80% were female) made TFSA contributions in 2011 that were greater than their individual incomes. Thus, transfers of funds between spouses and common-law partners likely increase the female participation rate above what it otherwise would have been.

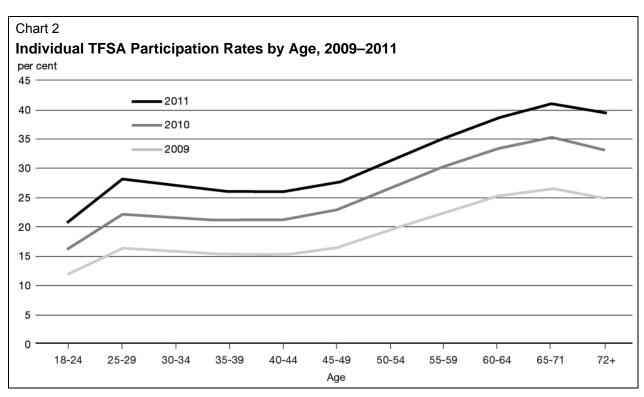
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In general, if an individual transfers property to their spouse or common-law partner for proceeds below the fair market value of the property, the *Income Tax Act* attribution rules treat any income earned on that property as income of the individual.

For some of these spouses, the high level of contributions relative to income could represent a transfer of existing assets held by the spouse into a TFSA. However, the majority of the spouses had zero taxable investment income in the prior year, which would tend to imply a transfer of funds between spouses.



TFSA participation rates are relatively stable between ages 25 and 49, and generally increase with age thereafter (Chart 2). Below age 50, TFSA participation rates peak in the 25-29 age group, before declining slightly over the next three age groups. The take-up of TFSAs for tax filers below age 30 is noteworthy given that younger adults generally have lower incomes and are less likely to hold financial assets than their older counterparts. On the other hand, for many young adults, the mid- to late-20s represent a good time to save for future major purchases or life events. After age 49, TFSA participation rates generally increase with age, for instance, rising from 28% for individuals 45 to 49 years of age to 41% for individuals 65 to 71 years of age in 2011. Among individuals aged 72 and over, the TFSA participation rate declines slightly, and is about one percentage point lower than for the 65-71 age group in 2011. Overall, seniors⁶ have been the largest users of TFSAs, with a take-up rate of 40% in 2011. Although many seniors are on a fixed income with a limited capacity to save on an ongoing basis, they have had more time to accumulate wealth and are generally well-placed to redirect their stock of existing savings to tax-assisted accounts such as the TFSA.

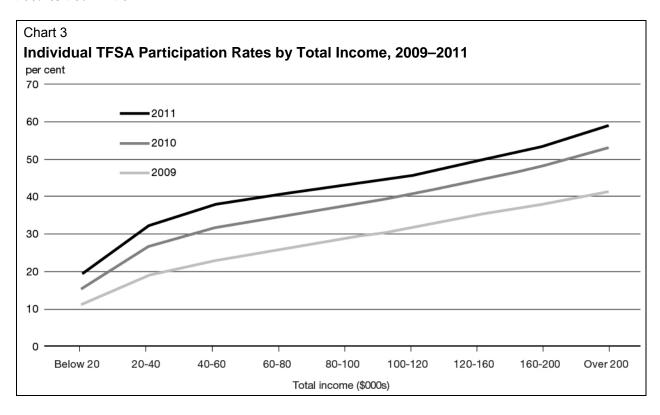


⁶ Defined as individuals aged 65 and older.

⁷ Bernheim (2002), p. 1,199.



TFSA participation rates steadily rise with total income, increasing from 20% for individual tax filers with less than \$20,000 of annual income to 58% for individual tax filers with more than \$200,000 of annual income in 2011 (Chart 3). This is consistent with the general findings on the usage of tax-assisted savings accounts in member countries of the Organisation for Economic Co-operation and Development (OECD), where participation rates generally increase with income. While participation rates have risen most for high-income individuals in absolute terms over the first three years of the TFSA, on a proportionate basis participation rates grew similarly for most income groups. The strongest proportional increase since 2009 was observed for those earning less than \$20,000, with their TFSA participation rate nearly doubling from about 11% in 2009 to 20% in 2011.



Profile of TFSA Holders¹⁰

Females accounted for about 55% of TFSA holders and total contributions in 2011. The higher proportion of female account holders is consistent with their higher TFSA participation rate and the fact that females account for about 52% of adult tax filers.

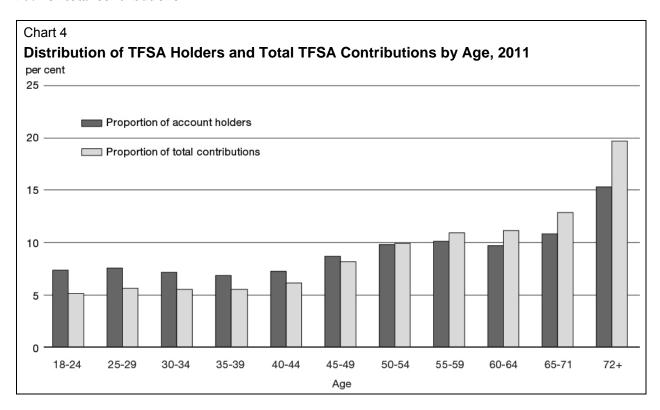
⁸ Throughout this paper, total income refers to the amount reported on an individual's federal income tax return.

OECD (2007), p. 35. HM Revenue and Customs (2007) and Joulfaian and Richardson (2001) reach a similar conclusion for tax-preferred savings accounts in the United Kingdom and the United States, respectively.

¹⁰ While this section focuses on distributions for 2011, the profile of account holders in prior years is largely the same as in 2011.



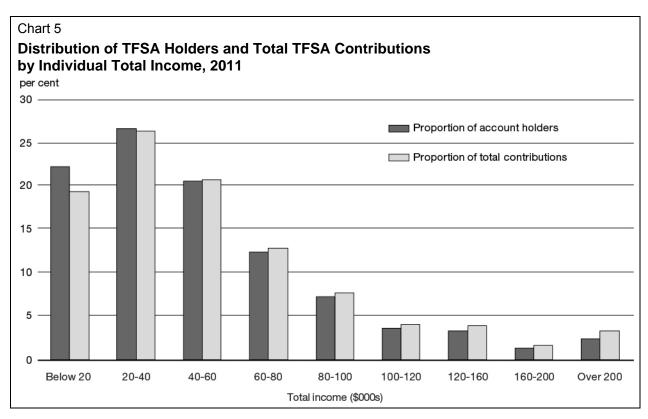
TFSA holders and the amount of contributions made by individuals are distributed similarly across all age groups (Chart 4). In particular, seniors (the total of the last two age categories) accounted for 26% of all TFSA holders and 32% of total contributions in 2011. Of this group, individuals age 72 years and older—who previously had only limited access to tax-assisted savings plans because they were ineligible to contribute to an RRSP—accounted for 15% of account holders and nearly 20% of total contributions.





The TFSA is also a popular means of savings for individuals across all income levels (Chart 5). For 2011, low- and middle-income earners (i.e., individuals with total incomes below \$80,000 and who account for 88% of adult tax filers) comprised 82% of all TFSA holders and made 79% of all contributions. Low- and modest-income individuals (i.e., individuals with total incomes below \$40,000) accounted for 49% of all account holders and 46% of total contributions.

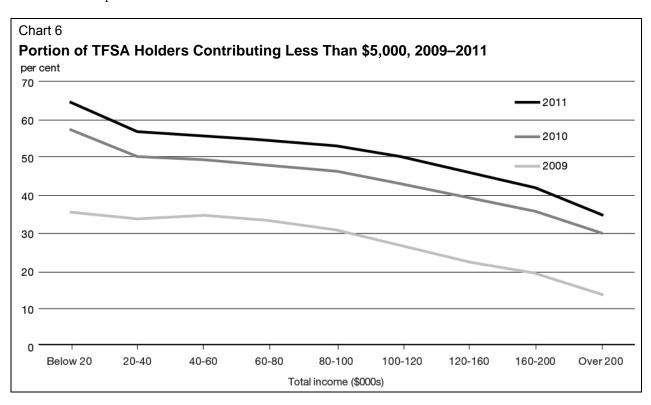
The large portion of account holders and contributions among low- and modest-income individuals displayed in Chart 5 contrasts with the relatively lower participation rate of these individuals (Chart 3). This results from the fact that there are proportionally more individuals in these income categories.



The average TFSA contribution amount for account holders with total incomes above \$80,000 was about \$4,340 compared to about \$3,690 for account holders with total incomes below \$80,000.



As the TFSA matures and individuals transfer their existing unsheltered financial assets to a TFSA, it is expected that an increasing proportion of account holders will contribute an amount less than the maximum annual contribution limit. For instance, about one-third of account holders with less than \$20,000 of total income contributed less than the \$5,000 annual contribution limit in 2009. The portion of account holders in this income range contributing less than \$5,000 increased to 64 per cent by 2011 (Chart 6). More generally, while the portion of TFSA holders who contributed less than \$5,000 has been increasing over time for all income groups, this portion decreases as income rises. As a result, going forward, the proportion of contributions made by lower-income Canadians is expected to decline as TFSA contribution room continues to accumulate.





In analyzing the distribution of TFSA holders and contributions among income groups, it is important to recognize that some TFSA holders reporting a low income for tax purposes may reside in a higher-income household, in which case their individual incomes may not be truly representative of their financial situation or capacity to contribute to a TFSA. To assess the extent to which this is the case, the contributions of married or common-law TFSA holders with less than \$20,000 of individual income were examined according to household income. For these spouses, the distribution of contributions according to household income shows that the majority reside in low-to modest-income households. About one-half of TFSA contributions made by spouses earning less than \$20,000 originated from households with less than \$40,000 in total income, and more than 80% originated from households with less than \$80,000 in total income (i.e., households with an average income of \$40,000 per spouse).

The TFSA and GIS Recipients

The TFSA improves savings incentives for low- and modest-income individuals because investment income earned in a TFSA and withdrawals from it are not included in income for the purposes of determining federal income-tested benefits and credits such as the Canada Child Tax Benefit, the GST/HST Credit, the Age Credit, and Old Age Security and GIS benefits. For low-income seniors, the exclusion of TFSA income and withdrawals for the purposes of calculating GIS benefits is particularly beneficial. Indeed, for GIS recipients, the TFSA provides a net rate of return equal to the pre-tax rate of return whereas the net rate of return on unregistered savings is reduced by the 50% GIS reduction rate.¹⁴

At the end of 2011, about 440,000 GIS recipients¹⁵ held approximately \$4.3 billion in assets in their TFSAs. In 2011, GIS recipients represented about 6% of TFSA holders, they accounted for about 7% of total TFSA assets, and their TFSA participation rate was 23%—3 percentage points higher than the 20% participation rate for the cohort of individuals earning less than \$20,000 a year (which would include most GIS recipients). Going forward, the TFSA will continue to provide a favourable tax environment for incenting additional savings among low-income individuals, including prospective GIS recipients.

About 248,000 individuals in 2011 made TFSA contributions that were greater than their incomes reported for tax purposes. The high level of contributions relative to income could represent a transfer of existing assets held by the individual into a TFSA or the transfer of funds between members of a household.

¹³ In determining the household income of these individuals, the analysis is restricted to married and common-law couples (other potential members of the household are not considered).

GIS benefits are reduced by 50 cents for each dollar of taxable income received by the pensioner and, in the case of couples, the pensioner's spouse or common-law partner, other than Old Age Security benefits and the first \$3,500 of employment income per person.

Including individuals receiving the Allowance under the Old Age Security program.



THE TFSA AND TRENDS IN UNREGISTERED SAVINGS

As the TFSA matures, it is estimated that, by 2030, in combination with other registered savings accounts, it will permit over 90% of Canadians to hold all their financial assets in tax-efficient savings vehicles. In 2006 through 2008, the three years immediately preceding the introduction of the TFSA, the percentage of total adult tax filers reporting taxable interest¹⁶ and dividends ranged from 35% to 37% (Table 2). In 2009, the first year of the TFSA, the percentage of adult tax filers reporting this type of income fell to 33%. The number of tax filers reporting this type of income declined 3 percentage points to 30% in 2010 and fell a further percentage point to 29% in 2011. ¹⁷ Certainly, numerous factors other than the TFSA may have influenced the number of individuals receiving taxable interest and dividends in these years, including volatile capital markets during the period, but the introduction of the TFSA in 2009 would seem to be an important change affecting the percentage of tax filers reporting this type of income on their tax returns.

Table 2
Adult Tax Filers Reporting Taxable Interest and Dividend Income¹
as a Percentage of Total Adult Tax Filers, 2006–2011

	Pre-TFSA				Post-TFSA				
	2006	2007	2008	2009	2010	2011 ²			
Percentage	35	37	37	33	30	29			

Excluding ineligible dividend income.

Source: T1 data, 2006-2011.

CONCLUSION

Ensuring that the tax system provides meaningful incentives to save supports a more efficient allocation between current and future consumption. In particular, the accumulation of personal savings allows Canadians to improve their living standards and better align income and consumption when planning for important life events such as retirement. In addition, personal savings can provide individuals with a private safety net in case adverse circumstances such as job loss or illness cause an unexpected drop in income. More generally, savings contribute to economic growth by increasing the funds available for capital investment, which leads to a higher capacity to produce goods and services.

² Preliminary 2011 T1 data.

With respect to the type of savings individuals choose to shelter, it is expected that individuals would shift interest-bearing assets into TFSAs first for two reasons: (1) personal income tax rates on interest income are higher than those on dividends (the Dividend Tax Credit, which notionally recognizes taxes paid at the corporate level, reduces personal income tax payable on dividends); and (2) the transfer of interest-bearing assets is much less likely to activate a significant capital gains tax liability than the transfer of equity instruments (conversely, a capital loss arising from an in-kind contribution to a TFSA is disallowed).

Using a more comprehensive definition of investment income which includes interest and other investment income, eligible Canadian dividends, and capital gains and losses, the percentage of tax filers reporting investment income or losses followed a similar pattern, falling from 38% in 2008 to 34% in 2009 to 31% in 2010, the last year for which such detailed data is available.



The evidence from the first three years of the TFSA program shows that Canadians have taken advantage of this new savings opportunity. The initial take-up was strong and the total annual contributions and assets have been growing at a steady pace. The TFSA is a popular means of saving for Canadians of all ages and income levels. In 2011, only three years after its introduction, close to one-third of adult tax filers had a TFSA. Seniors had the highest participation rate, with a take-up rate of 40%, while low- and middle-income earners comprised over 80% of TFSA holders and were responsible for about 80% of all contributions.

As the TFSA system matures and investment income compounds tax-free, TFSA funds will comprise a progressively larger portion of private savings. The early evidence shows that the TFSA has already become a key component of Canadians' personal finance planning and an important building block in the formation of a fair, competitive and efficient personal income tax system for all Canadians.



ANNEX: DESCRIPTION OF TFSA TAX EXPENDITURE METHODOLOGY

TFSA data collected by the Canada Revenue Agency has allowed for the development of a methodology tailored to the tax expenditure framework.

In general, a tax expenditure represents, holding all else equal, the tax revenue that would have been collected but for a particular tax measure which deviates from the benchmark system. In the case of the TFSA, the tax expenditure represents the revenue that is not collected from investment income that is earned in the accounts. The tax expenditure figure does not necessarily represent the cost to the Government. For instance, the TFSA tax expenditure does not include the impact of increased GIS benefits (since the payment of additional non-taxable GIS benefits on account of the TFSA does not affect tax revenues) nor does it account for individuals substituting TFSA contributions in place of RRSP contributions (since tax expenditures are calculated on the premise that the underlying tax base would not be affected by the removal of a particular measure). Increased GIS benefits and RRSP substitution would increase and decrease the cost to the Government for a particular year, respectively.

In addition to estimates of the aggregate investment income earned in the accounts, estimating the TSFA tax expenditure requires knowledge of the tax rate on TFSA holders and of the distribution of the types of investment income earned in the accounts (interest, dividends and capital gains).¹⁸

The marginal tax rate of account holders is calculated based on taxable income, age and province of residence. The federal average marginal tax rate (MTR) of TFSA holders was about 19% in 2009, 2010 and 2011. The average MTR is applied to interest income and is adjusted for the half-inclusion of capital gains and the federal Dividend Tax Credit.

Unfortunately, there is limited information available with regard to the distribution of investment income within TFSAs. The most relevant information is based on account data provided by financial institutions to Investor Economics, an economic consulting firm. These account data provide some indication of the breakdown of assets held by banks vis-à-vis brokerage firms as well as some information on the types of assets held at banks. While there is no breakdown by asset class for brokerages and financial advisors, it is reasonable to assume that these accounts hold mainly equities and bonds, either directly or through mutual funds or other fund structures.

Based on this information and making assumptions regarding rates of return for different asset classes, the amount of interest¹⁹ and dividend²⁰ income can be estimated. Capital gains (or losses) can then be determined residually by subtracting interest and dividend income from the total investment income. For simplicity, and given that it would be unreasonable to assume that all capital gains (losses) are realized in the initial years of the program, it is currently assumed that one-fifth of capital gains (losses) are realized at the end of each year.

It is necessary to disaggregate the investment income since interest, dividends and capital gains earned on non-registered assets are accorded different effective personal income tax rates.

A weighted interest rate (based on interest rates available on TFSA saving deposits and the average yield of long-term Government of Canada bonds) is applied to saving deposits and fixed-income assets.

The dividend yields of the S&P/TSX Composite index are applied to the stock of equity investments in order to estimate dividend income.



REFERENCES

Bernheim, B. D., (2002). "Taxation and Saving," *Handbook of Public Economics*, Vol. 3, A. J. Auerbach and M. Feldstein, editors. Elsevier Science Publishers B.V. (North Holland), Netherlands, pp. 1173-1249.

HM Revenue and Customs (2007). "Individual Attitudes to Saving: Effect of ISAs on People's Saving Behaviour—Research into Attitudes and Motivations for Saving in ISAs," working paper (www.hmrc.gov.uk/research/working-paper-isa.pdf).

Joulfaian, D. and D. Richardson (2001). "Who Takes Advantage of Tax-Deferred Saving Programs? Evidence from Federal Income Tax Data," *National Tax Journal*, 54(3), pp. 669-688.

Organisation for Economic Co-operation and Development (2007). *Encouraging Savings through Tax-Preferred Accounts*, OECD Tax Policy Studies, no. 20.



Tax Expenditures for Accelerated Deductions of Capital Costs

Introduction

Where a tax deduction is allowed for the cost of capital investments, the deduction is normally required to be spread over a number of years. This is based on the principle that capital assets are not entirely consumed in the period in which they are acquired, but instead contribute to earnings over several years. Therefore, the deduction is normally allowed at a rate which allocates the cost of the asset over the period that the asset contributes to earnings, or the period over which it loses its value—the asset's useful life. Allocating the deduction for capital costs over the useful life of assets helps to ensure that the tax system is neutral in its treatment of capital assets with different useful lives.

For tax purposes, firms calculate their deductions for depreciable capital assets under the rules set out in the *Income Tax Act* and the *Income Tax Regulations*. The allowable deduction rates for most tangible capital assets are set out in the *Regulations* under Schedule II—Capital Cost Allowances (CCA). The CCA system groups capital assets into classes and assigns each class a depreciation rate. The rate is generally a specified percentage of the capital cost of the asset or group of assets included in the class and is reflective of the useful life of those assets. In most cases, the percentage is applied to the declining balance of undeducted costs remaining for each successive year.

While CCA rates are typically set to reflect the useful life of the assets in the particular class, there are cases where the rate at which certain capital costs may be deducted for tax purposes is more rapid than would be permitted under the useful life benchmark. Where that is the case, it results in a positive tax expenditure.

Tax expenditures are not estimated for accelerated CCA due to methodological challenges and the fact that data is not generally available to calculate these estimates with a reasonable degree of accuracy. In many cases, this is due to differences in categorization of assets and recording of related expenses between the tax system and possible benchmarks such as financial statements and studies of economic depreciation. In some cases, the accelerated category encompasses a range of assets or expenses, but tax data does not provide sufficient detail on the particular type of assets in which companies invest. The calculations may also be complicated by other differences between the tax system and the benchmark, including the discretionary nature of CCA deductions, differences between economic versus tax depreciation, and the fact that gains or losses related to disposal of assets generally adjust the undepreciated balance of the asset pools for tax purposes while the adjustments are made on an asset-by-asset basis for accounting and economic depreciation purposes.

The Department of Finance has received inquiries regarding the amount of support provided through accelerated deductions. In response to these requests, and as a part of its ongoing review of methodologies used to estimate tax expenditures, the Department has developed an illustrative methodology for estimating tax expenditures associated with certain accelerated CCA deductions.

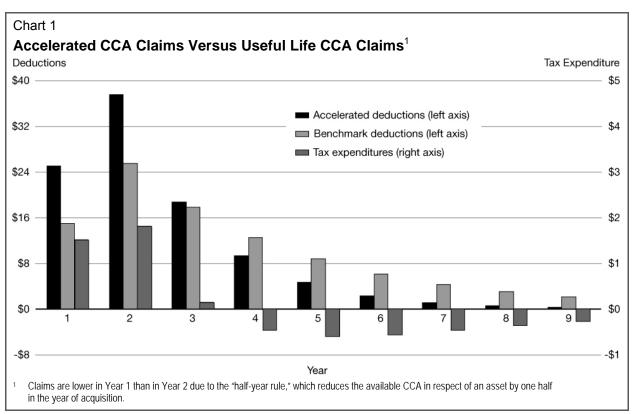


This paper sets out, at a high level, the types of assumptions and steps the illustrative methodology entails, using as examples three long-standing accelerated CCA measures. Given the limitations of the approach and the substantial amount of work required to implement it, in addition to the simplifying assumptions that may call into question the precision of the resulting estimates, the estimates presented in this paper are illustrative only and will not be replicated on an annual basis.

ACCELERATED CCA

When the rate at which capital costs may be deducted for tax purposes is more rapid than would be permitted under the useful life benchmark, this can result in tax deductions that are higher (compared with the useful life benchmark) in the initial years of the life of an asset, but that are lower in later years. Even though the total nominal amount of tax paid over time may be unchanged (i.e., assuming that tax rates remain constant), the taxpayer may realize a financial benefit from the deferral of taxation due to the time value of money.

Chart 1 shows the pattern of the tax expenditure associated with accelerated deductions under a stylized example that compares the hypothetical tax reduction due to deductions in respect of a one-time investment in a \$100 asset under an accelerated CCA (deductible at 50% per year on a declining-balance basis) and under the benchmark CCA (deductible at 30% per year on a declining-balance basis). It is also assumed that the taxpayer claims all available CCA in each period. The difference between the accelerated deductions and the benchmark deductions, multiplied by the applicable corporate income tax rate (i.e., the federal corporate tax rate of 15%), is the federal tax expenditure.





Initially, the accelerated deductions are higher than the benchmark deductions, which results in a tax expenditure. Since the accelerated deductions more quickly deplete the undepreciated capital cost of the asset than the benchmark deductions, benchmark deductions become higher than accelerated deductions over time. This leads eventually to negative tax expenditures in respect of the one-time investment and gives rise to the characteristic shape of the tax expenditure for deferral tax measures—positive costs initially, followed by a period where revenue receipts are higher than they otherwise would have been.

Cash-Flow Approach in the Context of Tax Expenditures for Accelerated CCA

Tax expenditures are generally calculated on a current cash-flow basis and represent the cost to the Government of a measure in a particular year. Deductions for capital expenditures are usually spread over a number of years—the asset's useful life. In the case of accelerated deductions, therefore, cash-flow tax expenditure estimates not only represent the revenue impact of accelerated deductions claimed with respect to investments made in a particular year, but also take into account the impact of accelerated deductions claimed with respect to investments made in previous years.

The importance of taking prior-year investments into account is highlighted in Table 1. This stylized example uses the same baseline assumptions as the example from Chart 1, and assumes that annual investment grows by 5% per year. As in Chart 1, this example also assumes that the taxpayer has the fiscal room to use all available CCA in each year. Based on these assumptions, the table illustrates the impact of prior-year investments on the current net tax expenditure. In practice, actual results would vary due to other factors, including, for example, fluctuations in annual investments, whether taxpayers have revenue against which to claim available deductions, and whether or not taxpayers may claim other deductions instead of accelerated CCA to reduce their taxable income. Because of these factors, it may not be inferred that any actual tax expenditure would follow the same pattern as per the simplistic assumptions used to create Table 1.

Table 1

Breakdown of Accelerated CCA Tax Expenditures by Year of Acquisition—
Stylized Example

(\$)										
Year	1	2	3	4	5	6	7	8	9	10
Impact on tax expenditure estimates due to assets acquired in:										
Year 1	1.5	1.8	0.1	-0.5	-0.6	-0.6	-0.5	-0.4	-0.3	-0.2
Year 2		1.6	1.9	0.1	-0.5	-0.6	-0.6	-0.5	-0.4	-0.3
Year 3			1.7	2.0	0.1	-0.5	-0.7	-0.6	-0.5	-0.4
Year 4				1.7	2.1	0.2	-0.5	-0.7	-0.7	-0.5
Year 5					1.8	2.2	0.2	-0.6	-0.7	-0.7
Year 6						1.9	2.3	0.2	-0.6	-0.8
Year 7							2.0	2.4	0.2	-0.6
Year 8								2.1	2.5	0.2
Year 9									2.2	2.7
Net tax expenditure	1.5	3.4	3.7	3.4	3.0	2.5	2.2	1.9	1.8	1.7



This example illustrates the difficulty of comparing cash-flow tax expenditure estimates for accelerated deductions to other cash-flow tax expenditure estimates: the net tax expenditure for an accelerated deduction is not equal to the potential revenue gain from eliminating the measure. Using Year 3 as an example, Table 1 shows that the net tax expenditure is \$3.7. This is the result of the impact of the tax expenditure associated with investments made in Year 3 (\$1.7) and in previous years (\$1.9 and \$0.1). If the Government decided in Year 3 to eliminate the measure going forward, the revenue gain in Year 3 would be less than suggested by the tax expenditure estimate for that year since only investments made in that year would be affected: government revenues would be \$1.7 higher, rather than \$3.7 higher as suggested by the net tax expenditure estimate. Conversely, eliminating the accelerated CCA in Year 8 would result in a revenue gain in that year that is higher than suggested by the net tax expenditure estimate (i.e., \$2.1 rather than \$1.9). Whether the potential revenue gain is higher or lower than the net tax expenditure estimate may depend on many factors, including the maturity of the accelerated CCA measure, trends in economic growth, market conditions and the ability of firms to make use of available deductions. The methodology illustrated in this paper will attempt to address the issue of comparability by breaking down the tax expenditure estimate according to the impact of investments made in the current year and in prior years.

MEASURES CONSIDERED

The illustrative methodology will be applied using the following three long-standing accelerated CCA incentives as examples:

Canadian vessels: Class 7 provides a 15% declining-balance CCA rate and includes vessels, railway cars and pumping equipment for hydrocarbons and CO₂. However, specified qualifying vessels are eligible for a 33.3% straight-line accelerated CCA. This treatment was introduced in 1967.

Mining assets¹: Generally, mining assets are included in Class 41, which provides a 25% declining-balance CCA rate. In 1972, an accelerated CCA was introduced that provides a maximum 100% deduction for these assets without the half-year rule² applying, but limited by project income. This treatment applies to tangible assets acquired since 1972 for new projects and certain eligible project expansions.

Clean energy generation and conservation equipment: Class 43.1 was introduced in 1994 and provides a 30% declining-balance accelerated CCA rate for investments in specified clean energy generation and conservation equipment. Class 43.2, which was introduced in 2005, provides an enhanced 50% declining-balance rate on investments made before 2020. In the absence of Class 43.1 and Class 43.2, qualifying assets would be deductible on a declining-balance basis at rates varying between 4% and 30%.

Accelerated CCA under Class 41 was also available for oil sands assets, but it is being phased out over the 2011–2015 period. Due to particularities of the oil sands industry, it was not possible to estimate tax expenditures for oil sands assets using the model developed in this paper. Therefore, the estimates presented refer only to traditional mining.

The half-year rule reduces the available CCA in respect of an asset by one half in the year of acquisition.



METHODOLOGY

Before describing the illustrative methodology presented in this paper, it is useful to lay out a number of specific features of the CCA system that complicate the calculation of tax expenditure estimates:

- CCA deductions are discretionary. Under CCA rules, taxpayers may claim any amount up to the maximum CCA rate. For example, a corporation that has no taxable income could choose to deduct no CCA in that year. In this instance, while a business may be eligible for accelerated CCA, no tax expenditure should be recorded as no deduction is used.
- CCA classes are broad and may include assets that are either eligible or not eligible for accelerated CCA. For instance, in addition to vessels eligible for accelerated CCA, Class 7 also includes railway cars and pumping equipment that are not eligible for the accelerated CCA rate. Similarly, mining assets included in Class 41 are eligible for accelerated CCA only if they are part of a new mining project or a major expansion. The tax data, however, does not explicitly identify accelerated CCA eligible assets. It is therefore necessary to develop assumptions in order to identify assets eligible for accelerated CCA.
- Taxpayers in a taxable position may choose between using accelerated CCA to reduce their taxable income and using other types of available deductions and/or credits. This may complicate the determination of how much of the available accelerated CCA deduction will be utilized, and therefore affect the value of the accelerated CCA tax expenditure.
- While the statutory corporate income tax rate is a straightforward determination in a given year, the effective tax rate to which a business would be subject in the absence of a tax incentive varies on a company-by-company basis, and depends on all of its tax attributes as well as other factors such as the availability of other deductions. The value of the tax expenditure is affected by the effective tax rate of each firm, which therefore must be taken into account.
- Taxpayers in certain circumstances may reclassify assets from one CCA class to another and
 combine or split their CCA balances. Even where this means that no accelerated CCA could be
 used over time, it is important to continue to identify these assets. For example, the use of
 accelerated CCA in the first years of the useful life of an asset depletes the available deductions
 in future years and continues to impact the tax expenditure even where no accelerated CCA
 continues to be claimed.

The illustrative methodology used to estimate tax expenditures for accelerated CCA is based on an analysis of corporate income tax returns. The steps in this analysis are as follows:

- Identification of the benchmark useful life CCA rate that would apply in the absence of the accelerated CCA. Typically, the rate will relate to a specific underlying CCA class;
- Construction of corporation-level time series of the accelerated CCA claims on an asset-by-asset basis;
- Construction of corporation-level time series of benchmark CCA claims (i.e., the claims that
 would have been made by a corporation in the absence of the accelerated CCA) based on
 assumptions regarding benchmark CCA rates and the extent to which taxpayers would make use
 of available deductions;



- Calculation of the net current tax expenditures as the difference in the value of a corporation's CCA claims under the accelerated versus the benchmark regimes, multiplied by the effective marginal tax rate of that corporation; and
- Breaking down the impact on the net tax expenditures of current-year versus prior-year investments.

The illustrative approach requires extensive data manipulation to generate historical and counterfactual time series amenable to analysis and comparison. Estimating the tax expenditures requires assumptions about benchmark CCA rates, taxpayers' ability to make use of available deductions and effective marginal tax rates. The methodology does not account for the potential use of other available deductions in place of accelerated CCA—doing so would require that all such deductions be tracked through time, and that assumptions be developed regarding the manner in which they would have been used in the absence of accelerated CCA. Finally, in certain circumstances, additional assumptions are necessary to fill in data gaps—for example, although the measures used as examples are long-standing in the tax system, available data extends back only to 2000.

In light of these considerations, the tax expenditure estimates presented in this paper should be treated with a high degree of caution. They are not sufficiently robust to be reported as regular line items in the annual Tax Expenditures and Evaluations report and will not be calculated on an annual basis. The objective of this exercise is to demonstrate the complexity and difficulty in arriving at tax expenditure estimates of accelerated deductions. Each of the steps outlined above is discussed in turn below.

Benchmark CCA Rates

The first step is to establish what would be the tax treatment of an asset in the absence of an accelerated CCA incentive. Accelerated CCA is provided relative to the existing CCA regime; therefore, the appropriate benchmark is the underlying, non-accelerated CCA rate that would otherwise apply. In some cases, determining the accelerated CCA rate that would apply is relatively straightforward, since the *Income Tax Regulations* are clear about the otherwise applicable CCA class and rate. Table 2 shows the accelerated and benchmark CCA rates for Canadian vessels (Class 7) and mining assets (Class 41):

Table 2

Accelerated and Benchmark CCA Rates for Class 7 and Class 41

Measure	Accelerated CCA Class and Rate	Benchmark CCA Class and Rate	
Canadian vessels	Class 7 33¼% (straight-line)	Class 7 15% (declining-balance basis)	
Mining assets	Class 41	Class 41	
	100%, up to project income (no half-year rule)	25% (declining-balance basis)	



In other cases, however, the *Income Tax Regulations* do not provide a clear benchmark CCA class. For example, there is no specific underlying CCA class that can be identified as the benchmark for clean energy generation and conservation equipment eligible for Class 43.1 and Class 43.2. These classes include a broad variety of assets with potentially different benchmark CCA rates. In general terms, these CCA classes include electricity generation equipment (e.g., wind turbines, photovoltaic equipment), heat generation equipment (e.g., ground source heat pumps, solar thermal equipment) and equipment to produce fuel from waste (e.g., bio-oil, biogas). Given the diversity of assets that qualify for these classes, the fact that the same type of asset may be used in more than one industry, and the lack of adequate data, assumptions needed to be developed regarding appropriate general benchmark rates.

The approach used involves a two-step process that first determines whether the benchmark rate would be influenced by the industry of the taxpayer. Then, for cases where analysis of the industry does not suggest a clear choice of benchmark, assumptions regarding benchmark rates are developed by:

- Broadly categorizing Class 43.1 and 43.2 eligible assets into three categories of equipment:
 - Electricity generation equipment;
 - Heat generation equipment; and
 - Equipment used to produce fuel from waste.
- Identifying the statutory CCA rates that would apply to each category in the absence of Class 43.1 and Class 43.2; and,
- Applying weights to these rates using publicly available data on clean energy generation output
 capacity in Canada (i.e., relative output capacity of renewable electrical energy, renewable
 thermal energy and renewable fuel production), which allows for the calculation of weighted
 average benchmark rates.

The resulting benchmark rates used for the purposes of this illustrative analysis for Class 43.1 and Class 43.2 are summarized in Table 3.

Table 3
Class 43.1 and Class 43.2 Benchmark CCA Rates

Industry	Benchmark CCA Class(es) and Rate
Manufacturing	Class 43 (30%)
Mining	Class 41 (25%)
Greenhouses	Class 6 (10%)
Utilities (weighted average)	Class 1, Class 17 and Class 47 (8%) ¹
Other industries (weighted average)	Class 1, Class 17 and Class 47 (7%) ¹

Benchmark CCA rates for electricity generating assets are based on a weighted average of applicable rates of CCA classes. Class 47 (8% rate) was introduced in Budget 2005. For assets acquired before that time, the benchmark CCA class was Class 1, providing a rate of 4%. Consequently, the weighted average in years prior to 2004 is 7% for utilities and 5% for other industries.



Building Historical Time Series

The second step of the analysis is the construction of historical time series of taxpayers' accelerated CCA claims. It is not always possible, based on the information on a single tax return, to identify whether an asset was eligible for accelerated CCA (reasons for this are discussed below). In order to construct the time series, the model starts by identifying all corporations in the sample period (i.e., 2000 to 2009) that claimed accelerated CCA at least once during that period. It then retrieves all available CCA data for these corporations (i.e., including both accelerated and non-accelerated CCA) for all years in the data set. Finally, once the historical time series have been created, the model identifies and retains time series relating to accelerated CCA and drops all non-accelerated CCA series from the data set.

The time series are built using data on capital cost allowances (including accelerated CCA) reported on Schedule 8 of corporate income tax returns. For every taxpayer in the data set, a separate time series is created for each line reported on Schedule 8. This requires an initially large data set, encompassing both assets that are eligible and assets that are not eligible for accelerated CCA. This is necessary for reasons such as:

- The same CCA class may be used more than once on a taxpayer's Schedule 8 (for example, under Class 7 a separate line is required for each vessel that qualifies for accelerated CCA; under Class 41, a separate line is required for each new project or eligible project expansion). The tax data, however, indicates only the CCA class—it does not identify individual assets, making it difficult to track them through time;
- In addition, as previously noted, certain CCA classes include both assets that are eligible and assets that are not eligible for accelerated CCA (e.g., Class 7 and Class 41). Since the tax data indicates only the CCA class, it is not possible based on any single return to distinguish between assets eligible and not eligible for accelerated CCA. This adds to the challenge of tracking the assets through time and increases the amount of data that must be analyzed;
- Given that CCA deductions are discretionary, taxpayers with assets eligible for accelerated CCA may nonetheless claim less than would have been permitted under the benchmark rate. In order to avoid accidentally excluding accelerated CCA eligible assets (i.e., due to a low historical claim), it is therefore necessary to retrieve data even when the CCA claim is not at the accelerated rate. This increases the size of the data set to be analyzed as the data set will thereby be composed of both accelerated and non-accelerated deductions; and
- Because taxpayers may under certain circumstances reclassify assets from one CCA class to another and combine or split their CCA balances, it is necessary to include data on other CCA classes for taxpayers with accelerated CCA claims, further increasing the size of the overall data set.

Once the data has been retrieved, a matching program is then used to build the time series by linking closing CCA pools in one period to opening CCA pools in the next. The program requires several iterations: it begins by linking only perfect matches (i.e., closing and opening balances perfectly equal). Balances for which the model is unable to generate a match are then flagged and reviewed manually. For example, the model is not able to match records where a taxpayer combines assets reported on separate rows in one return into one row on the next (or vice versa, splits one record into two)—these instances must be reviewed manually on an individual basis to allow the building of the time series.



Once the historical time series have been created, the model determines whether a time series relates to accelerated CCA eligible assets by checking if, in at least one period of that time series, the taxpayer makes a claim that exceeds the maximum allowed by the benchmark rate of the CCA class. Accelerated CCA time series are retained, while time series that are not flagged as containing accelerated deductions are dropped from the data set.

Counterfactual CCA Claims

The third step of the analysis is to generate counterfactual time series of CCA claims under the benchmark CCA rate, that is, the time series of the deductions that would have been claimed over time in the absence of accelerated CCA. To do so, the model assumes that the only change in taxpayer behaviour under the benchmark is a reduction in CCA claims (for example, the model does not assume that the availability of an accelerated deduction impacts the investment behaviour of firms, or that firms would use other discretionary deductions in the absence of accelerated CCA). In general, this is consistent with standard practice for estimating tax expenditures.

CCA Deductions Are Discretionary

CCA deductions are discretionary. If, in a particular period, a taxpayer eligible for accelerated CCA deducts an amount that is less than or equal to the amount available under the benchmark rate, then the behaviour of the taxpayer has not been altered compared to what it would have been under the benchmark. In this case, there is no tax expenditure. The model accounts for this by limiting counterfactual claims to the lesser of the benchmark CCA rate and the rate at which the taxpayer actually claimed CCA in the particular period.

Assets Acquired Prior to 2000

The data used to construct the historical time series extends back to 2000. For measures established prior to 2000, however, it is important to account for the fact that under a benchmark CCA regime, taxpayers' undepreciated CCA pools in 2000 would have been higher than in the historical data, since CCA deductions under the benchmark regime would have been lower. Otherwise, the tax expenditure estimates would be overstated, since they would not account for the higher counterfactual CCA claims that would be available due to the higher undepreciated CCA pools under the benchmark system.

In order to limit this upward bias, it is necessary to estimate the aggregate opening balance of the CCA pools in 2000 under the benchmark CCA rate. Based on the following simplifying assumptions, it can be shown that, over time, the ratio of unclaimed capital costs under the accelerated regime versus the benchmark regime will become constant:

- Taxpayers would have claimed accelerated CCA deductions prior to 2000 at a constant rate (e.g., equal to the average rate observed from 2000 to 2009);
- In the absence of accelerated CCA, taxpayers would have claimed CCA deductions at a constant rate equal to the benchmark CCA rate (which is less than the average observed rate of claimed accelerated deductions from 2000 to 2009); and
- Investment in accelerated CCA eligible assets prior to 2000 grew at a constant annual rate.



Using these assumptions, a ratio of the unclaimed capital cost balance under the accelerated regime versus the benchmark regime is estimated. The estimated ratio is used as a multiplier to infer what would have been the unclaimed capital cost balance in 2000 under the benchmark rate. To the extent that the simplifying assumptions may overstate (understate) CCA claims under the hypothetical benchmark CCA regime prior to 2000, the tax expenditure estimates would be overstated (understated).

For qualifying Canadian vessels under Class 7, the growth rate of capital expenditures on water transportation was assumed, on average, to be representative of the growth rate of investment in accelerated CCA eligible assets. For mining assets under Class 41, capital expenditures on mining were used as the proxy. Annual growth in investment in these assets was assumed to equal the average growth of expenditures in the proxy data. For Class 43.1, given the relatively short time frame from inception (1994) to the first year of available data (2000), the growth rate was calibrated based on the assumed accelerated and benchmark CCA claim rates and the opening CCA pool balance in 2000. Table 4 summarizes the other assumptions used and the multipliers calculated for each of the measures under consideration.

Table 4
Assumptions for the Estimation of the 2000 Unclaimed Capital Cost Balance

Measure	Year of Introduction	Accelerated CCA Claims ¹	Benchmark CCA Rate	Opening CCA Pool Multiplier
Canadian vessels (Class 7)	1967	24%	15%	1.5
Mining assets (Class 41)	1972	30%	25%	1.2
Clean energy assets (Class 43.1)	1994	20%	14% ²	1.1

Observed average rate of claim, 2000–2009.

The model uses the estimated multipliers to gross up the aggregate counterfactual opening CCA pools in 2000. Aggregate counterfactual CCA claims due to assets acquired prior to 2000 are then recalculated to reflect the higher opening balance. To the extent that the multipliers may be too low, the tax expenditure estimates will be overstated. Conversely, overestimating the multipliers would result in an understatement of the tax expenditure results.

Total Tax Expenditure Estimates

The fourth step in the illustrative methodology is to estimate the total net tax expenditure. The difference in the value of the accelerated versus the counterfactual benchmark CCA claims is considered a change (either positive or negative) in taxable income. The tax expenditure estimate, at the corporate level, represents the additional tax that would have been payable with this additional taxable income, based on each corporation's own marginal income tax rate.

² Weighted average based on benchmark CCA classes and rates identified in Table 3.



Adjustments for Partnerships

Consistent with other corporate tax expenditure estimates, the illustrative model used in this paper estimates tax expenditures based on data in corporate income tax returns. However, partnerships, which play a significant role in certain sectors (e.g., in the mining sector, which affects Class 41 tax expenditure estimates), may also claim accelerated CCA. Ignoring the impact of partnerships in the overall tax expenditure estimates could understate the cost of the accelerated CCA. Therefore, additional analysis was undertaken to develop assumptions to gross up the overall estimates in order to account for the role of partnerships.³

The illustrative methodology is unable to explicitly model the behavior of partnerships since, prior to 2011, many partnerships did not always prepare detailed information returns.⁴ Available partnership data, however, suggests that partnerships played a significant role in some of the accelerated CCA incentives analyzed. Therefore, assumptions were developed to estimate the relative share of accelerated CCA claimed by partnerships versus corporations. The tax expenditure estimates were then grossed up based on those relative shares. These shares, by their nature, are subject to a margin of error and depend on the assumption that partnerships and corporations claim CCA at about the same rate. To the extent that they may underestimate (overestimate) the role of partnerships, the resulting tax expenditure estimates would have a downward (upward) bias.

To account for accelerated CCA deductions claimed by partnerships, the model adjusts the results for Class 41 mining assets upward by 20% and the results for Class 43.1 and 43.2 by 35%. Available data suggests that the proportion of partnerships' CCA claims under Class 7 was negligible.

Impact of Current-Year Versus Prior-Year Investments

In the fifth step of the analysis, the illustrative methodology allocates the net tax expenditure estimate between current-year investment and investments made in prior years. To do so, the model pro-rates the CCA claim of each taxpayer in a year between the relative amount of CCA available in that year due to the opening balance of the CCA pool and the amount available due to new investments. It does so for both the historical (accelerated) and the counterfactual (benchmark) time series.

The difference between the pro-rated historical and counterfactual CCA claims is then used to allocate the total net tax expenditure estimates according to the impact of investments made in the current year and in prior years.

Accelerated CCA may also be claimed by unincorporated businesses. However, analysis of available data suggests that unincorporated businesses do not represent a significant proportion of CCA claims for the three measures reviewed in this paper.

Prior to 2011, certain corporate partnerships were not required to file a partnership information return. Rules have been introduced such that, effective January 1, 2011, all corporate partnerships are required to file information returns.



ILLUSTRATIVE TAX EXPENDITURE ESTIMATES

Illustrative tax expenditure estimates for the three measures discussed are presented below. In addition to the significant possibility of biases introduced by the myriad assumptions necessary to arrive at these illustrative estimates, as with most tax expenditures estimates, other factors may influence the results obtained. For example:

- Trends in economic cycles influence the profitability of firms and the degree by which deductions may be used to reduce taxable income;
- Trends in investments from one year to another, influenced by various elements of global economic cycles, affect the acquisition of accelerated CCA eligible assets; and
- The degree to which a specific deduction may be used is also influenced by the availability of
 other tax expenditures (deductions or credits) that firms may alternatively use to reduce their
 taxable income.

These factors are all highly variable in nature, which is reflected in the results obtained. The illustrative tax expenditure estimates are presented in the following tables.

Table 5
Illustrative Tax Expenditure for Class 7—Canadian Vessels, by Year of Acquisition, 2000–2009

(\$ millions)

Prior-year additions -1 Current-year additions Net tax expenditure

Note: Totals may not add due to rounding.

Overall, the illustrative tax expenditure associated with investments in specified qualifying vessels in Class 7 suggests that the tax expenditure for this accelerated CCA has remained modest throughout the decade. Activity in the shipbuilding industry over the past decade has been relatively low, so this is not a surprising result. Also, vessels supported by the Government's Structured Financing Facility, which was introduced in 2001, are not eligible for accelerated CCA.⁵

Accelerated CCA for vessels is not available in cases where the Minister of Industry has agreed to a Structured Financing Facility. In cases where a vessel or its attachments are financed with a benefit under the Structured Financing Facility program, the maximum CCA rate applicable to the vessel and its attachments is 15% (Class 7).



Table 6
Illustrative Tax Expenditure for Class 41—Mining Assets, by Year of Acquisition, 2000–2009

(\$ millions)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Prior-year additions	-5	31	28	14	66	48	172	-30	-70	-144
Current-year additions	10	3	3	18	13	18	70	29	136	151
Net tax expenditure	5	34	31	32	79	66	242	-2	66	7

Note: Totals may not add due to rounding.

The illustrative tax expenditure estimates for Class 41 mining assets exhibit significant variations from one year to the next. The variability of the results obtained may in part be explained by the design of the measure, which provides a 100% accelerated deduction limited by project income. The income of a mining project may, in practice, be influenced by many factors, including volatile commodities prices. A significant spike in project income in a particular year, leading to a similar spike in accelerated claims, could be expected to be followed by a number of years with relatively lower tax expenditures since the CCA pools would have been depleted (e.g., 2006 and 2007 estimates).

Table 7
Illustrative Tax Expenditure for Class 43.1 and 43.2—Clean Energy Generation and Conservation Equipment, by Year of Acquisition, 2000–2009
(\$ millions)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Prior-year additions	1	3	24	18	30	25	19	9	7	10
Current-year additions	7	4	1	13	4	1	8	12	6	7
Net tax expenditure	8	7	24	30	34	27	27	22	13	17

Note: Totals may not add due to rounding.

Support for clean energy generation through Class 43.1 and 43.2 was expanded over time: the introduction of Class 43.2 in 2005 provided an enhanced 50% accelerated CCA rate for most clean energy assets previously included in Class 43.1. In addition, recent budgets have expanded the range of eligible assets. Recent examples include heat recovery equipment and district energy equipment, equipment that generates electricity using waste heat sources, and a broader range of bioenergy equipment.



CONCLUSION

Due to methodological challenges and data limitations, the Department of Finance has not published tax expenditure estimates for accelerated CCA incentives. This paper presents, at a high level, an illustrative methodology that attempts to address the challenges in order to estimate tax expenditures related to accelerated CCA. In doing so, it demonstrates the degree of difficulty in providing such estimates and the number of assumptions required to implement such a methodology. There were five key components to this methodology:

- Determining useful life benchmarks for each accelerated CCA class;
- Constructing historical time series data based on annual individual corporate income tax returns;
- Recalculating CCA claims and balances under the counterfactual useful life benchmark rates;
- Estimating the total current tax expenditures; and
- Breaking the total current tax expenditures down by the impact of current- and prior-years' investments.

The quality of the estimates produced by this analysis is limited by the number of simplifying assumptions that are needed in order to derive an estimate. Because of the intensive nature of this exercise, the number of simplifying assumptions required to derive estimates, and the resulting lack of robustness of the estimates, the Department does not plan to publish them in the annual *Tax Expenditures and Evaluations* report or to carry out this exercise annually. The innovative methodology presented in this paper, however, provides a basis for better understanding the challenges inherent in estimating the tax expenditures associated with accelerated deductions.