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# Tax Expenditures and Evaluations

2014

Canada

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# Preface

The Department of Finance first reported on federal tax expenditures in December 1979, and has published estimates and projections of 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 an evaluation of the Charitable Donation Tax Credit as well as a study of interprovincial tax planning by corporate groups in Canada.

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 2014 Report

New tax measures were introduced and others modified in Budget 2014. Changes affecting estimates and projections of tax expenditures are described below.

## Personal Income Tax

### Adoption Expense Tax Credit

The Adoption Expense Tax Credit is a 15% non-refundable tax credit that allows adoptive parents to claim eligible adoption expenses relating to the completed adoption of a child under the age of 18, up to a maximum of $11,774 in expenses per child for 2014. To provide further tax recognition of adoption-related expenses such as adoption agency fees and legal fees, Budget 2014 increased the maximum amount of eligible expenses to $15,000 per child. This measure applies to adoptions finalized after 2013. Normal indexation will apply to the new maximum amount for taxation years after 2014.

### Children's Fitness Tax Credit

As announced on October 9, 2014, the Government enhanced the Children's Fitness Tax Credit by increasing the maximum amount that may be claimed under the credit to $1,000 from $500, and by making the credit refundable. The doubling of the maximum amount is effective for the 2014 and subsequent taxation years, and the credit will be made refundable effective for the 2015 and subsequent taxation years.

## Donations of Ecologically Sensitive Land

The Ecological Gifts Program provides a way for Canadians with ecologically sensitive land to contribute to the protection of Canada's environmental heritage. Under this program, certain donations of ecologically sensitive land, or easements, covenants and servitudes on such land, are eligible for special tax assistance. Individual donors are eligible for a Charitable Donation Tax Credit, while corporate donors are eligible for a Charitable Donation Deduction. As with other charitable donations, amounts not claimed for a year may be carried forward for up to five years. In addition, capital gains associated with the donation of ecologically sensitive land are exempt from tax. To permit donors to take greater advantage of tax assistance and thereby encourage larger donations, Budget 2014 extended to ten years the carry-forward period for donations of ecologically sensitive land, or easements, covenants and servitudes on such land. This measure applies to donations made on or after February 11, 2014.

## Donations of Certified Cultural Property

For the purpose of calculating a Charitable Donation Tax Credit (for individuals) or a Charitable Donation Deduction (for corporations), the value of a gift of property is deemed to be no greater than its cost to the donor if, generally, the donor acquired the property as part of a tax shelter gifting arrangement or held the property for a short period. Gifts of certified cultural property are exempt from this rule and also benefit from a capital gains exemption. As a result, Canadians are encouraged to donate culturally significant property to designated institutions and public authorities to help preserve Canada's national heritage.

The donation of certified cultural property could be a target for abuse by tax shelter promoters because of the combination of its favourable tax treatment, inherent uncertainties in appraising the value of art and artifacts, and the exemption from the rule that deems the value of a gift to be no greater than its cost to the donor in certain circumstances. Budget 2014 removed, for certified cultural property acquired as part of a tax shelter gifting arrangement, the exemption from the rule that deems the value of a gift to be no greater than its cost to the donor. Other donations of certified cultural property are not affected by this measure. This measure applies to donations made on or after February 11, 2014.

## Medical Expense Tax Credit

The Medical Expense Tax Credit recognizes the effect of above-average medical and disability-related expenses on a taxpayer's ability to pay income tax. The credit provides federal income tax relief equal to 15% of eligible medical and disability-related expenses in excess of a threshold that is the lesser of 3% of the taxpayer's net income and an indexed dollar amount ($2,171 in 2014). Budget 2014 expanded the list of eligible expenses under the credit to include costs associated with service animals specifically trained to assist individuals with severe diabetes, such as diabetes alert dogs, as well as costs for the design of an individualized therapy plan. These measures apply to expenses incurred after 2013.

## Search and Rescue Volunteers Tax Credit

In recognition of the important role played by search and rescue volunteers in contributing to the security and safety of Canadians, Budget 2014 introduced a Search and Rescue Volunteers Tax Credit to allow eligible ground, air and marine search and rescue volunteers to claim a 15% non-refundable tax credit based on an amount of $3,000. This measure applies to the 2014 and subsequent taxation years.

## Tax Deferral for Farmers

Farmers who dispose of breeding livestock due to drought, flood or excess moisture conditions existing in prescribed regions in a given year are permitted to defer up to 90% of the sale proceeds from inclusion in their taxable income until the year following the sale, or a later year if the conditions persist. This allows farmers to use the sale proceeds to fund the acquisition of replacement livestock. The inclusion in taxable income in the year of replacement will be largely offset by the cost of the replacement livestock.

The tax deferral is targeted at breeding livestock because its sale is akin to disposing of long-term productive assets. Budget 2014 extended this tax deferral to bees, and to all types of horses that are over 12 months of age, that are kept for breeding. This measure applies to the 2014 and subsequent taxation years.

## Family Package

On October 30, 2014, the Government proposed new measures that would provide tax relief or deliver benefits to Canadian families.[1] The proposed measures include:

- The Family Tax Cut, a federal tax credit that would allow a higher-income spouse to, in effect, transfer up to $50,000 of taxable income to a spouse in a lower tax bracket. The credit would provide tax relief—capped at $2,000—for couples with children under the age of 18, effective for the 2014 and subsequent taxation years. Tax relief would be calculated on the basis of the difference in tax before and after the effective transfer of income.
- An enhancement of the Universal Child Care Benefit that would provide an increased benefit of $160 per month for children under the age of 6 (up from $100 per month) and a new benefit of $60 per month for children aged 6 through 17, effective January 1, 2015. Enhanced payments for the Universal Child Care Benefit would take effect as of January 2015 and would begin to be reflected in monthly payments to recipients in July 2015. The July 2015 payment would include up to six months of benefits to cover the January to June 2015 period. It is proposed that the treatment of the existing Universal Child Care Benefit for tax and income-tested benefit purposes be extended to the enhanced Universal Child Care Benefit. This measure would affect the tax expenditure in respect of the inclusion of the Universal Child Care Benefit in the income of an eligible dependant for the 2015 and subsequent taxation years.
- The repeal of the Child Tax Credit for the 2015 and subsequent taxation years since it is proposed that the enhanced Universal Child Care Benefit replace the existing Child Tax Credit. Introduced in Budget 2007, the Child Tax Credit is a non-refundable tax credit based on a fixed amount per child under the age of 18 years ($2,255 in 2014, which amounts to tax relief of up to $338 per child).
- A $1,000 increase in the maximum dollar amounts that can be claimed under the Child Care Expense Deduction, effective for the 2015 taxation year. This means that the maximum amount would increase to $8,000 from $7,000 per child under age 7, to $5,000 from $4,000 for each child aged 7 through 16 (and infirm dependent children over age 16), and to $11,000 from $10,000 for children who are eligible for the Disability Tax Credit.

No changes to the Canada Child Tax Benefit have been proposed as part of this announcement. Eligible families will continue to receive monthly Canada Child Tax Benefit payments.

[1] At the time of production of this report, these measures were still subject to Parliamentary approval.

### 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 2014 extended eligibility for the credit for an additional year to flow-through share agreements entered into on or before March 31, 2015. Under the one-year "look-back" rule, funds raised with the benefit of the credit in 2015, for example, can be spent on eligible exploration up to the end of 2016.

## Goods and Services Tax

### Exemption for Hospital Parking

On January 24, 2014, the Government announced Goods and Services Tax/Harmonized Sales Tax (GST/HST) relief for hospital parking for patients and visitors in order to help reduce the cost burden on patients accessing the health care they need and to support their families and friends.

### Designing Training for Individuals With a Disorder or Disability

Budget 2014 expanded the current GST/HST exemption for training specially designed to help individuals cope with a disorder or disability to include services of designing such training, such as developing a training plan or an individualized therapy plan. The cost associated with this relief is included in the category "Exemption for health care services."

### Acupuncturists' and Naturopathic Doctors' Services

Budget 2014 added acupuncturists and naturopathic doctors to the list of health care practitioners whose professional services are exempt from the GST/HST. The cost associated with this relief is included in the category "Exemption for health care services."

### Eyewear Specially Designed to Electronically Enhance the Vision of Individuals With Vision Impairment

Budget 2014 added eyewear specially designed to treat or correct a defect of vision by electronic means to the list of medical and assistive devices that are zero-rated under the GST/HST. The cost associated with this relief is included in the category "Zero-rating of medical devices."

# The Tax Expenditures

Tables 1 to 3 provide tax expenditure values for personal income tax, corporate income tax and the GST for the years 2009 to 2014. Values for the years 2009 to 2012 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 2013 and 2014 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 12, 2014 *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 or projection, a dash means that the tax expenditure is not in effect, and the letter "X" indicates that the estimate or projection is not published for confidentiality reasons. 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 2014 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, the recent reductions in the general corporate income tax rate (from 19% to 18% on January 1, 2010, 16.5% on January 1, 2011, and 15% on January 1, 2012) had the effect of reducing the estimates and projections for most corporate income tax expenditures, with a few exceptions such as investment tax credits.

Table 1
**Personal Income Tax Expenditures***
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** |
| **Charitable Donations and Political Contributions** | | | | | | |
| Charitable Donation Tax Credit (excluding donations of assets eligible for capital gains exemption)[1] | 2,020 | 2,180 | 2,205 | 2,195 | 2,250 | 2,305 |
| Donations of publicly listed securities | | | | | | |
| Charitable Donation Tax Credit | 98 | 140 | 140 | 125 | 145 | 150 |
| Non-taxation of capital gains | 29 | 48 | 42 | 38 | 44 | 45 |
| Total tax expenditure | 127 | 188 | 182 | 163 | 189 | 195 |
| Donations of ecologically sensitive land[2] | | | | | | |
| Charitable Donation Tax Credit | 8 | 5 | 7 | 7 | 5 | 7 |
| Non-taxation of capital gains | 3 | S | S | S | S | S |
| Total tax expenditure | 11 | 7 | 9 | 9 | 7 | 9 |
| Donations of cultural property[3] | | | | | | |
| Charitable Donation Tax Credit | 20 | 18 | 17 | 26 | 23 | 23 |
| Non-taxation of capital gains | 6 | 6 | 5 | 8 | 7 | 7 |
| Total tax expenditure | 26 | 24 | 22 | 34 | 30 | 30 |
| Political Contribution Tax Credit[4] | 23 | 21 | 31 | 23 | 25 | 25 |
| First-Time Donor's Super Credit[5] | – | – | – | – | 5 | 7 |
| **Culture** | | | | | | |
| Assistance for artists | S | S | S | S | S | S |
| Children's Arts Tax Credit[6] | – | – | 32 | 37 | 40 | 42 |
| 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 | 5 | 4 | 4 | 4 | 4 | 4 |
| Education Tax Credit[7] | 200 | 200 | 200 | 200 | 200 | 210 |
| Textbook Tax Credit[7] | 33 | 32 | 32 | 32 | 32 | 34 |
| Tuition Tax Credit[7] | 255 | 270 | 285 | 290 | 295 | 310 |
| Transfer of Education, Textbook and Tuition Tax Credits | 520 | 535 | 565 | 565 | 570 | 575 |
| Carry-forward of Education, Textbook and Tuition Tax Credits[8] | 480 | 545 | 615 | 700 | 725 | 740 |
| Exemption of scholarship, fellowship and bursary income | 39 | 40 | 43 | 44 | 44 | 45 |
| Registered Education Savings Plans | 165 | 160 | 165 | 160 | 150 | 155 |
| Student Loan Interest Credit | 44 | 41 | 42 | 46 | 47 | 46 |

* 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
**Personal Income Tax Expenditures**
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** |
| **Employment** | | | | | | |
| Canada Employment Credit | 1,915 | 1,935 | 1,995 | 2,040 | 2,100 | 2,145 |
| Child care expense deduction | 810 | 850 | 900 | 960 | 980 | 1,015 |
| Deduction for income earned by military and police deployed to high-risk international missions | 36 | 37 | 35 | 15 | 14 | 5 |
| Deduction of home relocation loans | S | S | S | S | S | S |
| Deduction of other employment expenses | 930 | 945 | 985 | 1,000 | 1,010 | 1,025 |
| Deduction for tradespeople's tool expenses | 3 | 3 | 3 | S | S | S |
| Deduction of union and professional dues | 755 | 785 | 825 | 860 | 890 | 915 |
| 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[9] | 430 | 690 | 740 | 590 | 625 | 750 |
| Moving expense deduction | 105 | 100 | 100 | 100 | 96 | 100 |
| 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 | 160 | 160 | 170 | 180 | 180 | 185 |
| Overseas Employment Credit[10] | 72 | 73 | 75 | 68 | 52 | 35 |
| Tax-free amount for emergency service volunteers | 14 | 14 | 12 | 12 | 12 | 12 |
| Search and Rescue Volunteers Tax Credit[11] | – | – | – | – | – | 4 |
| Volunteer Firefighters Tax Credit[12] | – | – | 15 | 16 | 16 | 17 |
| **Family** | | | | | | |
| Adoption Expense Tax Credit[13] | 3 | 3 | 3 | 3 | 3 | 4 |
| Caregiver Credit | 97 | 100 | 105 | 105 | 110 | 115 |
| Child Tax Credit | 1,470 | 1,480 | 1,510 | 1,560 | 1,590 | 1,620 |
| 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[14] | – | – | – | 53 | 60 | 65 |
| Family Tax Cut[15] | – | – | – | – | – | 1,915 |
| Infirm Dependant Credit | 5 | 5 | 5 | 5 | 6 | 7 |
| Spouse or Common-Law Partner Credit | 1,385 | 1,410 | 1,425 | 1,495 | 1,540 | 1,570 |
| Eligible Dependant Credit | 785 | 785 | 790 | 805 | 805 | 810 |
| Inclusion of the Universal Child Care Benefit in the income of an eligible dependant[16] | – | 5 | 5 | 5 | 5 | 5 |

Table 1
**Personal Income Tax Expenditures**
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** |
| **Farming and Fishing** | | | | | | |
| Lifetime Capital Gains Exemption for farm and fishing property[17] | 320 | 325 | 385 | 475 | 515 | 525 |
| 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[18] | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Deferral of income from grain sold through cash purchase tickets[19] | -10 | -10 | 70 | 25 | -12 | -13 |
| 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. |
| AgriInvest (farm savings account) | 15 | 20 | 25 | 11 | 15 | 15 |
| Agri-Québec (farm savings account)[20] | – | – | 5 | 5 | 5 | 5 |
| Flexibility in inventory accounting | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Tax treatment of the Net Income Stabilization Account[21] | | | | | | |
| Deferral of tax on government contributions | S | – | – | – | – | – |
| Deferral of tax on bonus and interest income | S | – | – | – | – | – |
| Taxable withdrawals | S | – | – | – | – | – |
| **Federal-Provincial Financing Arrangements** | | | | | | |
| Logging Tax Credit | S | S | S | S | S | S |
| Quebec Abatement | 3,415 | 3,665 | 3,885 | 4,040 | 4,230 | 4,435 |
| Transfer of income tax points to provinces | 16,260 | 17,385 | 18,340 | 19,115 | 20,005 | 20,975 |
| **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 | 920 | 1,005 | 1,085 | 1,080 | 1,145 | 1,200 |
| 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 | 20 | 30 | 30 | 30 | 30 | 30 |
| Investment tax credits | 17 | 16 | 18 | 18 | 16 | 16 |
| Flow-through share deductions | 190 | 285 | 345 | 200 | 130 | 125 |
| Mineral Exploration Tax Credit for flow-through share investors[22] | 65 | 110 | 100 | 45 | 25 | 35 |
| Reclassification of expenses under flow-through shares[19] | -11 | S | -6 | -9 | -9 | -8 |
| Partial inclusion of capital gains[23] | 2,445 | 3,630 | 3,800 | 3,330 | 4,090 | 4,970 |

Table 1
**Personal Income Tax Expenditures**
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** |
| **General Business and Investment *(cont'd)*** | | | | | | |
| Taxation of capital gains upon realization | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Tax-Free Savings Account | 65 | 165 | 160 | 305 | 435 | 520 |
| *Small Business* | | | | | | |
| Lifetime Capital Gains Exemption for small business shares[17] | 475 | 540 | 595 | 615 | 580 | 590 |
| Deduction of allowable business investment losses | 35 | 35 | 30 | 35 | 30 | 30 |
| Deferral through 10-year capital gain reserve | S | S | S | S | S | S |
| Labour-Sponsored Venture Capital Corporations Credit[24] | 125 | 130 | 140 | 150 | 145 | 140 |
| 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 | 5 | 3 | 4 | X | 4 | 4 |
| **Health** | | | | | | |
| Children's Fitness Tax Credit[25] | 110 | 110 | 110 | 115 | 115 | 130 |
| Disability Tax Credit | 620 | 650 | 675 | 690 | 720 | 750 |
| Medical Expense Tax Credit[26] | 1,000 | 1,080 | 1,135 | 1,200 | 1,295 | 1,425 |
| Non-taxation of business-paid health and dental benefits | 1,685 | 1,780 | 1,850 | 1,935 | 2,015 | 2,065 |
| **Income Maintenance and Retirement** | | | | | | |
| Age Credit | 2,295 | 2,410 | 2,530 | 2,700 | 2,830 | 2,955 |
| 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 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Non-taxation of Guaranteed Income Supplement and Allowance benefits | 89 | 100 | 115 | 130 | 130 | 135 |
| Non-taxation of investment income from life insurance policies[27] | 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 | 145 | 155 | 160 | 170 | 180 | 190 |
| Non-taxation of up to $10,000 of death benefits | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| 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 | 135 | 135 | 130 | 125 | 125 | 125 |
| Non-taxation of veterans' Disability Awards | 22 | 32 | 28 | 33 | 39 | 40 |
| Non-taxation of workers' compensation benefits | 620 | 625 | 625 | 625 | 625 | 625 |
| Registered Disability Savings Plans | S | S | 3 | 5 | 6 | 8 |
| Pension Income Credit | 965 | 1,010 | 1,035 | 1,065 | 1,085 | 1,120 |
| Pension income splitting | 865 | 895 | 975 | 1,035 | 1,085 | 1,145 |

Table 1
**Personal Income Tax Expenditures**
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| **Income Maintenance and Retirement *(cont'd)*** | | | | | | |
| Registered Pension Plans[28] | | | | | | |
| Deduction for contributions | 11,945 | 12,200 | 12,780 | 13,270 | 14,040 | 14,475 |
| Non-taxation of investment income | 7,145 | 10,120 | 10,535 | 13,675 | 15,080 | 15,550 |
| Taxation of withdrawals | -6,605 | -7,140 | -7,525 | -7,610 | -8,080 | -8,430 |
| Net tax expenditure | 12,485 | 15,180 | 15,790 | 19,335 | 21,040 | 21,595 |
| Registered Retirement Savings Plans[28] | | | | | | |
| Deduction for contributions | 7,005 | 7,245 | 7,450 | 7,670 | 7,985 | 8,125 |
| Non-taxation of investment income | 4,085 | 6,755 | 6,985 | 9,330 | 10,555 | 10,695 |
| Taxation of withdrawals | -4,375 | -4,810 | -5,250 | -5,225 | -5,270 | -5,580 |
| Net tax expenditure | 6,715 | 9,190 | 9,185 | 11,775 | 13,270 | 13,240 |
| Supplementary information: present-value of tax-assisted retirement savings plans[29] | 10,150 | 10,470 | 10,945 | 12,005 | 12,635 | 13,115 |
| Saskatchewan Pension Plan | S | S | S | S | S | S |
| Treatment of alimony and maintenance payments | 93 | 88 | 88 | 86 | 86 | 86 |
| U.S. Social Security benefits[30] | 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 | 85 | 87 | 87 | 88 | 88 | 87 |
| First-Time Home Buyers' Tax Credit | 120 | 105 | 110 | 110 | 105 | 110 |
| Home Renovation Tax Credit[31] | 2,265 | – | – | – | – | – |
| Non-taxation of capital gains on principal residences[32] | 3,785 | 4,105 | 4,700 | 3,900 | 4,165 | 4,810 |
| Non-taxation of income from the Office of the Governor General of Canada[33] | 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 | 140 | 150 | 160 | 170 | 180 | 190 |
| **Memorandum Items** | | | | | | |
| *Avoidance of Double Taxation* | | | | | | |
| Dividend gross-up and credit[34] | 3,805 | 3,790 | 4,145 | 4,450 | 5,020 | 4,885 |
| Foreign Tax Credit | 660 | 670 | 740 | 860 | 940 | 1,020 |
| 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] | 230 | 410 | 350 | 300 | 425 | 440 |
| Farm and fishing loss carry-overs | 11 | 14 | 16 | 15 | 15 | 15 |
| Non-capital loss carry-overs | 56 | 49 | 63 | 70 | 66 | 73 |

Table 1
**Personal Income Tax Expenditures**
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** |
| **Memorandum Items *(cont'd)*** | | | | | | |
| *Social and Employment Insurance Programs* | | | | | | |
| Canada Pension Plan and Quebec Pension Plan | | | | | | |
| Employee-Paid Contribution Credit | 2,815 | 2,880 | 3,070 | 3,205 | 3,320 | 3,460 |
| Non-taxation of employer-paid premiums | 4,520 | 4,640 | 4,945 | 5,310 | 5,480 | 5,645 |
| Employment Insurance and Quebec Parental Insurance Plan | | | | | | |
| Employee-Paid Contribution Credit[36] | 960 | 985 | 1,065 | 1,155 | 1,235 | 1,280 |
| Non-taxation of employer-paid premiums | 1,870 | 1,915 | 2,075 | 2,250 | 2,410 | 2,465 |
| *Refundable Tax Credits Classified as Transfer Payments*[37] | | | | | | |
| Canada Child Tax Benefit[38] | 9,753 | 10,013 | 10,049 | 10,266 | 10,402 | 10,480 |
| Refundable Medical Expense Supplement | 130 | 135 | 135 | 140 | 145 | 150 |
| Working Income Tax Benefit | 1,025 | 1,055 | 1,080 | 1,100 | 1,160 | 1,180 |
| *Other* | | | | | | |
| Basic Personal Amount | 27,880 | 28,350 | 29,020 | 30,405 | 31,380 | 32,205 |
| 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 | 39 | 42 | 44 | 25 | 22 | 23 |
| Partial deduction of meals and entertainment expenses | 175 | 185 | 185 | 200 | 195 | 195 |

Notes:

1 The tax expenditures associated with the Charitable Donation 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 Donation Tax Credit associated with all other donations. The total tax expenditure for the Charitable Donation Tax Credit would take into account all relevant components.

2 Budget 2014 extended to ten years the carry-forward period for donations of ecologically sensitive land, or easements, covenants and servitudes on such land. See the "What's New in the 2014 Report" section for details.

3 This measure was changed in Budget 2014. See the "What's New in the 2014 Report" section for details.

4 The higher level for this tax expenditure in 2011 is due to contributions in respect of the 41st general election.

5 This measure was introduced in Budget 2013, effective 2013. See the "What's New" section of the 2013 edition of this report for details. The lower value for this tax expenditure relative to the cost presented in Budget 2013 reflects a lower-than-expected take-up of the measure.

6 This measure was introduced in Budget 2011, effective 2011. See the "What's New" section of the 2011 edition of this report for details. 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.

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

8 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.

9 This measure was changed in Budget 2010, effective March 4, 2010. See the "What's New" section of the 2010 edition of this report for details.

10 The phase-out of this measure was announced in Budget 2012. See the "What's New" section of the 2012 edition of this report for details.

11 This measure was introduced in Budget 2014, effective 2014. See the "What's New in the 2014 Report" section for details.

12 This measure was introduced in Budget 2011, effective 2011. See the "What's New" section of the 2011 edition of this report for details. 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.

[13] This measure was enhanced in Budget 2014. See the "What's New in the 2014 Report" section for details.

[14] This measure was introduced in Budget 2011, effective 2012. See the "What's New" section of the 2011 edition of this report for details. 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.

[15] This measure was announced on October 30, 2014, effective 2014. See the "What's New in the 2014 Report" section for details.

[16] This measure was introduced in Budget 2010, effective 2010. See the "What's New" section of the 2010 edition of this report for details.

[17] Budget 2013 increased the Lifetime Capital Gains Exemption (LCGE) to $800,000 from $750,000 effective for the 2014 taxation year. In addition, the LCGE limit will be indexed to inflation for taxation years after 2014. See the "What's New" section of the 2013 edition of this report for details.

[18] Budget 2014 extended this tax deferral to bees, and to all types of horses that are over 12 months of age, that are kept for breeding, effective 2014. See the "What's New in the 2014 Report" section for details.

[19] For an explanation of why this tax expenditure may be negative in some years, see the 2010 edition of *Tax Expenditures: Notes to the Estimates/Projections*.

[20] This measure was introduced in Budget 2011, effective 2011. See the "What's New" section of the 2011 edition of this report for details.

[21] 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.

[22] This credit was extended in Budget 2014 and is set to expire on March 31, 2015. See the "What's New in the 2014 Report" section for details.

[23] This tax expenditure does not take into account the tax value of current-year capital losses applied against previous-year capital gains.

[24] Budget 2013 announced the phase-out of this measure by 2017. See the "What's New" section of the 2013 edition of this report for details.

[25] The increase in 2014 reflects changes announced on October 9, 2014. See the "What's New in the 2014 Report" section for details.

[26] 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. Budget 2014 expanded the list of eligible expenses under the credit. See the "What's New in the 2014 Report" section for details.

[27] 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.

[28] 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.

[29] 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.

[30] This measure was changed in Budget 2010, effective January 1, 2010. See the "What's New" section of the 2010 edition of this report for details.

[31] This temporary measure was introduced in Budget 2009 for the 2009 taxation year only. See note 46 of Table 1 in the 2010 edition of this report for details.

[32] 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.

[33] Budget 2012 repealed this exemption, effective 2013. See the "What's New" section of the 2012 edition of this report for details.

[34] The estimates and projections include the revenue impact associated with both the enhanced Dividend Tax Credit and the ordinary Dividend Tax Credit. 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 2007 Economic Statement. Budget 2013 introduced changes to the ordinary Dividend Tax Credit and gross-up factor to ensure the appropriate tax treatment of dividend income.

[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" section of the 2012 edition of this report for 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 2013 corresponds to the expenditure reported in the *Public Accounts of Canada* for the 2013–14 fiscal year, ending March 31, 2014). The amount for 2014 represents projected spending for the 2014–15 fiscal year.

Table 2
**Corporate Income Tax Expenditures***
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** |
| **Charitable Donations, Gifts, Charities and Non-Profit Organizations** | | | | | | |
| Deductibility of charitable donations[1] | 325 | 390 | 395 | 390 | 325 | 340 |
| Donations of publicly listed securities | | | | | | |
| Deductibility of donations[2] | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Non-taxation of capital gains | 36 | 62 | 67 | 55 | 69 | 64 |
| Total tax expenditure | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Donations of ecologically sensitive land[3] | | | | | | |
| Deductibility of donations | 11 | S | 5 | S | 5 | 4 |
| Non-taxation of capital gains | 10 | S | S | S | S | S |
| Total tax expenditure | 21 | 3 | 5 | S | 6 | 4 |
| Donations of cultural property[4] | | | | | | |
| Deductibility of donations | 4 | 25 | 6 | 35 | 3 | 15 |
| 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) | 140 | 125 | 125 | 80 | 100 | 100 |
| **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 | 1,900 | 2,050 | 2,440 | 2,515 | 2,650 | 2,790 |
| Logging Tax Credit | 4 | 8 | 10 | 8 | 19 | 19 |
| **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 | 3,210 | 3,285 | 3,830 | 3,870 | 4,480 | 4,715 |
| 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
**Corporate Income Tax Expenditures**
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** |
| **General Business and Investment *(cont'd)*** | | | | | | |
| *Non-Refundable Investment Tax Credits* | | | | | | |
| Atlantic Investment Tax Credit[5] | | | | | | |
| Earned and claimed in current year | 31 | 91 | 61 | 81 | 93 | 61 |
| Claimed in current year but earned in prior years | 22 | 30 | 39 | 81 | 149 | 82 |
| Earned in current year but carried back to prior years | 8 | 12 | 13 | 147 | 189 | 27 |
| Total tax expenditure | 61 | 133 | 113 | 309 | 431 | 170 |
| Scientific Research and Experimental Development Investment Tax Credit[5] | | | | | | |
| Earned and claimed in current year | 835 | 695 | 815 | 785 | 790 | 765 |
| Claimed in current year but earned in prior years | 670 | 715 | 770 | 935 | 940 | 905 |
| Earned in current year but carried back to prior years | 110 | 170 | 45 | 60 | 220 | 60 |
| Total tax expenditure | 1,615 | 1,580 | 1,630 | 1,780 | 1,950 | 1,730 |
| Apprenticeship Job Creation Tax Credit | | | | | | |
| Earned and claimed in current year | 52 | 49 | 52 | 62 | 73 | 74 |
| Claimed in current year but earned in prior years | 9 | 11 | 14 | 18 | 20 | 20 |
| Earned in current year but carried back to prior years | 4 | 6 | 5 | 4 | 4 | 4 |
| Total tax expenditure | 65 | 66 | 71 | 84 | 97 | 98 |
| Investment Tax Credit for Child Care Spaces | S | S | S | S | S | S |
| *Small Business* | | | | | | |
| Deduction of allowable business investment losses | 16 | 15 | 27 | 8 | 9 | 15 |
| Low tax rate for small businesses[6] | 4,370 | 4,185 | 3,825 | 3,145 | 3,030 | 3,170 |
| 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[7] | X | X | X | X | X | X |
| Exemptions from non-resident withholding tax | | | | | | |
| Dividends[8] | 1,315 | 1,725 | 2,150 | 2,265 | 2,320 | 2,425 |
| Interest | 1,675 | 1,455 | 1,395 | 1,545 | 1,545 | 1,615 |
| Rents and royalties | 350 | 345 | 360 | 440 | 420 | 440 |
| Management fees | 160 | 155 | 170 | 225 | 210 | 220 |
| 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. |

Table 2
**Corporate Income Tax Expenditures**
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** |
| **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[9] | -9 | -8 | 42 | 16 | -7 | S |
| Flexibility in inventory accounting | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Agricultural co-operatives—patronage dividends paid as shares | 5 | 5 | 8 | 8 | 8 | 8 |
| AgriInvest (farm savings account) | S | 3 | 3 | S | S | S |
| Agri-Québec (farm savings account)[10] | – | – | S | S | S | S |
| Exemption for farmers' and fishers' insurers | 5 | 6 | 7 | 10 | 9 | 9 |
| *Natural Resources* | | | | | | |
| Corporate Mineral Exploration and Development Tax Credit[11] | 22 | 13 | 76 | 60 | 14 | 21 |
| Deductibility of contributions to a qualifying environmental trust[12] | S | S | 5 | S | S | S |
| Earned depletion | 5 | S | S | S | S | S |
| Flow-through share deductions | 69 | 69 | 82 | 53 | 33 | 32 |
| Reclassification of expenses under flow-through shares[9] | -3 | S | S | S | S | S |
| *Other Sectors* | | | | | | |
| Exemption from branch tax for transportation, communications, and iron ore mining corporations | 6 | 43 | 40 | 12 | 20 | 25 |
| Special tax rate for credit unions[13] | 79 | 79 | 65 | 41 | 27 | 20 |
| Surtax on the profits of tobacco manufacturers | X | X | X | X | X | X |
| **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 | 32 | 30 | 43 | 43 | 59 | 62 |
| Investment income credited to life insurance policies | 275 | 260 | 285 | 275 | 270 | 275 |
| Tax status of certain federal Crown corporations | X | X | X | X | X | X |

Table 2
**Corporate Income Tax Expenditures**
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** |
| **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 | 51 | 185 | 195 | 105 | 225 | 235 |
| Refundable taxes on investment income of private corporations | | | | | | |
| Additional Part I tax[14] | -1,700 | -1,735 | -2,315 | -2,780 | -3,315 | -3,460 |
| Part IV tax | -3,350 | -2,785 | -3,035 | -3,460 | -3,790 | -3,960 |
| Dividend refund | 6,190 | 5,185 | 5,610 | 6,305 | 7,070 | 7,385 |
| Net tax expenditure | 1,140 | 665 | 260 | 65 | -35 | -35 |
| *Loss Offset Provisions* | | | | | | |
| Capital loss carry-overs | | | | | | |
| Net capital losses carried back | 445 | 300 | 87 | 115 | 105 | 110 |
| Net capital losses applied to current year | 210 | 445 | 475 | 420 | 425 | 425 |
| Farm and fishing loss carry-overs | | | | | | |
| Farm and fishing losses carried back | 14 | 14 | 11 | 12 | 13 | 12 |
| Farm and fishing losses applied to current year | 45 | 49 | 69 | 47 | 48 | 50 |
| Non-capital loss carry-overs | | | | | | |
| Non-capital losses carried back | 3,290 | 2,805 | 2,080 | 1,890 | 3,120 | 2,200 |
| Non-capital losses applied to current year | 4,445 | 3,950 | 4,175 | 4,320 | 3,875 | 3,935 |
| *Refundable Tax Credits Classified as Transfer Payments*[15] | | | | | | |
| Atlantic Investment Tax Credit | 13 | 13 | 14 | 17 | 16 | 16 |
| Scientific Research and Experimental Development Investment Tax Credit | 1,540 | 1,500 | 1,500 | 1,445 | 1,455 | 1,405 |
| Canadian Film or Video Production Tax Credit | 215 | 200 | 230 | 270 | 270 | 280 |
| Film or Video Production Services Tax Credit | 73 | 82 | 92 | 94 | 105 | 110 |
| *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 | 265 | 270 | 280 | 280 | 265 | 275 |
| Patronage dividend deduction | 345 | 285 | 335 | 240 | 230 | 255 |

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 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."

3 Budget 2014 extended to ten years the carry-forward period for donations of ecologically sensitive land, or easements, covenants and servitudes on such land. See the "What's New in the 2014 Report" section for details.

4 This measure was changed in Budget 2014. See the "What's New in the 2014 Report" section for details.

5 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 15). The total amount of tax assistance provided by this credit is the sum of its non-refundable and refundable components. Changes to this measure were announced in Budget 2012. See the "What's New" section of the 2012 edition of this report for details.

6 The reduction in the tax expenditure between 2009 and 2012 primarily reflects the reduction in the general corporate income tax rate, which reduced the difference between the general and small business rates, the basis for the tax expenditure.

7 Budget 2013 announced the elimination of the International Banking Centre rules, effective for taxation years that begin on or after March 21, 2013. See the "What's New" section of the 2013 edition of this report for details.

[8] This category includes the tax expenditure attributable to the exemption of estate and trust income distributions, including distributions by income trusts.

[9] For an explanation of why this tax expenditure may be negative in some years, see the 2010 edition of *Tax Expenditures: Notes to the Estimates/Projections*.

[10] This measure was introduced in Budget 2011, effective 2011. See the "What's New" section of the 2011 edition of this report for details.

[11] The phase-out of this measure was announced in Budget 2012. See the "What's New" section of the 2012 edition of this report for details.

[12] This measure was expanded in Budget 2011 to include trusts established after 2011 that are required to be established to fund reclamation costs associated with pipelines. 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.

[13] The phase-out of this measure was announced in Budget 2013. See the "What's New" section of the 2013 edition of this report for details.

[14] This item includes the additional 6⅔% refundable tax on investment income as well as the Part I tax paid on investment income in excess of the benchmark rate.

[15] 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" section of the 2012 edition of this report for details.

Table 3
**GST Tax Expenditures***
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** |
| **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 | 15 | 15 | 15 | 15 | 15 | 15 |
| Exemption and rebate for legal aid services | 20 | 20 | 20 | 25 | 25 | 25 |
| Non-taxability of certain importations | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Foreign Convention and Tour Incentive Program | 10 | 10 | 15 | 15 | 15 | 15 |
| Small suppliers' threshold | 185 | 170 | 175 | 180 | 185 | 190 |
| 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 | 895 | 890 | 870 | 885 | 875 | 865 |
| Rebate for poppies and wreaths | – | S | S | S | S | S |
| Rebate for registered charities | 265 | 270 | 285 | 285 | 295 | 305 |
| Rebate for qualifying non-profit organizations | 70 | 75 | 70 | 60 | 65 | 65 |
| **Education** | | | | | | |
| Exemption for educational services (tuition) | 580 | 630 | 670 | 720 | 745 | 775 |
| Rebate for book purchases made by qualifying public institutions | 25 | 20 | 20 | 20 | 20 | 20 |
| Rebate for colleges | 80 | 100 | 100 | 85 | 85 | 90 |
| Rebate for schools | 370 | 360 | 375 | 380 | 395 | 415 |
| Rebate for universities | 225 | 260 | 260 | 235 | 240 | 255 |
| **Health Care** | | | | | | |
| Exemption for health care services[1] | 515 | 565 | 605 | 625 | 645 | 670 |
| Exemption for hospital parking[2] | – | – | – | – | – | 30 |
| Rebate for hospitals | 520 | 560 | 615 | 585 | 605 | 620 |
| Rebate for specially equipped motor vehicles | S | S | S | S | S | S |
| Zero-rating of medical devices[1] | 290 | 300 | 310 | 315 | 320 | 335 |
| Zero-rating of prescription drugs | 665 | 695 | 725 | 730 | 755 | 785 |
| **Households** | | | | | | |
| Exemption for child care and personal services | 135 | 140 | 150 | 155 | 160 | 170 |
| GST/HST Credit | 3,645 | 3,760 | 3,870 | 3,995 | 4,090 | 4,205 |
| Travellers' exemption | 155 | 170 | 190 | 205 | 225 | 240 |
| Zero-rating of basic groceries | 3,490 | 3,555 | 3,685 | 3,810 | 3,920 | 4,075 |

* 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
**GST Tax Expenditures**
millions of dollars

| | Estimates | | | | Projections | |
|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** |
| **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) | 1,395 | 1,455 | 1,465 | 1,495 | 1,580 | 1,665 |
| Rebate for new housing | 580 | 585 | 575 | 565 | 585 | 580 |
| Rebate for new residential rental property | 50 | 55 | 55 | 65 | 65 | 65 |
| **Municipalities** | | | | | | |
| Exemption for municipal transit | 155 | 165 | 170 | 175 | 185 | 190 |
| Exemption for water and basic garbage collection services | 185 | 195 | 210 | 210 | 215 | 225 |
| Rebate for municipalities | 1,895 | 2,050 | 2,040 | 2,105 | 2,155 | 2,205 |
| **Memorandum Items** | | | | | | |
| *Recognition of Expenses Incurred to Earn Income* | | | | | | |
| Rebate to employees and partners | 75 | 75 | 70 | 65 | 70 | 70 |
| *Other* | | | | | | |
| Partial input tax credits for meals and entertainment expenses | 135 | 140 | 150 | 150 | 150 | 155 |

Notes:

[1] These measures were expanded in Budget 2014. See the "What's New in the 2014 Report" section for details.

[2] This measure was announced on January 24, 2014. See the "What's New in the 2014 Report" section for details.

# Part 2
Tax Evaluations and
Research Reports

# Evaluation of the Federal Charitable Donation Tax Credit

## 1. Introduction

The charitable sector is an important contributor to Canadian society, playing a vital role in providing valuable goods and services to Canadians in areas such as health care, education, poverty relief and the protection of the environment. In recognition of this important role, Canadians support charities directly by donating cash and goods and by volunteering their time. Governments in Canada also provide assistance to charities through direct grants and contributions as well as by way of a number of tax preferences targeted to the charitable sector.

A key component of the tax-based assistance provided by governments in Canada to the charitable sector is the Charitable Donation Tax Credit. Canadians who donate to registered charities and other qualified donees can claim a non-refundable credit in respect of their charitable donations on both their federal and provincial personal income tax returns. By lowering the after-tax cost of giving, these credits encourage people to donate more to charities and support the financing of the charitable sector. In 2012, Canadians claimed the federal Charitable Donation Tax Credit in respect of donations worth $8.6 billion.

This report presents an evaluation of the effectiveness of the federal Charitable Donation Tax Credit. The focus of the evaluation is on the ability of the credit to encourage individuals to donate more, taking into account the cost of providing the credit. This analysis was prepared subsequent to the Government's commitment, made in response to a recent recommendation of the House of Commons Standing Committee of Finance, to redouble its ongoing efforts to monitor charitable giving trends and characteristics.[1] Section 2 of this report provides background information on the federal Charitable Donation Tax Credit and other personal income tax measures intended to encourage charitable donations by individuals. Section 3 reviews the trends in charitable giving in Canada between 1995 and 2012 based on tax return information. Section 4 analyzes the effectiveness of the Charitable Donation Tax Credit, on the basis notably of an in-depth review of available statistical studies of the impact of tax incentives on charitable donations.

## 2. Background

This section describes the key federal personal income tax measures intended to encourage charitable donations by individuals, namely the Charitable Donation Tax Credit and the capital gains exemption for donations of certain types of assets. Other federal tax preferences are targeted at the charitable sector, notably the income tax exemption for registered charities and other qualified donees and the deductibility of charitable donations by corporations in calculating their corporate taxable income. These tax measures fall outside the scope of this report and are therefore not reviewed in this report.

[1] See recommendation 7 of the February 2013 report of the Standing Committee on Finance entitled *Tax Incentives for Charitable Giving in Canada*. See also the Government's response to this report, dated June 11, 2013.

## 2.1 Charitable Donation Tax Credit

Tax incentives for charitable donations in Canada were first introduced with the *Income War Tax Act, 1917* when a deduction was implemented for "amounts paid by a taxpayer during the year to the Patriotic and Red Cross Funds, and other patriotic and war funds approved by the Minister".[2] Several modifications were made to the tax treatment of charitable donations over the years, most notably as part of the 1987 tax reform when the then-existing deduction for charitable donations made by individuals was converted into a tax credit effective for the 1988 taxation year. This change was motivated in part by a desire to ensure that the amount of tax assistance provided in respect of charitable donations was independent of the donor's income level.[3]

Since 1988, charitable donations made by individuals to registered charities and other qualified donees have therefore been eligible for a non-refundable tax credit that individuals can claim to reduce their federal tax payable. In 2015, the credit available in respect of the first $200 of donations claimed in a year is calculated at the lowest personal income tax rate (15% in 2015), while the credit in respect of donations in excess of $200 is calculated at the highest personal income tax rate (29% in 2015). Relatively few donors are subject to the highest personal income tax rate of 29%, which implies that most donors who donate over $200 can obtain, for the amount that exceeds $200, a credit that more than offsets the federal tax payable on the income that financed that portion of their donations. The credit is available for donations made in a year up to a limit of 75% of the donor's net income for the year (100% in the year of a donor's death and the immediately preceding year), and donations not claimed in the year they were made can be carried forward and claimed in one of the subsequent five years. An individual can claim the credit in respect of his or her own donations as well as the donations made by his or her spouse or common-law partner. This pooling of donations could permit spouses or partners to exceed the $200 threshold, and therefore can allow the spouses or partners to obtain a higher credit than if each were claiming the credit separately.

Only donations made to registered charities and other qualified donees are eligible for the tax credit. Registered charities include charitable organizations as well as public and private foundations, while other qualified donees include other entities such as Canadian municipalities or the United Nations and its agencies that, while not registered charities, have the authority under the *Income Tax Act* to issue official donation receipts.[4] To qualify as a registered charity, an organization must pursue at least one of four purposes: 1) relief of poverty (e.g., food banks, soup kitchens, low-cost housing units); 2) advancement of education (e.g., colleges, universities, research institutes); 3) advancement of religion (e.g., places of worship, missionary organizations); or 4) other purposes beneficial to the community that the courts have recognized as charitable at law (e.g., promotion of health and the arts, protection of the environment). There are over 86,000 registered charities in Canada.

All provinces and territories provide tax credits for donations with similar rules as for the federal Charitable Donation Tax Credit, although at different credit rates. Table 1 shows the provincial and territorial credit rates for 2015 as well as the combined federal-provincial/territorial credit rates for each province or territory.

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[2] The *Income War Tax Act, 1917*, 7-8 Geo 5, c. 28, s. 3. This measure was subsequently repealed and reintroduced in the 1930s.

[3] See Department of Finance Canada (1987). See Annex 1 for a list of recent changes to the Charitable Donation Tax Credit and other tax preferences targeted at charitable donations made by individuals.

[4] See Annex 2 for the full list of qualified donees.

Table 1
**Charitable Donation Tax Credit Rates, by Province and Territory, 2015**
%

| | Federal and provincial/territorial rates | | Combined federal-provincial/territorial rates | |
|---|---|---|---|---|
| | First $200 of donations | Donations above $200 | First $200 of donations | Donations above $200 |
| Federal | 15.00 | 29.00 | | |
| Newfoundland and Labrador | 7.70 | 13.30 | 22.70 | 42.30 |
| Prince Edward Island[1] | 9.80-10.78 | 16.70-18.37 | 24.80-27.78 | 45.70-47.37 |
| Nova Scotia | 8.79 | 21.00 | 23.79 | 50.00 |
| New Brunswick | 9.68 | 17.95 | 24.68 | 46.95 |
| Quebec[2] | 20.00 | 24.00 | 32.53 | 48.22 |
| Ontario[1] | 5.05-7.88 | 11.16-17.41 | 20.05-22.88 | 40.16-46.41 |
| Manitoba | 10.80 | 17.40 | 25.80 | 46.40 |
| Saskatchewan | 11.00 | 15.00 | 26.00 | 44.00 |
| Alberta | 10.00 | 21.00 | 25.00 | 50.00 |
| British Columbia | 5.06 | 14.70 | 20.06 | 43.70 |
| Yukon[1] | 7.04-7.39 | 12.76-13.40 | 22.04-22.39 | 41.76-42.40 |
| Northwest Territories | 5.90 | 14.05 | 20.90 | 43.05 |
| Nunavut | 4.00 | 11.50 | 19.00 | 40.50 |

Note: Based on information available as of December 2014.

[1] The range reflects the fact that the effective credit rate can be higher than the statutory rate for provinces and territories that impose surtaxes. Surtaxes increase the value of the credit as they are calculated as a percentage of provincial/territorial income taxes net of the provincial/territorial Charitable Donation Tax Credit.

[2] The combined federal-provincial rate for Quebec is adjusted to reflect the 16.5% federal tax abatement.

Sources: Canada Revenue Agency; Department of Finance calculations.

In response to an extended review of tax incentives for charitable giving in Canada by the House of Commons Standing Committee on Finance (see footnote 1), the federal government introduced in Budget 2013 the temporary First-Time Donor's Super Credit to encourage new donors to give to charity. This credit supplements the Charitable Donation Tax Credit with an additional 25% tax credit for a first-time donor on up to $1,000 of cash donations. In total, a first-time donor is entitled to a 40% federal credit on cash donations of $200 or less and a 54% federal credit for the portion of donations over $200 but not exceeding $1,000. The additional credit applies to cash donations made on or after March 21, 2013 and may be claimed only once in a taxation year between 2013 and 2017.

## 2.2 Capital Gains Exemption for Donations of Certain Eligible Assets

Individuals donating certain assets that have appreciated in value can be eligible for an exemption from tax in respect of the capital gain realized on the donated assets. Assets eligible for a capital gains exemption include publicly listed securities and certain exchangeable shares, certified cultural property, and ecologically sensitive land. This exemption, which is also available for provincial income tax purposes, can be claimed in addition to the Charitable Donation Tax Credit, further reducing the after-tax cost of donating eligible assets.[5]

In addition to the capital gains exemption, donations of certified cultural property and ecologically sensitive land can fully be claimed as credit on up to 100% of net income. The carry-forward period for the unclaimed portion of donations of ecologically sensitive land is ten years, instead of five years for other gifts.

## 2.3 After-Tax Price of Charitable Donations

The tax incentives described in Sections 2.1 and 2.2 have the effect of lowering the after-tax price of giving. Chart 1 shows how the after-tax price of a $1 donation has evolved since the introduction of the federal Charitable Donation Tax Credit in 1988. The after-tax price is calculated under the assumption that the $1 donation would be creditable at the highest federal and provincial credit rates (i.e., 29% for the federal credit).

Variations in the after-tax price of cash donations at the top credit rate since 1988 have been limited. Taking into account the federal credit and the average credit for the provinces and territories, the after-tax price declined from 54 cents per dollar of cash donations in 1988 to 48 cents per dollar by 1996.[6] This decline was due to increases in provincial top income tax rates, as well as to the introduction of or increases in federal and provincial surtaxes. The after-tax price increased to 54 cents per dollar by 2002, reflecting federal and provincial tax rate reductions implemented in the late 1990s and early 2000s, and has remained relatively stable at that level since then.

Chart 1 also shows the after-tax price of donating $1 worth of publicly listed securities to illustrate the impact of the exemption from capital gains tax for gifts of eligible assets. In 1997, capital gains realized on gifts of publicly listed securities were first made eligible for a reduced inclusion rate of one half the normal capital gain inclusion rate (which was then three-quarters). As a result, the after-tax price of gifts of such securities was 39% lower than the after-tax price of cash donations. The gap between the after-tax prices of cash and asset gifts narrowed as of 2000, in large part due to the reduction in the inclusion rate for capital gains from 75% to 50%. Gifts of publicly listed securities were made fully exempt from capital gains tax in 2006, and since then the after-tax price of such gifts has been 43% lower on average than the after-tax price of cash donations.[7]

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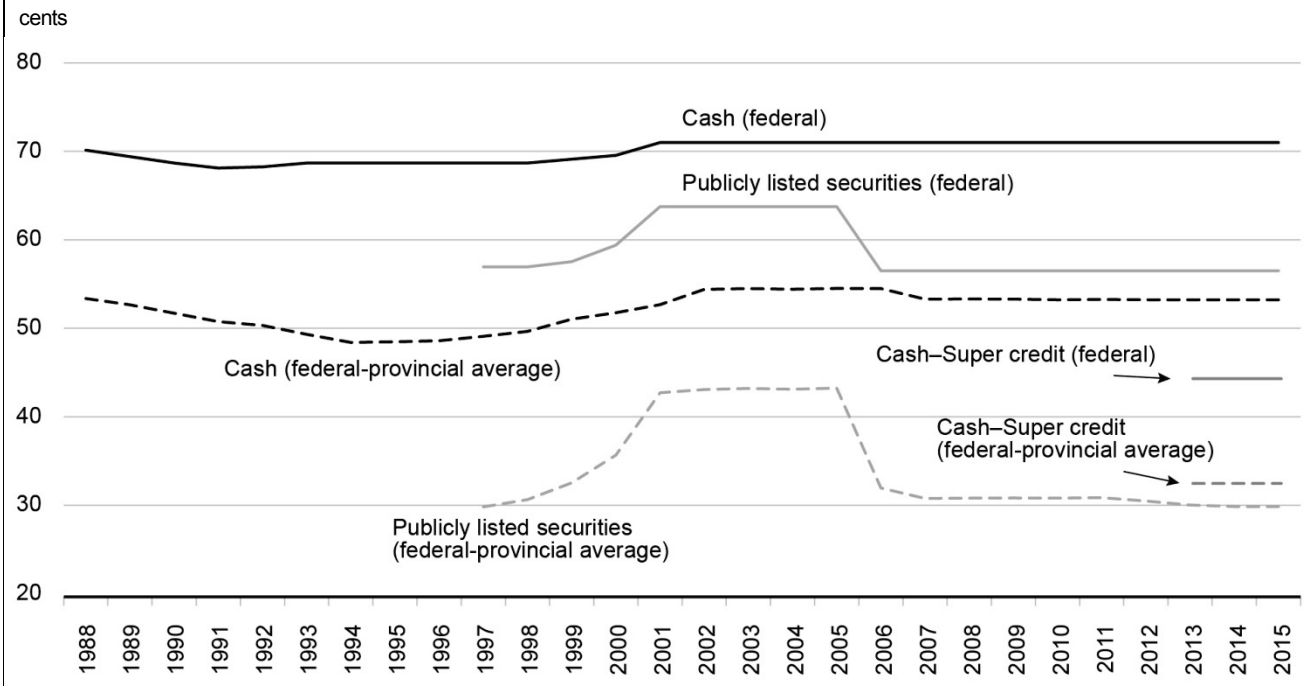
[5] The credit is based on the fair market value of the asset being donated, while only a fraction of the capital gain realized upon the donation not exceeding 50% is included in the donor's income. This means that for most donors the Charitable Donation Tax Credit should fully offset the tax payable on the income or gain that is funding the donation, including for donations of assets that are not eligible for the capital gains exemption.

[6] From this point forward, references to "provinces" also include the territories.

[7] The capital gains inclusion rate was reduced to zero for donations of publicly listed securities, stock options, and ecologically sensitive land to a registered charity or other qualified donee (other than a private foundation) made after May 1, 2006 (the inclusion rate for donations of these properties made before May 2, 2006 was reduced to 25%). The capital gains inclusion rate for donations of these capital properties (other than donations of ecologically sensitive land) was extended to donations made to private foundations as of March 19, 2007.

Chart 2 shows the after-tax prices of donations for donors resident in selected provinces (not including the impact of the federal Charitable Donation Tax Credit). After-tax prices of donations may vary significantly from one province to another. Outside of the territories, the after-tax price ranges from a high of 87 cents per dollar of donations in Newfoundland and Labrador to a low of 76 cents in Quebec in 2015. There have also been significant movements over time, which reflect the different changes in tax rates and reforms that were implemented by provinces. For example, Quebec converted its charitable donation deduction into a tax credit in 1993 and reduced its threshold for donations eligible for the highest tax credit rate from $2,000 to $200 in 2000. Alberta increased its tax credit rate from 12.75% to 21% in 2007.

Chart 1
**After-Tax Price of a $1 Donation, 1988 to 2015**

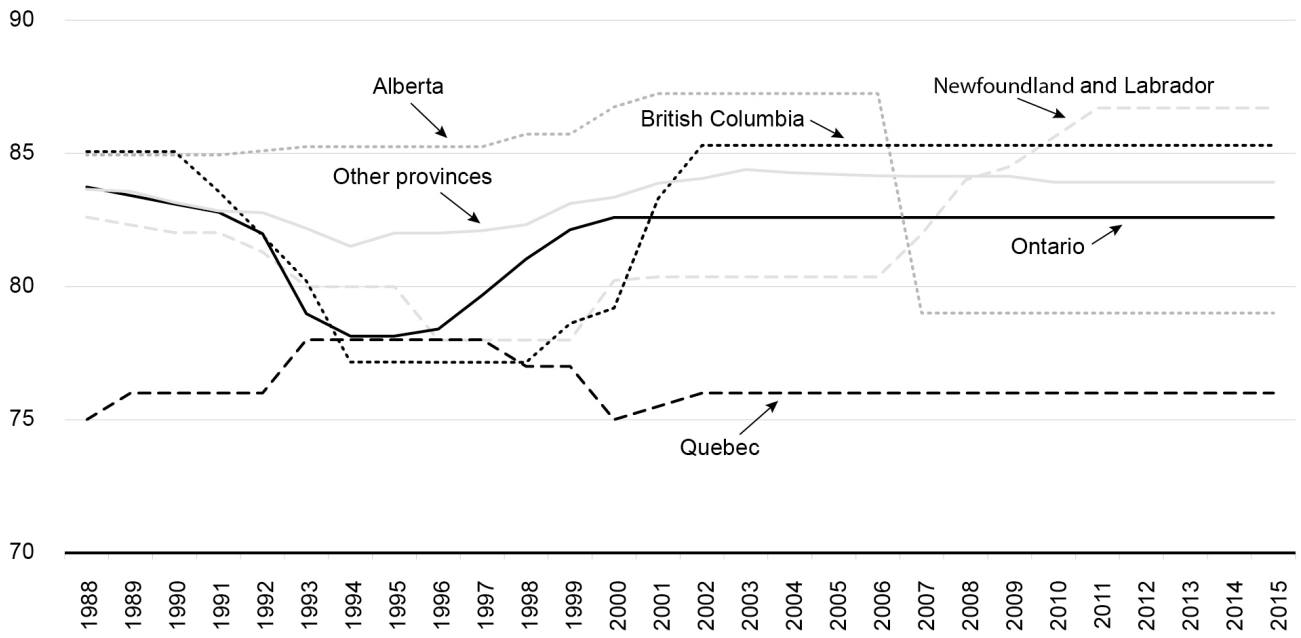



Notes: This chart shows the after-tax price of a $1 donation assuming the donor's total donation exceeds $200 ($250 between 1988 and 1993). For ease of illustration, the after-tax price of publicly listed securities as illustrated assumes that the entire donation is considered a capital gain. The after-tax prices of donations of ecologically sensitive land and cultural property are equal to donations of publicly listed securities but the capital gain exemptions for the donation of these assets were implemented in different years (1977 for cultural property and 2000 for ecologically sensitive land). The provincial average price is weighted by the share of total donations claimed in each province. Based on information available as of December 2014.

Source: Department of Finance.

Chart 2

**After-Tax Price of a $1 Donation, by Province (Excluding Federal Tax Incentives), 1988 to 2015**




Notes: Prior to 2001, the after-tax price of a $1 donation is calculated based on the tax-on-tax system for provinces other than Quebec. The average of "other provinces" is an unweighted average. Based on information available as of December 2014.

Source: Department of Finance.

## 2.4 Fiscal Cost of Tax Incentives for Individual Donations

The fiscal cost for the federal government of tax incentives for charitable donations by individuals is estimated at more than $2.5 billion in 2014, 98% of which is comprised of the cost of the federal Charitable Donation Tax Credit. The cost of the capital gains exemption for donated assets is estimated at $52 million, while the cost for the First-Time Donor's Super Credit is estimated at $7 million. A detailed breakdown of the overall fiscal cost of federal tax incentives for charitable donations for 2009 to 2014 is provided in Table 2.

Table 2
**Tax Expenditures Associated With Federal Tax Incentives for Charitable Donations by Individuals, 2009 to 2014**
millions of dollars

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|---|---|
| Charitable Donation Tax Credit (excluding donations of assets eligible for the capital gains exemption) | 2,020 | 2,180 | 2,205 | 2,195 | 2,250 | 2,305 |
| Donations of publicly listed securities | | | | | | |
| Charitable Donation Tax Credit | 98 | 140 | 140 | 125 | 145 | 150 |
| Non-taxation of capital gains | 29 | 48 | 42 | 38 | 44 | 45 |
| Total tax expenditure | 127 | 188 | 182 | 163 | 189 | 195 |
| Donations of ecologically sensitive land | | | | | | |
| Charitable Donation Tax Credit | 8 | 5 | 7 | 7 | 5 | 7 |
| Non-taxation of capital gains | 3 | S | S | S | S | S |
| Total tax expenditure | 11 | 7 | 9 | 9 | 7 | 9 |
| Donations of cultural property | | | | | | |
| Charitable Donation Tax Credit | 20 | 18 | 17 | 26 | 23 | 23 |
| Non-taxation of capital gains | 6 | 6 | 5 | 8 | 7 | 7 |
| Total tax expenditure | 26 | 24 | 22 | 34 | 30 | 30 |
| First-Time Donor's Super Credit | – | – | – | – | 5 | 7 |

Note: An "S" indicates that the absolute value of the tax expenditure is less than $2.5 million.
Source: Department of Finance.

# 3. Trends in Charitable Donations in Canada

This section presents statistics on recent trends in charitable giving in Canada. These statistics were compiled from information reported on federal individual income tax returns from 1995 to 2012.

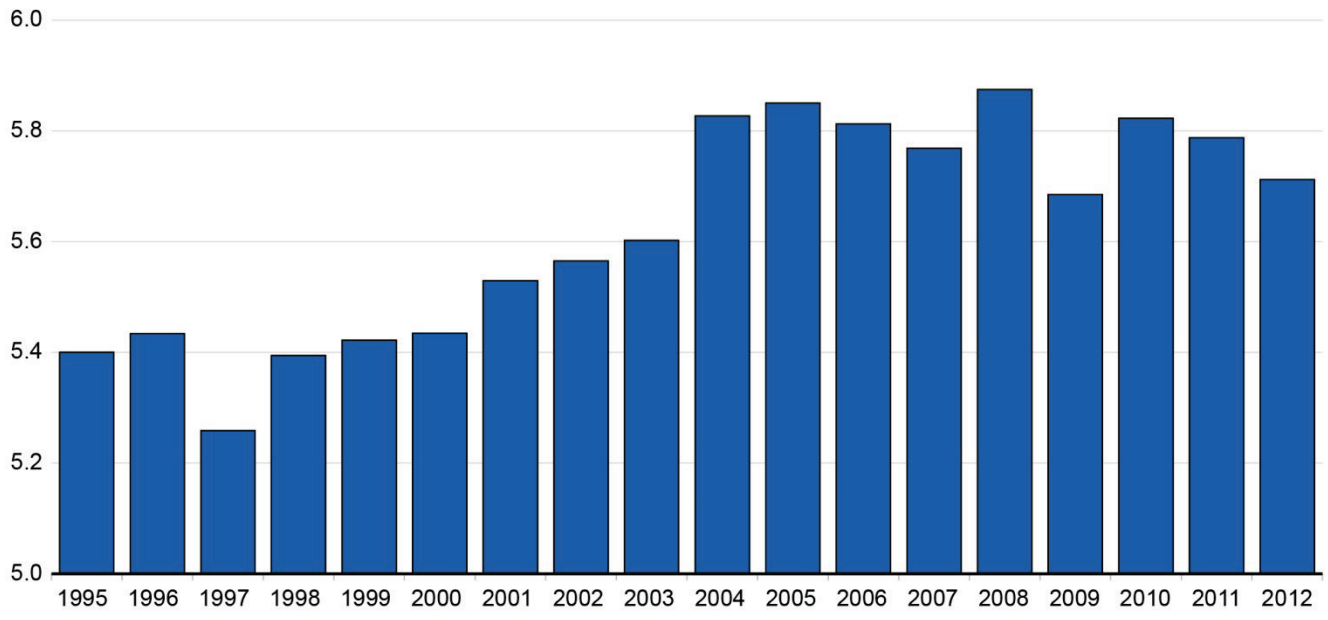
## 3.1 Claimants

The number of individuals claiming the federal Charitable Donation Tax Credit increased significantly between 1998 and 2005 but has since been relatively stable at about 5,780,000 on average (Chart 3). The number of claimants according to tax return information is significantly smaller than the number of donors as estimated from direct surveys. For instance, based on results from the periodic Canada Survey of Giving, Volunteering and Participating, Statistics Canada estimates that close to 23.8 million Canadians, or roughly 85% of the Canadian population aged 15 and over, made a financial donation in 2010.[8] The gap between the number of donors estimated by surveys and the number of individuals who claim the Charitable Donation Tax Credit can be attributed to several factors. Certain donations reported in surveys are not eligible for the credit, such as donations made to non-profit organizations or to other organizations that are not registered charities or other qualified donees. A tax receipt may not have been requested by donors for certain donations, depending on the ways or venues where the donations are made (e.g., door-to-door soliciting, certain fundraising events). Other reasons may explain why individuals who made eligible donations and were issued a tax receipt would not report these donations on their tax returns. In particular, individuals who cannot benefit from the tax credit because they and their spouse or common-law partner have no tax payable have little incentive to report their gifts on their tax returns. Individuals with positive amounts of tax payable may also neglect to report their donations on their tax returns or lose their tax receipts. Finally, the pooling of donations by spouses and partners and the ability to claim the credit in a given year in respect of donations made in any of the previous five years could both reduce the number of distinct individuals who claim the credit in any given year.

[8] This proportion is similar to the proportions estimated by Statistics Canada for 2004 and 2007. Results from the 1997 and 2000 surveys are not comparable to results from later surveys due to changes in survey methodology.

Chart 3

**Number of Claimants of the Charitable Donation Tax Credit, 1995 to 2012**

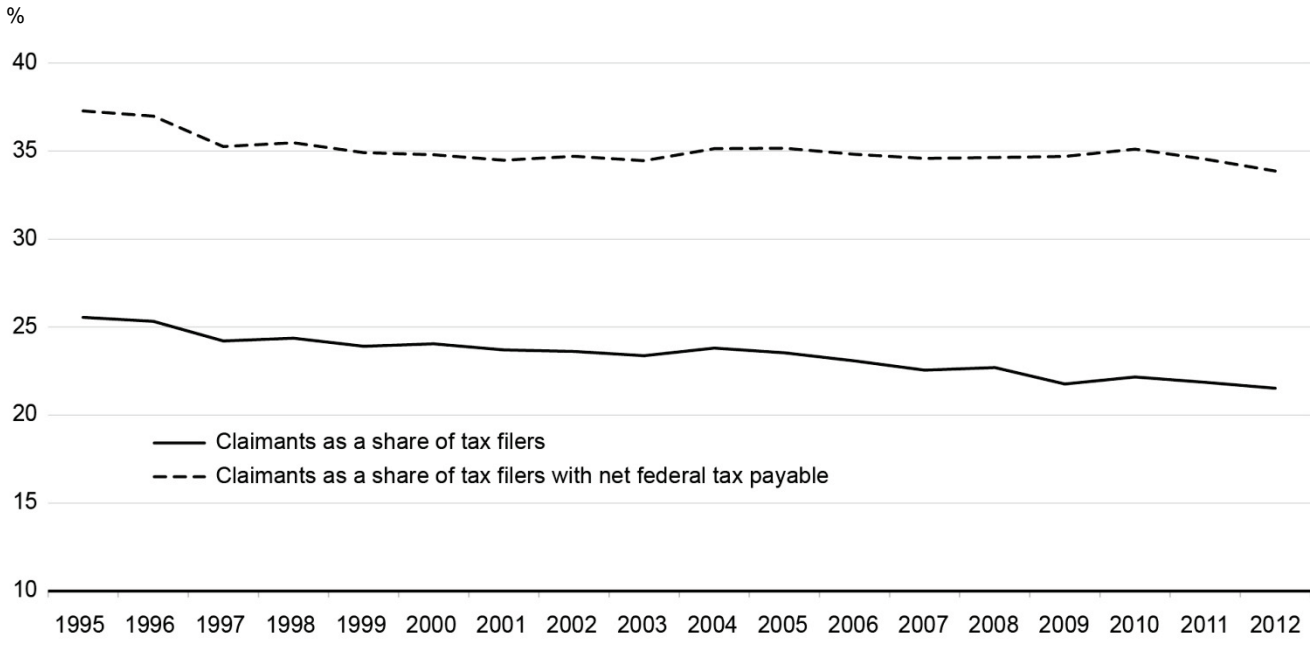



Source: T1 return data.

The proportion of tax filers who claimed the Charitable Donation Tax Credit declined from 25.6% in 1995 to 21.5% in 2012 (Chart 4). This decline has raised concerns among stakeholders. However, as shown in Chart 4, part of the decline in the rate of claimants can be explained by the decline in the share of tax filers who have net tax payable and who can therefore benefit from the Charitable Donation Tax Credit. The share of tax filers with net tax payable was significantly lower in 2012 than in 1995, which reflects in part the tax reductions that were introduced at the federal level over that period. When expressed as a share of tax filers with net tax payable (the dotted line in Chart 4), the rate of claimants remained stable between 1997 and 2010, with declines being observed in two short periods only (before 1997 and after 2010).

Chart 4

**Charitable Donation Tax Credit Claimants as a Share of Tax Filers and as a Share of Tax Filers With Net Federal Tax Payable, 1995 to 2012**




Note: Net federal tax payable is determined before the application of the Charitable Donation Tax Credit.

Source: T1 return data.

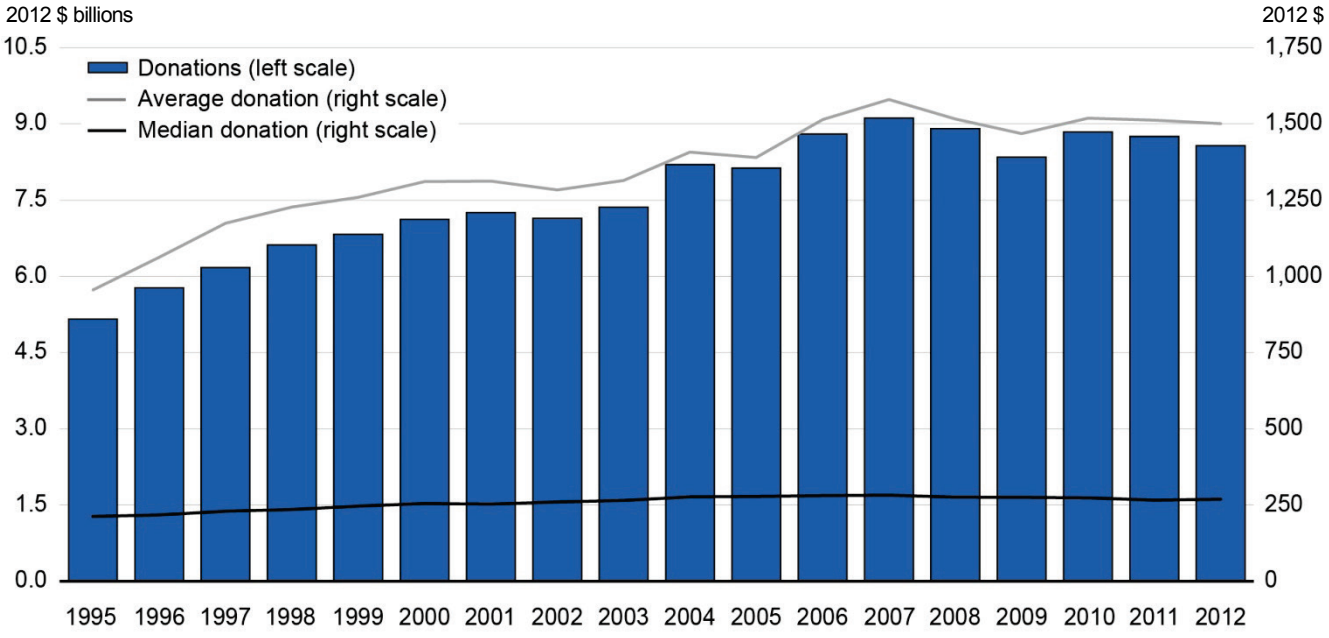
## 3.2 Charitable Donations Claimed

Charitable donations reported by individuals claiming the federal Charitable Donation Tax Credit totalled $8.6 billion in 2012 (Chart 5). This is 5.9% lower in real terms than the peak observed in 2007, with most of the decline having taken place during the last economic recession. The decline since 2007 in the total amount of donations claimed as credit is mainly associated with a decrease in the average value of donations in constant dollars as the number of claimants has been relatively stable.

As is the case for the number of donors, the total amount of charitable donations claimed is much smaller than the total amount of donations estimated by Statistics Canada's Canada Survey of Giving, Volunteering and Participating. In the survey, total financial donations in 2010 were estimated at $10.6 billion, which is $2.1 billion or 25.3% higher than total donations claimed in that year.[9] Results from the survey also suggest that total financial donations increased by 1.7% in real terms between 2007 and 2010, while donations claimed on tax returns declined by 3% over the same period.[10] These discrepancies may be explained by the same factors that may explain the differences between the number of donors based on survey data and the number of individuals claiming the tax credit as per tax return data. In addition, tax return data are likely more precise than survey data, for example because survey respondents may not always remember exactly how much they donated over the survey period.

Chart 5

**Charitable Donations Claimed as a Tax Credit, 1995 to 2012**




Notes: Excludes donations made as part of tax shelter arrangements. Includes donations made in the year of death.

Sources: T1 return data; Department of Finance calculations.

[9] Discrepancies are also observed for 2004 and 2007 (18.9% and 7.4% respectively).

[10] Looking at the real change in donations over the 2004 to 2010 period, survey results report an increase of 7.3%, which is similar to the increase of 7.8% observed from tax data.

Table 3 provides a breakdown of charitable donations claimed on tax returns by type of donation. In 2012, cash donations and gifts of assets not eligible for the capital gains exemption accounted for $8.1 billion or 94% of total donations claimed as credit, while gifts of assets eligible for the capital gains exemption accounted for close to $500 million or 6% of the total.

Table 3
**Charitable Donations Claimed on Tax Returns, by Type of Donation, 2012**

| | Amount of donations (millions of dollars) | Share of total (%) |
|---|---|---|
| Total charitable donations | 8,585 | 100.0 |
| Cash and assets not eligible for the capital gains exemption | 8,087 | 94.2 |
| Assets eligible for the capital gains exemption | | |
| Publicly listed securities | 433 | 5.0 |
| Ecologically sensitive land | 42 | 0.5 |
| Cultural property | 24 | 0.3 |
| Total | 498 | 5.8 |

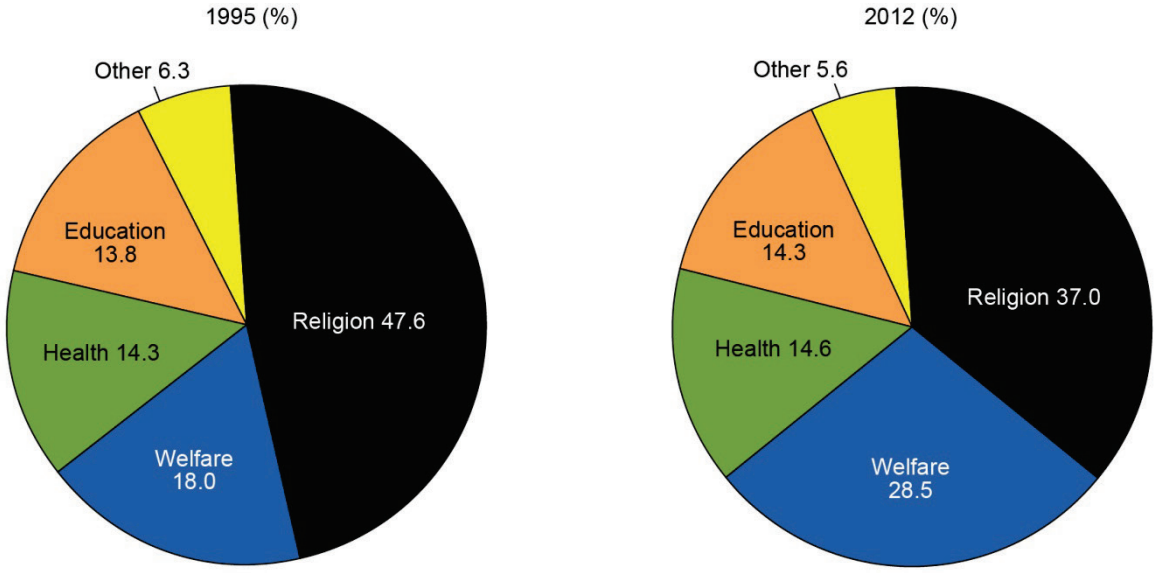
Notes: Totals may not add up due to rounding. Figures assume that the full amounts of gifts were claimed in the year they were made. Cash donations and gifts of assets not eligible for the capital gains exemption cannot be separated due to data limitations. This category also includes gifts of depreciable properties not included in the above categories.

Sources: T1 return data; Environment Canada; Department of Finance calculations.

## 3.3 Donations and Sources of Revenues by Type of Charity

Except for the preferential treatment granted to gifts of ecologically sensitive land and certified cultural property, charitable donations benefit from the same level of tax assistance regardless of the type of charity to which the donations are made.[11] Chart 6 shows the distribution of tax-receipted donations by charity subsector, based on information reported by registered charities to the Canada Revenue Agency.[12] In 2012, tax-receipted donations made to religious charities accounted for 37% of the total, while charities in the welfare and health subsectors accounted for 28.5% and 14.6% of total tax-receipted donations respectively. Although religious charities accounted for the largest share of total donations, their share has decreased significantly since 1995.

Chart 6
**Distribution of Tax-Receipted Donations by Charity Subsector, 1995 and 2012**




Note: Charities are organized into subsectors according to the conventional T3010 classification by charity type.
Source: Registered Charity Information Return (T3010) data.

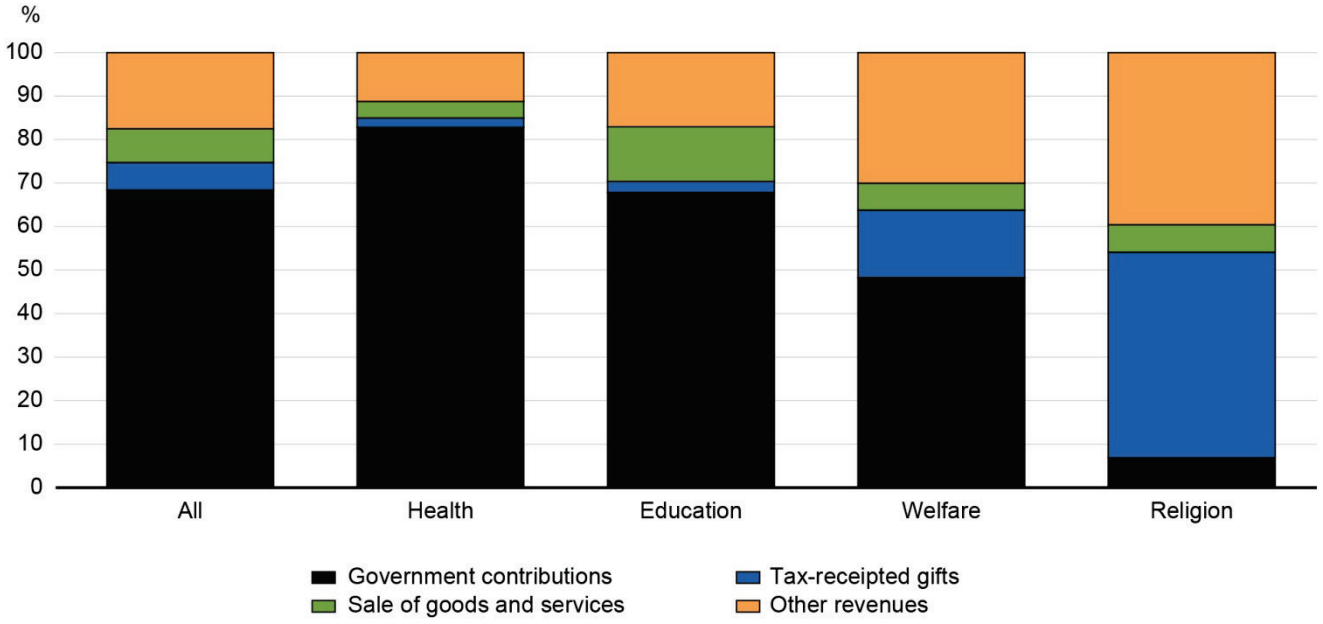
[11] To be eligible for a capital gains exemption, gifts of ecologically sensitive land must be made to a registered charity designated by the Minister of the Environment, while gifts of cultural property must be made to a registered charity designated by the Minister of Canadian Heritage and Official Languages.

[12] Data shown in Charts 6 and 7 are from the Registered Charity Information Return (T3010). They differ from donations reported by taxpayers on the T1 return as they include donations made by corporations and trusts but exclude donations to qualified donees that are not registered charities.

Chart 7 shows the composition of the total revenues of charity subsectors by source. Government contributions are the main source of funding for most subsectors, accounting for 68% of the total revenues of registered charities in 2012. However, the composition of total revenues differs significantly across subsectors. In particular, religious and welfare charities rely on tax-receipted donations for 47% and 15% of their revenues respectively. Charities in the health and education subsectors—groups that include hospitals and universities—receive significant government funding, and as such tax-receipted donations represent only 2% on average of their total revenues.

Chart 7

**Total Revenues of Charity Subsectors by Source, 2012**




Note: Other revenues include non-tax-receipted gifts, transfers from other charities, rental and investment income, sale of assets, memberships and other.

Source: Registered Charity Information Return (T3010) data.

# 4. Effectiveness of the Charitable Donation Tax Credit

## 4.1 Introduction

Governments provide support to the charitable sector in recognition of its valuable contribution to society. In particular, tax incentives for charitable donations are intended to provide support to charities by encouraging individuals to fund the operations of these organizations through private donations. Therefore, tax incentives for charitable donations will be viewed as effective if they contribute positively to the financing of charities, after accounting for the cost of providing such tax incentives. This can be referred to as the "price effectiveness" of tax incentives for charitable donations.

Price effectiveness is a key aspect of the effectiveness of the Charitable Donation Tax Credit, and is the topic of the next three sections. Section 4.2 elaborates on the definition of price effectiveness and discusses a number of issues that need to be considered in determining whether the Charitable Donation Tax Credit is price effective, in particular the price elasticity of donations. Section 4.3 reviews issues that must be addressed in estimating the price elasticity of donations, while Section 4.4 reviews the associated empirical literature.

## 4.2 Definition of Price Effectiveness

Price effectiveness in relation to the Charitable Donation Tax Credit means the extent to which the credit is effective at increasing donations to the charitable sector by reducing the after-tax price of giving, considering the costs associated with the credit. This concept is similar to the concept of cost effectiveness in that it translates the need to maximize output (in this case, donations to charities) while minimizing cost. The expression "price effectiveness" is preferred, however, to emphasize that the credit operates by reducing the after-tax price of giving.

To be price-effective, the Charitable Donation Tax Credit should generate a net benefit to society, that is, the value to society of charitable activities that are funded by the additional donations generated by the credit should be greater than the cost to society of providing the credit. Furthermore, the Charitable Donation Tax Credit must be price-effective relative to the other options available to governments to achieve the same outcomes (i.e., direct government funding of charities, direct provision of charitable goods and services by governments).

The following reviews some issues that need to be considered in determining whether the Charitable Donation Tax Credit is price-effective as so defined.

## Price Elasticity of Giving

The first step in assessing whether the Charitable Donation Tax Credit is price-effective involves determining the extent to which charitable activities are funded by the additional donations generated by the credit, and evaluating the resulting benefits to society. However, quantifying the benefits to society of additional charitable activities is a very complex undertaking; in practice, most analyses of the price effectiveness of tax incentives for charitable donations have focused on the narrower question of quantifying the amount of additional charitable donations that can be attributed to such tax incentives. This involves estimating the price elasticity of charitable donations, that is, the extent to which donations increase when the price of giving is reduced. Since a decrease in the price of giving should result in an increase in charitable donations, the price elasticity of giving is expected to be negative.

In general, it is considered that the price elasticity of giving should be at least as high as one (in absolute value) for tax incentives for charitable donations to be price-effective. That is, tax incentives should generate additional charitable donations that are at least as large as the tax revenues being forgone because of the tax incentives, since otherwise direct funding of the charitable sector by the government would result in more funding being provided to that sector at an equal or lower cost. Other factors, however, should also be considered in determining whether a tax incentive is price-effective (for example, the factors discussed in the rest of this section and the next section), and therefore a tax incentive could be found to be effective or not effective overall even though the price elasticity of giving would be lower or higher than one (in absolute value). As such, this particular condition could be seen as providing some useful guidance as to whether the Charitable Donation Tax Credit is effective or not, but should not be considered determinative on its own.

## Impact of Direct Government Funding of the Charitable Sector on Private Donations

Another factor that needs to be accounted for in assessing the price effectiveness of a tax incentive for charitable donations is the possibility that direct government funding of charities crowds out private donations.[13] Government crowd-out may arise in one of two manners.[14] First, potential donors may see less need to donate to charities when the government increases its funding of the charitable sector. Second, charities that receive government funding may see less need to raise donations from private individuals, especially if fundraising activities are costly and only ancillary to their charitable activities.

Empirical evidence of the existence of a net crowding out effect of government funding on private donations is still relatively limited. Results for Canada obtained by Andreoni and Payne (2013a) suggest an almost dollar-for-dollar government crowd-out, which is largely attributable to reduced fundraising by charities. Similar results are obtained by Andreoni and Payne (2011) using data on U.S. charities. Andreoni and Payne (2013a) further observe that government funding crowds out funding from foundations and other charities, which is consistent with the fact that these groups of donors are generally well-informed about the financial needs of recipient charities, and may respond to government funding by reallocating funds to other charities. Andreoni and Payne (2013b) also find that the level of crowding out varies across charity sectors, being large for social welfare charities but non-existent for health, overseas and relief organizations.

[13] Direct provision by governments of the goods and services that the charitable sector would otherwise provide could also result in the crowding out of private donations. This section only discusses the crowd-out attributable to direct government funding in order to simplify the discussion.

[14] See Andreoni (2006) and Saez (2004) for a more complete discussion of these questions.

Government funding of the charitable sector could potentially also have the opposite effect, that is, it may crowd *in* donations, for instance by signalling to potential donors that the charities that receive government funding would make good use of their donations. Indeed, the results obtained by Andreoni and Payne (2013a) indicate that tax-receipted gifts are crowded in by government funding, but that this effect is more than offset by the crowd-out that is due to reduced fundraising activities, such that the net impact of government funding is to crowd out individual donations.

The crowding out of private donations by direct government funding must be accounted for in assessing the price effectiveness of charitable tax incentives. Government crowd-out increases the price effectiveness of charitable tax incentives relative to direct government funding (and vice-versa in the case of government crowd-in), as it increases the cost for the government of achieving a given level of funding, a point which is further discussed below. Government crowd-out must also be taken into account when estimating the price elasticity of charitable donations, otherwise the price elasticity could be incorrectly estimated.

## Targeting of Tax Incentives

What is being donated may vary (cash or assets), the manner to donate may vary (e.g., donations at fundraising events or through automatic monthly withholding from paycheques) and the recipients of gifts may undertake charitable activities in a broad range of sectors. These factors may influence the price elasticity of donations, which would mean that a tax incentive could be more or less price-effective for each type of donation that qualifies for the incentive (e.g., donations through automatic monthly withholding may adjust more slowly to a change in the tax credit as donors may not readily update their withholding arrangements). Determining whether a tax incentive is targeted at the most price-elastic forms of donations would require estimates of the price elasticity for different forms of donations, including those that do not qualify for the tax incentive (such as donations for which no tax receipts are issued). Such information is difficult to obtain in practice due to data limitations and the fact that the prices of donations that are not eligible for a tax incentive would generally not vary across individuals. Some of the studies that have estimated the price elasticity of donations for different categories of donors or donees are reviewed in Section 4.4.

The non-refundable feature of the Charitable Donation Tax Credit gives rise to a similar issue, in that by design the incentive effect of the credit is limited to those individuals that pay sufficient federal taxes to be in a position to benefit from the credit. The share of individuals who have no federal tax payable (before application of the Charitable Donation Tax Credit) and for whom the credit does not reduce the price of giving has been increasing in recent years (see Chart 4). Whether this reduces the overall price effectiveness of the credit would depend on whether individuals who can and cannot benefit from the credit are equally sensitive to the price of giving. For instance, if individuals who have no federal tax payable (who, in general, would tend to be lower-income individuals) are less sensitive to price than individuals that can fully benefit from the credit, the non-refundable feature of the credit would improve the price effectiveness by ensuring that the credit is targeted at individuals who are more likely to be responsive to the tax incentive. The issue of whether the price elasticity of giving varies for individuals in different income groups is considered in Section 4.4.

While targeting the most price-elastic forms of donations is desirable from a price effectiveness perspective, it is also important that the additional donations generated by the tax credit be targeted at the most pressing social needs in order for social welfare to be maximized. The Charitable Donation Tax Credit and other tax incentives for charitable donations operate much differently in that respect than direct government funding, in that the allocation of tax-assisted funding across charities and charitable needs is determined by donors rather than governments, and is therefore the outcome of the aggregation of the decisions made by individual donors. The allocation of tax-assisted funding across charity sectors seems to differ from the allocation of direct government funding (see Chart 7). This may suggest that government priorities differ from individual preferences, although it can also be the case that governments take into account the distribution of tax-assisted donations in determining which charity sectors should receive direct funding. In any event, it cannot be assumed that direct government funding to charities is necessarily more efficiently targeted than tax-assisted funding.

## Cost of Providing Tax Incentives for Charitable Donations

In assessing the price effectiveness of a tax incentive for charitable donations, one must consider not only the amount of additional donations that result from the tax incentive, but also the cost that is incurred in providing the incentive. This is necessary to assess whether the tax incentive generates a net benefit to society—that is, whether the economic benefits resulting from the additional funding provided to charities exceed the economic costs of providing the tax incentive—and whether the tax incentive is more or less costly than alternative options.

Table 4
**Cost of Tax-Assisted Funding Relative to Direct Government Funding**

| | A. Tax-assisted funding of charities | B. Direct government funding of charities | C. Difference (A - B) |
|---|---|---|---|
| Amount directly allocated to charitable activities | $\Delta D$ | $\Delta D$ | – |
| Administrative costs | $\alpha \cdot \Delta D$ | $\alpha^* \cdot \Delta D$ | $(\alpha - \alpha^*) \cdot \Delta D$ |
| Economic cost of tax distortions—share attributed to increased funding | $\theta_1 \cdot \gamma \cdot \Delta D$ | $\gamma \cdot \Delta D$ | $-(1 - \theta_1) \cdot \gamma \cdot \Delta D$ |
| Economic cost of tax distortions—share attributed to windfall gains | $(\theta_1 - \theta_0) \cdot \gamma \cdot D_0$ | – | $(\theta_1 - \theta_0) \cdot \gamma \cdot D_0$ |
| Economic cost of tax distortions—additional cost due to government crowd-out | – | $\mu \cdot \gamma \cdot \Delta D$ | $-\mu \cdot \gamma \cdot \Delta D$ |
| Fundraising costs | $\rho \cdot \Delta D$ | – | $\rho \cdot \Delta D$ |

Table 4 compares the economic cost of securing an amount $\Delta D = D_1 - D_0$ of additional funding to the charitable sector by encouraging private donations with a tax credit (column A) to using tax revenues to provide the same amount of funding to the charitable sector (column B). This cost can be decomposed as follows:

- *The direct money cost $\Delta D$ of providing the additional funding:* This cost is the same under the two options, although it is assumed by donors in the case of tax-assisted funding, and by the government (and indirectly taxpayers) in the case of direct government funding.
- *Administrative costs:* These costs include, for instance, the costs to individuals of claiming the tax credit, the costs to charities of issuing tax receipts and the costs to the government of administering the tax credit in the case of tax-assisted funding, or, in the case of direct government funding, the costs to charities of requesting the funding and the costs to the government of determining the allocation of funding across charities. It is assumed in Table 4 that these costs are proportional to the amount of additional funding being provided, by factors of $\alpha$ and $\alpha^*$respectively.
- *Economic costs attributable to tax distortions:* Raising tax revenues imposes costs on the economy in that taxes distort decisions made by taxpayers (for instance, individuals may reduce the number of hours they work when labour income is taxed). Such economic costs are incurred in funding the charitable sector in the following circumstances:
  - When a tax credit is provided to encourage charitable donations, the government must raise taxes to make up for the tax revenus loss that results from the provision of the credit. The associated economic cost is equal to $\theta_1 \cdot \gamma \cdot \Delta D$ where $\theta_1$ is the level of the tax credit that must be provided to generate $\Delta D$ in additional donations and $\gamma$ is the economic cost of raising one dollar of tax revenue.
  - In addition, to the extent that the tax credit is provided in respect of all donations, existing donations would qualify for the credit to the same extent as new donations, which would imply that a portion of the additional tax assistance that the government needs to provide in order to generate $\Delta D$ in additional donations will accrue to existing donors as windfall gains. The government will need to make up for this additional revenue loss by further raising taxes, which would result in an additional economic cost of $(\theta_1 - \theta_0) \cdot \gamma \cdot D_0$ where $D_0$ is the amount of donations at the initial level of the tax credit ($\theta_0$) and $(\theta_1 - \theta_0)$ is the increase in the value of the tax credit that is required to generate $\Delta D$ in additional donations.
  - In the case of direct government funding, taxes must be raised in the amount of $\Delta D$ to finance the additional funding being provided, at an economic cost of $\gamma \cdot \Delta D$.

- In addition, as discussed earlier in this section, the cost of direct government funding could be higher if government funding of the charitable sector crowds out private donations. That is, the government might need to provide an additional amount of funding to make up for a reduction in private donations, at a cost in terms of economic distortions of $\mu \cdot \gamma \cdot \Delta D$ where $\mu$ is the magnitude of government crowd-out (for instance, $\mu = 1$ if government crowds out private donations on a dollar-for-dollar basis).[15]

- *Fundraising costs:* These represent the cost that charities must incur in order to attract the $\Delta D$ in additional donations. It is also assumed that there is a fixed fundraising cost of $\rho$ per dollar of donations raised.

As indicated in the third column of Table 4, tax-assisted funding has two potential cost advantages over direct government funding: the lower (by a factor of $1 - \theta_1$) economic costs that arise from the fact that taxes must be raised to cover the value of the tax assistance provided to individual donors rather than the full amount of additional funding provided, and the cost savings because the crowd-out associated with direct government funding is avoided. In turn, tax-assisted funding also has two potential cost disadvantages: fundraising costs, and the economic costs that result from the need to make up for forgone tax revenues attributable to pre-existing donations.

There are inherent difficulties—from both theoretical and data limitation perspectives—in determining the different parameters that are required to assess the total economic cost of generating additional charitable donations by way of a tax credit, and to determine whether this cost is smaller or greater than the cost for the government of directly providing the same amount of funding to the charitable sector. Existing studies for Canada suggest that the economic cost of raising one dollar of tax revenue ($\gamma$) is in the range of 25 cents to 30 cents per dollar, while available information on fundraising costs would suggest that the cost to charities of raising one dollar of donations ($\rho$) may be about 15 cents.[16] On the other hand, accounting for the forgone tax revenues attributable to pre-existing donations would require some knowledge of the impact of the tax credit on charitable donations, since the magnitude of windfall gains accruing to existing donors depends on the extent to which donations are higher because of the tax credit. As discussed in Section 4.4, limited evidence is available as to the price elasticity of charitable donations in Canada. The same is true regarding the scale of government crowd-out in Canada, with only a few studies having considered this issue (see the discussion earlier in this section). More definite estimates of the price elasticity of charitable donations and of government crowd-out in Canada would be needed in order to get a better indication of the price effectiveness of the Charitable Donation Tax Credit, both on its own and relative to direct government funding.

[15] This cost would be somewhat lower, to the extent that private donations are reduced, because of the reduction in the total amount of tax assistance provided in respect of private donations.

[16] Lester (2012), using estimates from Dahlby and Ferede (2011), calculates a welfare loss due to taxation of 26 cents per additional dollar raised in 2010. Results obtained by Baylor and Beauséjour (2004) using a dynamic general equilibrium model would imply a cost of about 30 cents per dollar raised based on the 2010 tax mix. As for fundraising costs, Hall (1996) finds that fundraising costs in Canada averaged 26 cents per dollar raised by charities, with a median of 12 cents. According to more recent figures from Charity Intelligence Canada (www.charityintelligence.ca/canadas-top-10-largest-charities), fundraising costs for Canada's 10 largest charities averaged 21 cents per dollar of donations between 2012 and 2014. Data from the Registered Charity Information Return (T3010) suggests costs closer to 15 cents per dollar of donations.

## 4.3 Estimating the Price Elasticity of Charitable Donations

Determining the price elasticity of giving is a key step in assessing the price effectiveness of the Charitable Donation Tax Credit, and measuring the extent to which tax credits and other tax incentives encourage individuals to donate more is an issue that has been studied extensively in the economic literature.

As is the case for many empirical analyses, the key challenge in estimating the price elasticity of charitable donations is to untangle the effect of price from the influence of other factors on charitable donations. This section discusses the nature of this challenge in more detail and reviews some of the factors other than price that may influence charitable donations. Section 4.4 reviews estimates of the price elasticity of giving that have emerged over the last 40 years and considers the evidence that is available on the question of the price elasticity of charitable donations in Canada.

### Factors Influencing Charitable Donations

From an analytical perspective, charitable donations can be viewed as a normal economic good, the amount of which is determined by its relative price, the constraints that limit an individual's ability to donate, and the individual's preferences.

The price for an individual of donating one dollar is the direct financial cost of parting with one dollar, minus any tax assistance that the donor may obtain, net of any compliance costs that must be incurred to obtain the tax assistance.[17] Other financial and non-financial costs may also be incurred by a donor (e.g., transaction costs, banking charges) that would increase the price of donations. These other costs are generally unobservable, and most often ignored in empirical studies.

Individuals are constrained in the amounts they can donate by their available resources—both their income and wealth, and their financial (cash, investments) and non-financial (real assets) resources. Resource constraints not only limit the amounts that individuals can donate, but also the types of donations that can be made (i.e., gifts of cash versus assets). This may indirectly affect the price a donor faces, for instance when gifts of certain assets benefit from more generous tax preferences, as is the case in Canada for publicly listed securities, ecologically sensitive land and cultural property.

Preferences are what motivate an individual to give. There is an ample literature on why people donate to charities, which highlights two primary factors. Donors may be motivated by altruism, that is, by a desire to have a positive impact on others and their community. In this case the reason to donate is to make other people feel better. In contrast, individuals may also donate because *they* feel better if they donate, irrespective of what is achieved through their donations. This "warm-glow" effect (sometimes referred to as "impure altruism") arises whenever the positive feeling associated with the act of giving provides by itself utility larger than the monetary cost of the donation.[18] Such a warm-glow effect may be attributable to social pressures, sympathy for a cause, guilt, or the donor's desire to get social recognition. Fundraising activities by charities, by increasing pressures to donate, can contribute to this warm-glow effect, and can thus indirectly motivate individuals to donate.

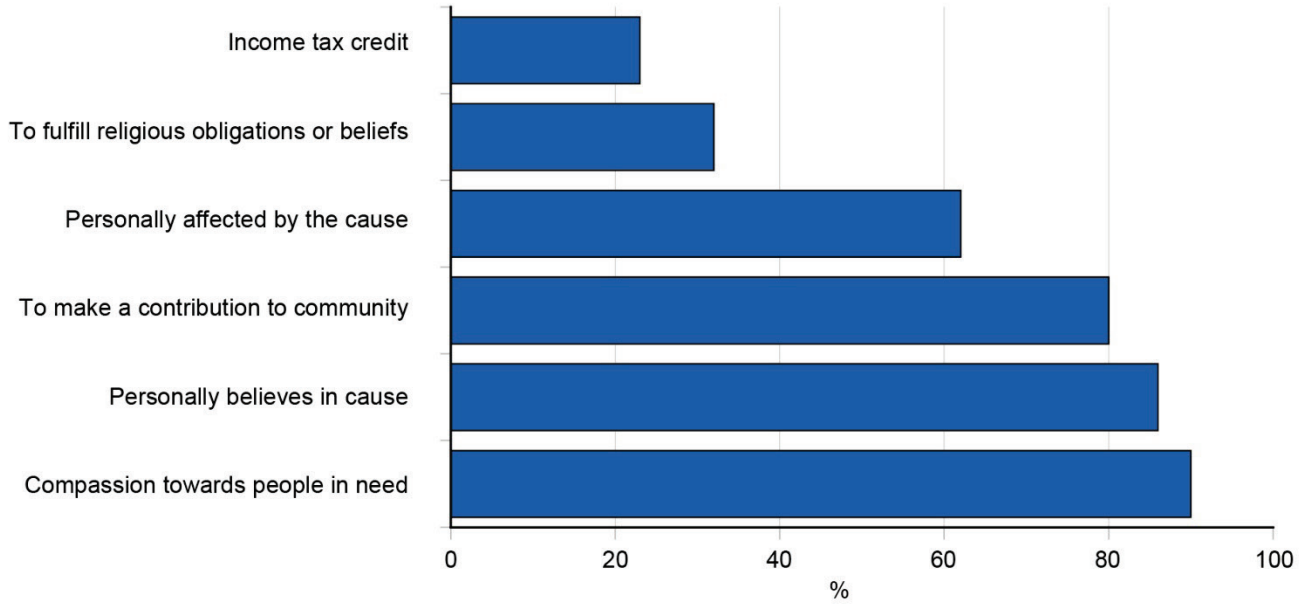
[17] Non-tax assistance for charitable donations may also be available, for instance when a government matches the donation made by the individual. A program that matches private donations on a dollar-for-dollar basis would effectively reduce the after-tax price of donations by one half in that an individual would achieve two dollars of donation for the (private) price of one.

[18] See Andreoni (1989) for further details.

Measuring the effect of price on donations requires that the effect of donors' motivations and ability to donate be properly controlled for, which in turn requires that each of these three variables—price, motivations and ability to donate—be properly measured.

This raises many difficulties, in particular regarding motivations, which are difficult to observe. Donors may be asked about their motivations in surveys; for instance, Chart 8 indicates the motivations reported by Canadian donors that were surveyed through Statistics Canada's Canada Survey of Giving, Volunteering and Participating. Most respondents reported some altruistic motivations, with 90% of donors saying their donations were motivated by compassion towards people in need, 86% by a personal belief in a cause, and 80% by a desire to make a contribution to the community.

Chart 8
**Reasons for Making Financial Donations, 2010**

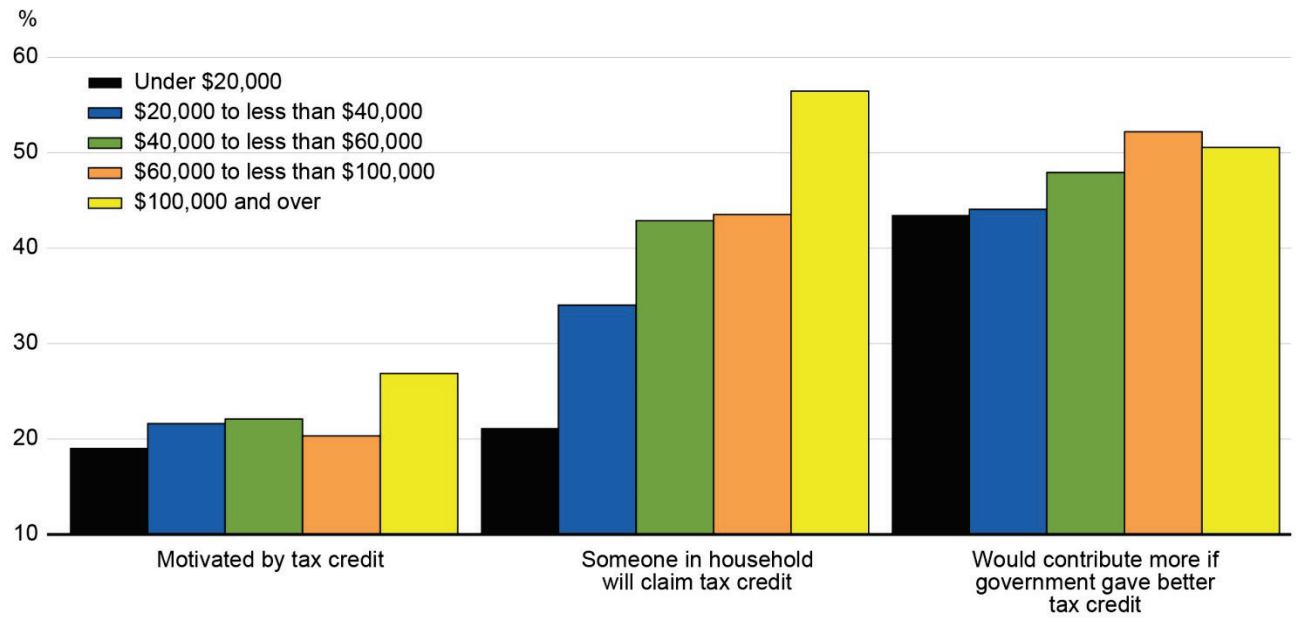



Note: Donors aged 15 and over.
Source: Statistics Canada, Canada Survey of Giving, Volunteering and Participating, 2010.

However, self-reported motivations may not necessarily be good indicators of true motivations, in particular when motivations are being confounded with considerations with respect to price or ability to donate. As shown in Chart 8, just 23% of donors cited the income tax credit as a motive for giving, well below a range of other factors, which could be seen as suggesting that the tax credit has little impact on donations. However, tax incentives for donations do not work by motivating people to donate, but rather by reducing the after-tax price of donations so that people who are motivated to donate will donate more. Responses to survey questions that are more directly targeted on the impact of the credit on the after-tax price of donating are suggestive of a larger impact of the tax credit. For instance, Chart 9 shows that the share of respondents who said they intended to claim the tax credit or would give more if the tax credit was increased is greater than the share of respondents who indicated they were motivated to give by the tax credit. That said, it can also be seen in Chart 9 that responses to these questions vary by income class, with higher-income respondents being more likely to provide answers that suggest that the tax credit has some influence on their donations. This may indicate that higher-income individuals are more sensitive to price considerations, but could also suggest that donations are determined by some other underlying factors that vary with income (e.g., low-income individuals may not be able to donate more due to budget constraints, and thus would be less likely to answer that they would contribute more if the tax credit were enhanced).

Chart 9

**Survey Responses Concerning the Impact of the Charitable Donation Tax Credit, by Total Household Income of Respondents, 2010**




Note: Total income, before taxes and deductions, of all household members from all sources in the past 12 months.

Sources: Statistics Canada, Canada Survey of Giving, Volunteering and Participating, 2010; Department of Finance calculations.

## Socio-Economic Characteristics of Donors

In practice, most empirical studies of the determinants of charitable donations make use of observable socio-economic variables, such as income, age or gender, as indicators of donors' motives and ability to give. Questions arise, however, as to how good a role these variables can play as indicators of these factors, and how to interpret the relationships between these variables and the donations being observed. These are important questions, as the conclusions drawn concerning the impact of price considerations on donations may not be valid if the variables used to control for donors' motives and ability to give are poor proxies for these factors, and the results obtained may be difficult to interpret if the relationships between these variables and donations are not well understood.

This section reviews the key socio-economic characteristics that are closely correlated with charitable giving and which are generally explicitly controlled for in econometric studies of the price elasticity of giving. Canadian statistics are presented for each of these characteristics in order to inform the interpretation of existing price elasticity studies that are reviewed in the next section.[19]

### *Income*

Income is a strong predictor of charitable giving, and studies have generally found that the income elasticity of donations is positive, indicating that the average value of giving increases with income. An individual's ability to donate would be expected to increase with the individual's income, because donations can be financed out of current income or out of accumulated wealth, for which income can be a proxy. Income may be associated with giving for other reasons as well. Higher-income individuals may feel they have a moral obligation to "give back" to their communities, or may be approached more often for donations, thereby increasing the social pressure and opportunities to donate.[20] Higher-income individuals may also be more inclined to make donations that qualify for the tax credit for social or institutional reasons.

A strong correlation between donations and income is observed in Canada, both in survey and tax return data. As shown in Table 5, the share of individuals that claim the Charitable Donation Tax Credit increases with income, as does the share of all claimants that donate more than $200 and the average value of reported donations.

[19] Unless otherwise noted, the statistics presented in this section are derived from tax return information for a sample of 10% of all tax filers aged 20 or more that provides information for both a tax filer and his or her spouse or common-law partner (if there is one). Donations made in the year of death are not shown in order to focus on charitable giving decisions made actively as opposed to bequests. Adjustments are also made to exclude outlying values. Since spouses and partners can pool their donations and may choose how much to donate based on their combined resources, the income of each spouse or partner in a couple is calculated as the couple's combined income, divided by the square root of two to account for economies of scale available to couples. Individuals are classified by income quantile on the basis of their income as so adjusted. Income corresponds to gross adjusted pre-tax income, which is defined as total income for federal tax purposes (line 150 of the federal income tax return) plus or minus some adjustments, including the addition of the non-taxable portion of capital gains, and the removal of the gross-up of dividends from taxable Canadian corporations and the amount of pension income transferred from a spouse or common-law partner. The sample is restricted to filers with federal tax payable (or in the case of married or common-law filers, to those with combined federal tax payable).

[20] See Bryant et al. (2003).

Table 5
**Share of Individuals Claiming the Charitable Donation Tax Credit and Average Donation, by Income Quantile, 2012**

| | Income quantile | | | | |
|---|---|---|---|---|---|
| | P0-P25 ($0-$37,121) | P26-P50 ($37,122-$56,149) | P51-P75 ($56,150-$84,380) | P76-P95 ($84,381-$157,627) | P96-P100 ($157,628 and above) |
| Claimants as a share of tax filers with net federal tax (%) | 23.6 | 27.8 | 32.3 | 39.0 | 47.7 |
| Distribution of claimants by size of donations (%) | | | | | |
| Donations of $50 and less | 5.7 | 6.3 | 7.1 | 6.9 | 3.8 |
| Donations of $51-$200 | 5.8 | 6.8 | 8.2 | 9.5 | 7.1 |
| Donations over $200 | 12.1 | 14.6 | 17.0 | 22.6 | 36.7 |
| Average value of donations ($) | | | | | |
| All claimants | 651 | 917 | 1,055 | 1,292 | 4,775 |
| Claimants donating $200 or less | 137 | 140 | 141 | 150 | 175 |
| Claimants donating more than $200[1] | 514 | 777 | 913 | 1,135 | 4,326 |
| Donations of publicly listed securities | 0 | 0 | 2 | 8 | 274 |

Note: Totals may not add up due to rounding.

[1] The average value of donations above $200 excludes donations of publicly listed securities.

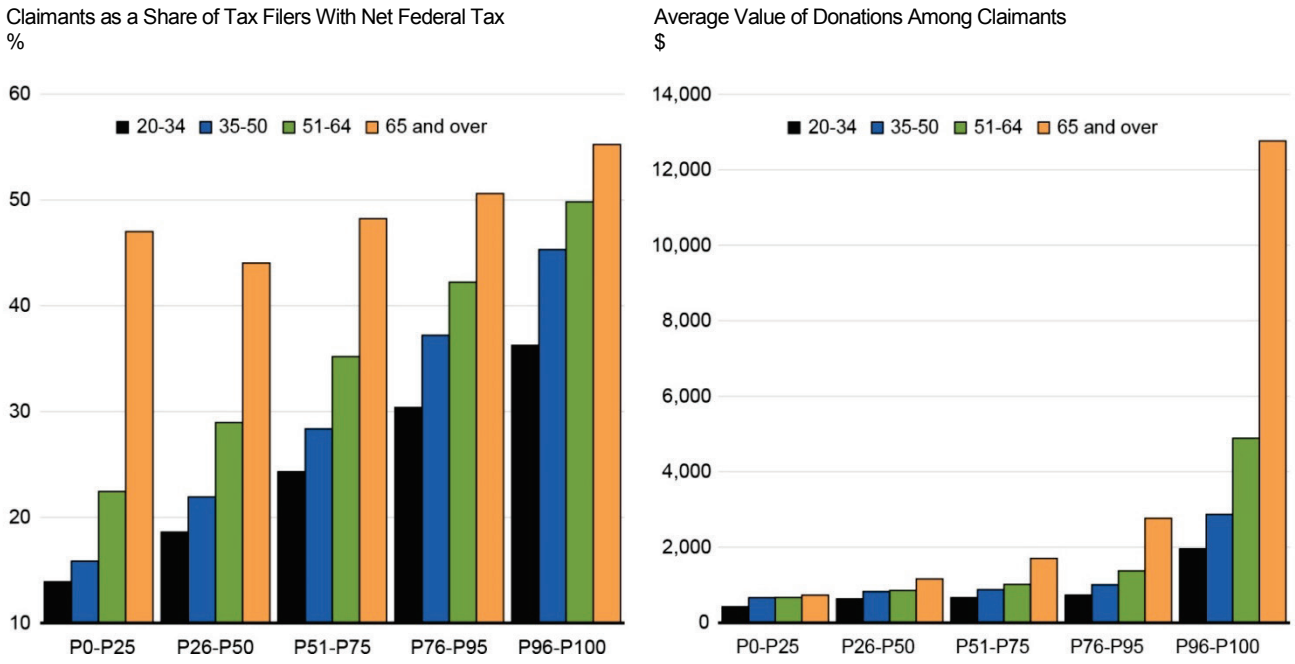
Source: T1 return data.

### *Age*

A strong positive correlation also exists between age and charitable donations. In Canada, the share of individuals that claim charitable donations increases with age at all income levels (Chart 10). Average reported donations also increase with age, with claimants aged 65 and over making significantly larger donations than their younger counterparts, especially for claimants in the top 5% income quantile. Similar patterns are observed in other countries, and studies have generally found that charitable donations increase with age, controlling for other determinants of donations.

Chart 10

**Share of Individuals Claiming the Charitable Donation Tax Credit and Average Donation, by Age and Income Quantile, 2012**




Note: The income ranges for each quantile correspond to those presented in Table 5.

Source: T1 return data.

A variety of potential explanations for the relationship between age and charitable giving are offered in the literature. Most importantly, age may reflect life-cycle dynamics whereby the disposable income of individuals increases through time as children leave home, mortgages are being paid off, work-related expenses are reduced, etc., and wealth is being accumulated out of which larger donations can be made. Some authors have also suggested that the larger donations of older donors may in part be attributable to the higher participation of these individuals in church activities (see below about religious motivations for giving).[21]

### *Gender and Marital Status*

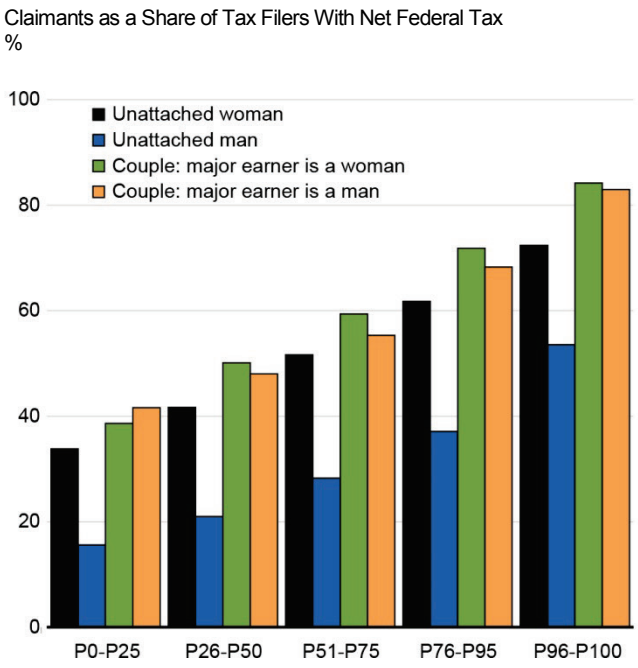
Results from studies that have considered the impact of gender on giving are somewhat mixed, although some recent studies have suggested that women may be more likely to donate than men after controlling for other factors.[22] Empirical studies have also generally found that individuals in a couple relationship make larger donations than single, separated and divorced individuals, even after controlling for income and age.

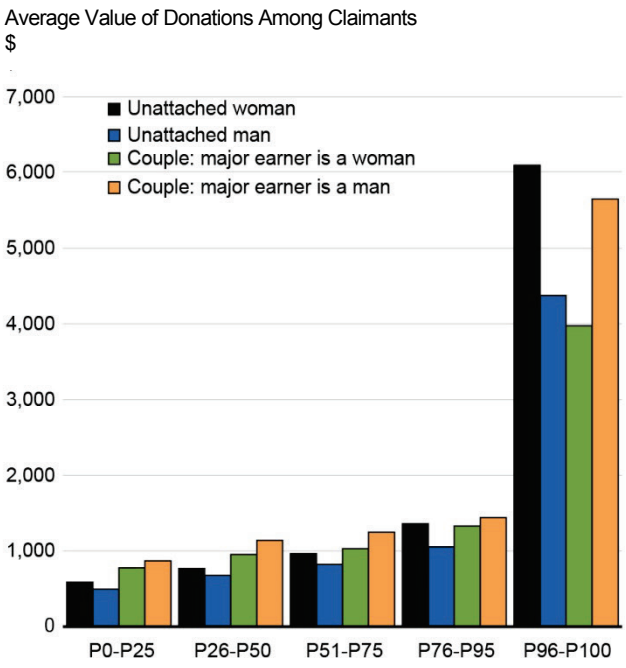
[21] See Bekkers and Wiepking (2012). According to results from Statistics Canada's Canada Survey of Giving, Volunteering and Participating reported in Turcotte (2012), roughly 30% of respondents aged 65 and over reported being religiously active compared to only 13% of those aged 35 to 44.

[22] See Mesch et al. (2011) and Bekkers and Wiepking (2012) for a review of studies that consider the impact of gender.

Chart 11

**Share of Individuals Claiming the Charitable Donation Tax Credit and Average Donation, by Gender and Income Quantile, 2012**




Notes: In this chart, spouses or common-law partners are counted as having claimed the tax credit as long as at least one of the two spouses or partners has claimed the credit. The income ranges for each quantile correspond to those presented in Table 5.

Source: T1 return data.

Chart 11 illustrates these dynamics amongst Canadian donors. Unattached women are more likely to claim the tax credit for donations compared to their male counterparts, and donate slightly more on average. For individuals with a spouse or partner, donation rates and average donations are higher than for unattached individuals, and do not vary significantly depending on whether the couple's main earner is a man or a woman, apart from average donations by the top 5% of tax filers which are significantly larger when the couple's main earner is a man.

The exact nature of the relationship between marital status and giving is unclear. One possible explanation would be that individuals with spouses or partners have expanded social networks, and as such would be exposed to more opportunities to donate than single individuals.[23] Gender and marital status could also be interacting, in that gender differences in giving may be related to how decisions about giving are made within couples, for instance if partners are discussing the amount of donations they want to make.[24]

[23] See Bekkers and Wiepking (2012).

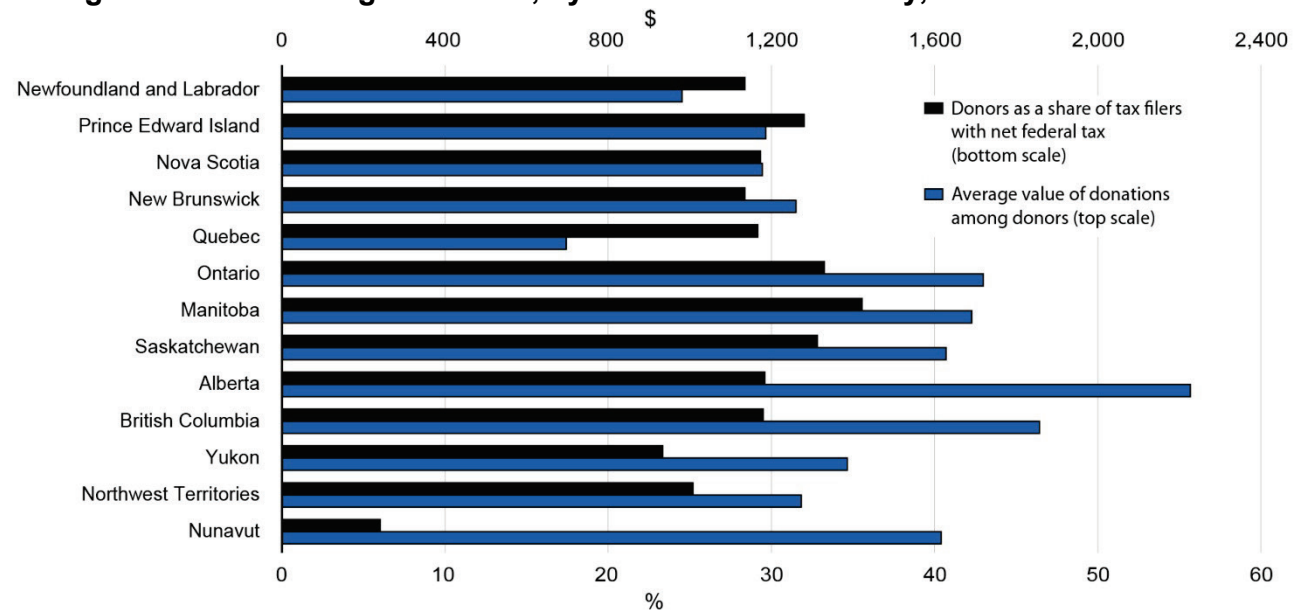
[24] See, for example, Andreoni et al. (2003), Yörük (2010), and Andreoni and Payne (2013b).

### *Region*

Giving behaviours vary across Canadian provinces and territories. The share of individuals claiming the tax credit is relatively high in Prince Edward Island, Ontario, Manitoba and Saskatchewan, while the average value of donations reported by residents of Quebec is considerably lower than for residents of other provinces and territories (Chart 12).

Chart 12

**Share of Tax Filers With Net Federal Tax Claiming the Charitable Donation Tax Credit and Average Donation Among Claimants, by Province and Territory, 2012**



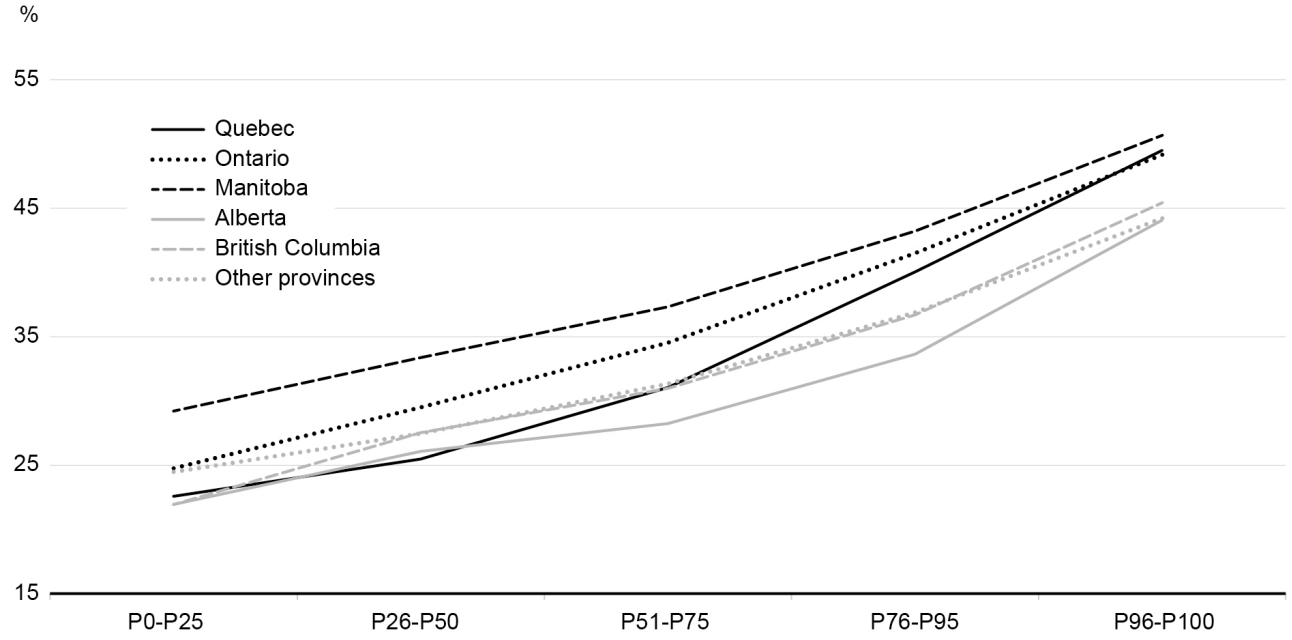

Note: Based on T1 tax returns for all tax filers aged 20 and over, excluding those who died in 2012.

Source: T1 return data.

Regional differences may reflect differences in income. As shown in Chart 13, donation rates increase with income in all provinces, which implies that aggregate donation rates would be expected to be higher in richer provinces. Regional differences may also reflect other factors, such as differences in the sizes of age groups, in the composition of the charitable sector in each province, or in the levels of government social spending.

Chart 13

**Share of Tax Filers Claiming the Charitable Donation Tax Credit, by Province and Income Quantile, 2012**




Note: The income ranges for each quantile correspond to those presented in Table 5.

Source: T1 return data.

### *Other Characteristics*

Other characteristics may be of interest when analyzing the determinants of charitable giving.

Most empirical studies find a positive relationship between charitable giving and education after controlling for the fact that more educated people generally earn more. Possible explanations for this relationship include higher educated individuals being more exposed to information about charitable causes or more often solicited, or having a higher degree of social trust, a greater sense of social responsibility or more confidence in charities.[25]

[25] See Bekkers and Wiepking (2011) for a summary.

Another important social determinant of charitable giving is religion. Empirical studies that control for religious involvement find a positive relationship between religion and charitable giving. As shown in Chart 6, religious organizations in Canada receive the largest share of charitable donations. While only 32% of donors in 2010 reported a sense of religious obligation as a motive for giving, respondents that attended religious services weekly were more likely to make charitable donations and donated more on average compared to those who did not attend services weekly.[26] The positive relationship between religion and charitable giving may reflect social values, but could also be explained by the fact that people attending religious services may have more opportunities for giving.[27]

## 4.4 Review of Estimates of the Price Elasticity of Giving

As noted above, assessing the price effectiveness of tax incentives for charitable donations requires some knowledge of the impact of the tax incentives on the amount of donations made, which in turn involves estimating the price elasticity of charitable donations, that is, the extent to which donations increase when the price of giving is reduced.

Many empirical studies over the last 40 years have attempted to estimate the responsiveness of charitable donations to tax incentives. The majority of these studies have focused on charitable giving in the United States, with only a few studies looking at the impact of tax incentives on charitable donations based on data from Canada or other countries (Germany and France in particular). This section presents a review of the international literature, followed by a review of the Canadian studies. Results from the international literature may not be directly applicable to Canada as the design of tax incentives may vary across countries and individuals may respond differently to these incentives due to societal, institutional or other differences. Nevertheless, a study of these results can be informative by helping to understand how individuals respond to tax incentives.

### International Studies

There is a general consensus in the literature that tax incentives for charitable donations have a positive impact on charitable giving, although the magnitude of that impact is debated given the many challenges associated with estimating the price elasticity of giving. As noted in Section 4.3, a fundamental difficulty is distinguishing the causal effect of price on charitable giving from the effects of income and other factors. In recognition of this difficulty, this literature has progressed by making use of increasingly sophisticated econometric methods, notably to try to account for determinants of giving that are unobservable.

Early estimates of the price elasticity of giving were obtained using cross-sectional data (i.e., observations for many individuals for a single year) and statistical methods that exploited the fact that not all individuals in a given year face the same after-tax price of giving. The consensus among these early studies was that the price elasticity of giving was greater than one in absolute value, indicating that tax incentives for charitable donations could be price-effective.[28]

[26] Statistics Canada, 2010 Canada Survey of Giving, Volunteering and Participating. In 2010, 93% of respondents who attended church on a weekly basis made charitable donations and donated an average of $1,004. In contrast, 83% of respondents who did not attend church weekly made charitable donations, donating $300 on average.

[27] See Bekkers and Wiepking (2011). Members of certain religious organizations are also required to make donations to their organizations.

[28] See Clotfelter (1985).

Later studies began to exploit panel data (i.e., observations for many individuals over a multiple-year period), which offers two major advantages. First, the ability to follow the same group of individuals over time makes it possible to distinguish between long-run responses to persistent changes in price and income from short-run responses that are driven by donation-smoothing or learning behaviours.[29] Second, panel data allows for econometric methods that help reduce statistical biases caused by the omission of unobservable factors. This aspect is particularly important since, as noted, the underlying motives for giving are often unobservable. Overall, results from panel data studies tend to yield price elasticity estimates that are lower than the results obtained by studies using cross-sectional data. In many cases, these estimates were less than one in absolute value, suggesting that tax incentives for charitable donations are less likely to be price-effective.

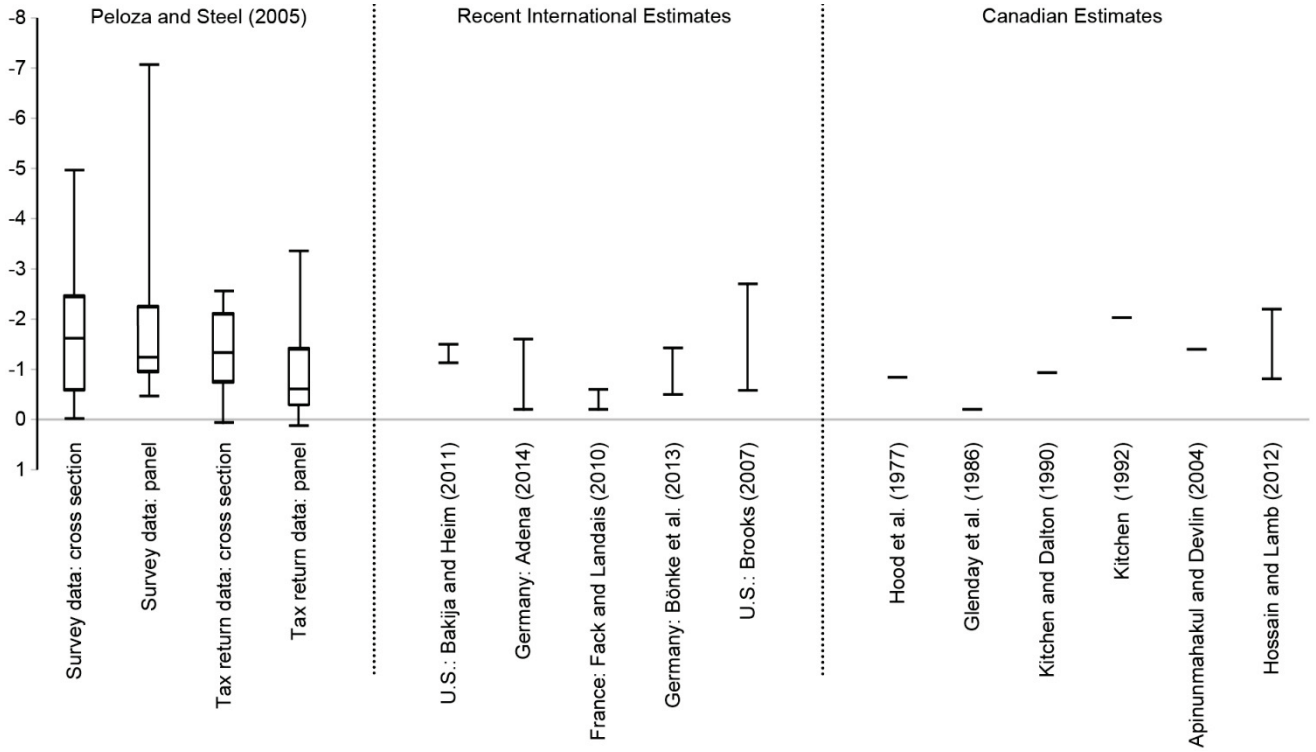
Different price elasticity estimates have also been obtained depending on whether the data being used were collected by surveys or from tax returns. Survey data provide a rich set of socioeconomic characteristics, but are also less precise in general than tax return data. Furthermore, high-income households and individuals tend to be under-represented in survey data, which can be problematic given their greater propensity to donate. In turn, tax return data generally lack the rich socioeconomic information available in survey data.

Chart 14 summarizes the range of estimates that were obtained in international studies published before 2005 (the majority of which were based on U.S. data), as reported in an extensive review of price elasticity estimates that was published by Peloza and Steel (2005). Estimates from more recent studies, including some non-U.S. studies, are also shown in the middle panel of Chart 14, while estimates from available Canadian studies are shown in the right panel.

[29] See Barrett (1991) and Bakija and Heim (2011).

Chart 14

**Summary of Estimates of Price Elasticity of Charitable Donations**




Notes: Estimates in the left panel are summarized by box and whisker plots. The lower end of each box marks the upper threshold for the lowest quartile of estimates and the top end of each box marks the lower threshold for the top quartile of estimates. The median estimate is marked by the horizontal markers inside the box. The whiskers are the two lines outside the box that extend to the highest and lowest estimates. Estimates in the middle and right hand panels are summarized by the range between the lowest and highest estimates. Single estimates are indicated by single markers. Estimates from studies that dealt specifically with bequests are not shown.

Estimates for the pre-2005 period are organized according to the source and type of data used (i.e., survey data versus tax return data, cross-sectional data versus panel data). As can be observed, estimates differ noticeably according to the source and type of data used. Estimates based on cross-section samples of survey data have an interquartile range from -0.6 to -2.4 and a median estimate of -1.6, while those based on survey-based panel data range from -1.0 to -2.2 with a median of -1.25. Overall, among survey data estimates, those based on panel data are lower than those based on cross-sectional data.[30] Estimates from studies that made use of tax return data rather than survey data are also generally lower, with elasticity estimates based on cross-sections of tax return data ranging from -0.8 to -2.1 with a median estimate of -1.3, compared to a median estimate of only -0.6 and an interquartile range from -0.3 to -1.4 for estimates obtained from tax return panel data.[31] Peloza and Steel (2005) provide statistical evidence that confirms that the price elasticity of giving reported in studies based on tax return data is lower than in studies based on survey data. However, these authors were not able to conclude that the difference between estimates based on panel data and cross-section data was statistically significant.[32]

The majority of older studies reviewed in Peloza and Steel (2005) generally attempted to estimate the responsiveness of donations to the after-tax price of giving for the population as a whole. It may be the case, however, that different groups of donors respond differently to tax incentives, for instance that higher-income donors are more sensitive to tax incentives than lower-income donors, or that individuals who make relatively large donations or who donate to certain types of charities pay more or less attention to the after-tax price of giving than other donors. Knowledge of how the price elasticity of giving may differ across groups of donors is important in assessing the price effectiveness of charitable tax incentives, both overall and for distinct groups of donors. More recent studies have focused on how the responsiveness of donations to the after-tax price of giving may vary across different groups of donors. Results seem to be mixed as to whether higher-income individuals respond more strongly to charitable tax incentives than other donors.[33] Using sophisticated econometric techniques, Bakija and Heim (2011) find little evidence that higher-income individuals are more sensitive to the price of giving compared to lower-income individuals.[34] Their study makes use of a panel data sample of high-income U.S. tax filers spanning from 1979 to 2006, and exploits the variation in the after-tax price of giving over time and across U.S. states to estimate the price elasticity of giving.[35] In contrast, using a similar methodology with German data, Adena (2014) finds evidence of heterogeneity across income classes, with estimates of -0.2 for individuals at the lower end of their income spectrum, -1.6 for those in the middle, and -1.4 for those at the top of the income spectrum. Both of these studies, particularly that of Bakija and Heim (2011), rely on samples of data in which high-income individuals are over-represented; as such their ability to detect differences in the price elasticity of giving across income groups may be limited.

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[30] The average elasticity estimate within the upper and lower quartile of cross-section-based survey estimates is -1.6 compared to -1.3 for survey panel data estimates.

[31] The average elasticity estimate within the upper and lower quartile of tax return cross-section based estimates is -1.4 compared to -0.8 for tax return panel data estimates.

[32] Estimates presented in Peloza and Steel (2005) may also vary depending on the methods used to address the econometric challenges associated with the large percentage of individuals who donate nothing at all. See for example Bradley et al. (2005).

[33] The impact of income on the price elasticity of giving was also addressed in earlier studies but again with mixed results; see Peloza and Steel (2005) for a summary. Based on the range of income compositions used in the samples employed in the studies reviewed by Peloza and Steel (2005), the authors were not able to find statistical evidence that the price elasticity of giving differs by income.

[34] In an earlier study, Bakija and Heim (2008) did conclude that the price elasticity of giving was higher when the sample was restricted to those with very high incomes (their lowest income category was for incomes of less than $200,000).

[35] Bakija and Heim (2011)'s preferred estimates fall between -1.13 and -1.5, depending on the specification employed. Their results also suggest that donors react slowly to changes in the price of giving, likely because it takes time for individuals to learn about changes in the after-tax price of giving.

Recent studies comparing the price elasticity of giving for donors making large or small donations generally suggest that donors may indeed respond differently depending on their level of giving. Based on a sample of German tax filers ranging over 1998 to 2004, Bönke et al. (2013) find that individuals who donate relatively little to charity and those who make very large donations are more responsive to changes in the after-tax price of giving compared to other donors. More specifically, they find a price elasticity of -1.4 for small donations and -1.1 for very large donations, while the elasticity for the majority of donors can be as low as -0.5. Fack and Landais (2010), using tax return data for middle-income French households, find that the price elasticity of giving tends to be higher for more generous donors (-0.6) compared to smaller donors (-0.2).

Finally, using U.S. survey data, Brooks (2007) obtains an overall price elasticity of giving of -2.7, but finds substantial variation in the price elasticity of giving depending on which charity sectors individuals choose to donate to. Donations to religious charities are found not to be affected by the price of giving, while the price elasticity of giving to charities in other sectors ranges from -0.6 for donations to those in the health sector to -1.3 for donations to charities that relieve poverty.

## Estimates of the Price Elasticity of Giving in Canada

As noted, only a few studies have considered the price elasticity of giving using Canadian data. Early estimates for Canada date back to years before 1988 when charitable donations made by individuals were deductible in computing taxable income rather than eligible for a non-refundable tax credit. Using aggregate data on donations and income for the years 1968 to 1973, Hood et al. (1977) estimated the price elasticity of giving in Canada to be -0.86. Subsequently, Glenday et al. (1986) obtained an estimate of only -0.2 based on a small cross-section sample of tax return data for the years 1978 to 1980. Finally, using data from Statistics Canada's Survey of Family Expenditures, Kitchen and Dalton (1990) estimated an elasticity of -0.93 for 1982 and Kitchen (1992) obtained an estimate of -2.03 based on data for 1986. Their studies also examined elasticity differences across regions and income groups, though their results appear to suffer from identification problems (which could explain the large gap between these two estimates).[36]

Caution should be taken in interpreting the results from these early studies, as they were based on simpler methodologies and had to deal with more severe data limitations. Also, the tax incentive in place in the period covered by these studies—a deduction for charitable donations made by individuals—operated differently than the existing tax credit, and as such the results from these early studies may not be directly applicable to the system that is currently in place.

A number of more recent studies have considered the impact of the Charitable Donation Tax Credit using data from Statistics Canada's Canada Survey of Giving, Volunteering and Participating. Some of these studies have also considered whether the price elasticity of giving differs across types of giving. A first study for 1997 by Apinunmahakul and Devlin (2004) found that donations to non-religious charities were highly responsive to price (price elasticity of -1.4) while donations to religion-based charities were not.[37] They found that price had no statistically significant impact on total donations. In a more recent study, Hossain and Lamb (2012) found an overall elasticity estimate of -1.68 that is statistically significant. They also found that price elasticity varies by type of donation, with estimates ranging from -0.81 for donations to religious charities to -2.2 for donations to international charities.

[36] The estimates for Kitchen and Dalton (1990) and Kitchen (1992) shown in Chart 14 reflect their estimates for Canada overall.

[37] Kitchen and Dalton (1990) and Kitchen (1992) also observed that donations to religious causes seemed to be relatively price-inelastic, but as noted their studies may have suffered from identification problems.

Additional studies would be needed before firm conclusions could be drawn on the price effectiveness of the federal Charitable Donation Tax Credit in Canada. The results obtained by Hossain and Lamb (2012) are suggestive that the Charitable Donation Tax Credit could be price-effective. This study, however, made use of cross-sectional survey data, and the analysis of U.S. studies presented above seems to indicate that studies based on this type of data obtain price elasticity estimates that tend to be biased upward compared to studies that use panel data and tax return data.

# 5. Conclusion

The charitable sector is an important contributor to Canadian society, playing a vital role in providing valuable goods and services to Canadians in areas such as health care, education, poverty relief and the protection of the environment. In recognition of this important role, Canadians support charities directly by donating cash and goods and by volunteering their time, while governments in Canada provide assistance in a number of ways, notably by offering a tax credit in respect of donations made by individuals. In 2012, Canadians claimed the federal Charitable Donation Tax Credit in respect of donations worth $8.6 billion.

This report has presented an assessment of the effectiveness of the federal Charitable Donation Tax Credit. The effectiveness of the tax credit and of other tax incentives for charitable donations must be assessed vis-à-vis the contribution that such incentives can make to the attainment of the objectives being pursued by governments in supporting the charitable sector. First and foremost, tax incentives for charitable donations will be viewed as effective if they contribute positively to the financing of charities, after accounting for the costs of providing such tax incentives.

Empirical studies of the determinants of charitable donations, including the few recent studies that have studied this question using sophisticated data and econometric techniques, support the general conclusion that tax incentives have a positive impact on charitable giving. Studies for Canada are fewer and do not offer a sufficient basis to draw firm conclusions on the price elasticity of charitable donations in Canada. Results from international studies suggest that tax incentives such as the Charitable Donation Tax Credit are likely effective in encouraging individuals to donate more, but the precise magnitude of that impact remains to be determined. Furthermore, empirical research on the impact of tax incentives across groups of donors or donations made to different charity sectors is still limited.

There are inherent difficulties in assessing the cost of the Charitable Donation Tax Credit, in part because the cost per dollar of generating additional donations with a tax credit is a function of the price elasticity of charitable donations in Canada. In addition, whether this cost is lower or higher than the cost that governments incur in funding the charitable sector directly or in providing the goods and services that charities would otherwise provide depends not only on the price elasticity of charitable donations, but also on the extent to which governmental support crowds out private donations to the charitable sector. More definitive estimates of these parameters for Canada would be needed in order to better determine the relative price effectiveness of the credit.

# Annex 1

## Recent Changes to Tax Incentives for Charitable Donations Made by Individuals

**1994**

- Reduction to $200 (from $250) of the threshold over which charitable donations are creditable at the higher rate (29%).

**1995**

- Elimination of the net income limit for donations of ecologically sensitive land eligible for the tax credit.

**1996**

- Increase in the amount of charitable donations eligible for the tax credit from 20% to 50% of net income, and to 100% of net income in the year of death and the preceding year.

**1997**

- Reduction by one half of the normal inclusion rate applicable to capital gains arising from donations of publicly listed securities made before 2002.
- Increase in the amount of charitable donations eligible for the tax credit from 50% to 75% of net income.

**2000**

- Reduction in the taxable employment benefits realized when shares acquired through stock option plans are donated, to parallel the treatment of donations of publicly listed securities.
- Extension of the tax credit to donations of Registered Retirement Savings Plan, Registered Retirement Income Fund and insurance proceeds that are made as a consequence of direct beneficiary designations.
- Reduction by one half of the normal inclusion rate applicable to capital gains arising in respect of gifts of ecologically sensitive land and related easements, covenants and servitudes.

**2001**

- Permanent extension of the reduced inclusion rate applicable to capital gains arising from donations of publicly listed securities.

**2006**

- Reduction to 0% of the inclusion rate applicable to capital gains arising from donations of publicly listed securities and ecologically sensitive land.

**2007**

- Extension of the capital gains tax exemption to capital gains arising on donations of publicly listed securities and ecologically sensitive land to private foundations.

**2008**

- Extension of the capital gains tax exemption to capital gains arising on donations of unlisted exchangeable securities if exchanged for publicly listed securities and donated to a charity within 30 days of the exchange.

**2013**

- Introduction of the temporary First-Time Donor's Super Credit on cash donations of up to $1,000 made before 2018.

**2014**

- Extension of the carry-forward period for donations of ecologically sensitive land from five to ten years.
- Change to allow the trustee of an individual's estate increased flexibility to apply the Charitable Donation Tax Credit against the income tax liabilities of the individual or the estate.

# Annex 2

## List of Qualified Donees Under the *Income Tax Act*

As defined in subsection 149.1(1) of the *Income Tax Act*, a "qualified donee" means a person that is

(a) registered by the Minister of National Revenue and that is

(i) a housing corporation resident in Canada and exempt from income tax that has applied for registration,

(ii) a municipality in Canada,

(iii) a municipal or public body performing a function of government in Canada that has applied for registration,

(iv) a university outside Canada that is prescribed to be a university the student body of which ordinarily includes students from Canada, or

(v) a foreign organization that has applied to the Minister of National Revenue for registration,

(b) a registered charity,

(c) a registered Canadian amateur athletic association, or

(d) Her Majesty in right of Canada or a province, the United Nations or an agency of the United Nations.

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# Interprovincial Tax Planning by Corporate Groups in Canada: A Review of the Evidence

## Introduction

In Canada, all provinces and territories levy corporate income taxes, in addition to the federal government.[1] The definition of the tax base is broadly consistent across provinces, but provincial corporate income tax (CIT) rates differ from one province to another.[2]

Inter-jurisdictional differences in taxation levels, such as interprovincial differences in CIT rates, can be viewed as reflecting different preferences across jurisdictions for different levels of public services and public goods. To that extent, fiscal decentralization—the ability of jurisdictions to set their own levels of spending and taxation—can be welfare-enhancing when jurisdictions are tailoring their "menus" of public policies to address their citizens' needs and preferences, and competition across jurisdictions induces governments to be more efficient in designing and implementing these policies.

On the other hand, differences in tax policies across jurisdictions could also result in inefficiencies where the tax policies implemented in one jurisdiction have negative spillover effects for other jurisdictions. Such effects could be real effects—for instance, differences in taxation levels may distort the location of investment across jurisdictions, with more capital being invested in lower-tax jurisdictions than would be justified on the basis of pre-tax rates of return alone. Tax rate differentials may also give rise to tax planning intended to move income to lower-tax jurisdictions, without a concurrent relocation of income generating activities. These two categories of effects may have negative fiscal implications for jurisdictions, in particular by encouraging excessive tax competition to attract mobile tax bases.

This study examines the extent to which differences in provincial CIT rates may induce corporations to seek tax planning opportunities to shift taxable income from jurisdictions with higher tax rates to those with lower tax rates, without a concurrent shift in real business activities. Corporate-level taxation data are used to estimate the elasticity of taxable income to provincial CIT rates, that is, the extent to which the level of taxable income reported by a corporation in a given province is affected by that province's CIT rate, taking into account other possible determinants of taxable income. This empirical analysis is performed to provide insights on the importance of tax planning transactions that are motivated by CIT rate differentials across Canadian provinces. The analysis focuses on groups of commonly-controlled corporations, and compares the tax planning behaviour of corporate groups that have the flexibility to engage in interprovincial tax planning to those that do not (for example, because these corporations only have operations in one province).

[1] From this point forward, references to "provinces" also include the territories.

[2] The federal government has Tax Collection Agreements for corporate income tax with all provinces except Quebec and Alberta. The basic foundation of the Tax Collection Agreements is that the federal government agrees to collect and administer provincial taxes, in exchange for which the provinces agree to a common tax base.

This paper is organized as follows. The next section reviews provincial CIT rates over time and provides information on the ways in which corporations may undertake tax planning activities to take advantage of tax rate differentials. The paper then looks for general evidence of tax planning behaviour by examining changes in the distribution of taxable income across provinces over time. This discussion is followed by the presentation of an econometric analysis of the sensitivity of taxable income to provincial CIT rates for groups of commonly-controlled corporations. The final section of the paper summarizes the results and presents the conclusions of the analysis. A technical annex provides further information about the econometric model and discusses the results in more detail.

# Background

## Recent Trends in Provincial Corporate Income Tax Rates

Chart 1 shows trends in provincial statutory CIT rates from 2000 to 2014. It shows separately the CIT rates for the four largest provinces (Quebec, Ontario, Alberta and British Columbia, which together account for about 90% of taxable income in Canada), in addition to the unweighted average of the CIT rates in the other provinces.[3]

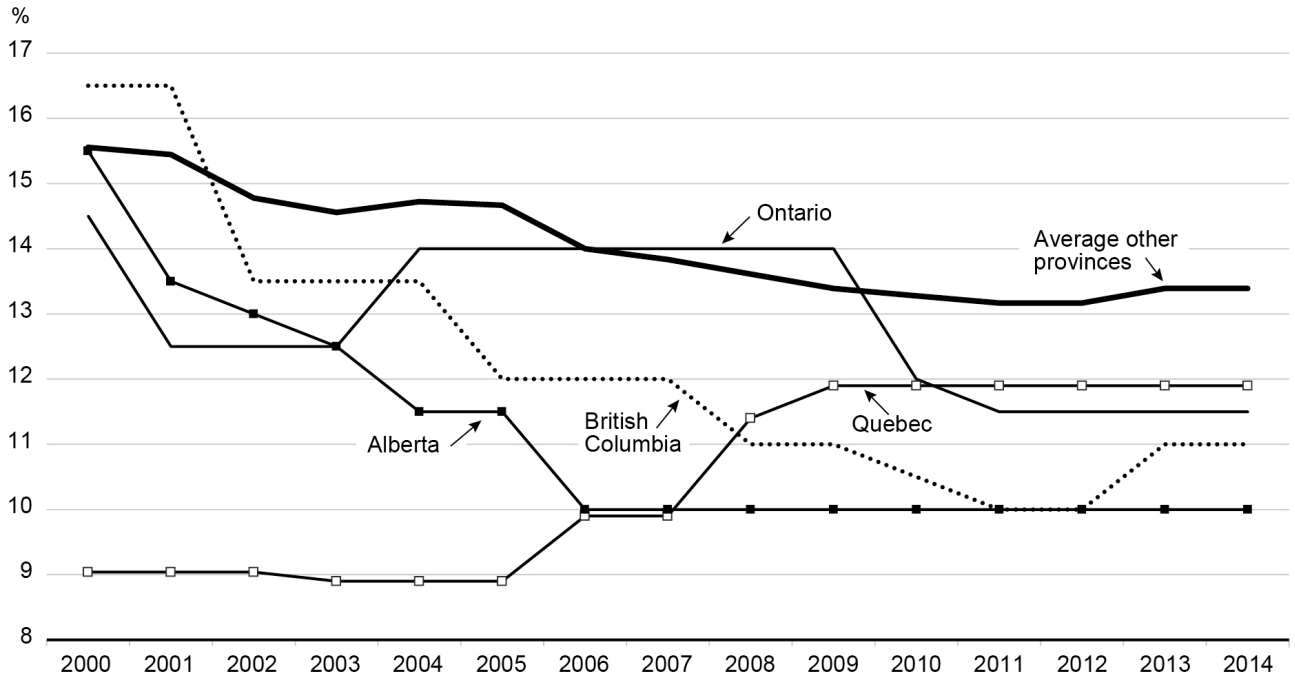
In 2000, the CIT rate differentials among provinces were substantial, with CIT rates ranging from 9% in Quebec—the lowest-tax-rate jurisdiction in Canada that year—to 17% in Manitoba, New Brunswick and Saskatchewan.

[3] Table A1 in Annex 1 provides the CIT rates by province over the 2000 to 2014 period.

Over the last decade, the Quebec government increased its CIT rate, while most other jurisdictions decreased their rates. This led to a convergence of CIT rates, in particular among the four largest provinces. The gap between the highest and lowest CIT rates for these provinces declined substantially, from 7.5 percentage points in 2000 to 1.9 percentage points since 2011. On average, the four largest provinces implemented larger declines in their CIT rates than other provinces over the 2000 to 2014 period.

Chart 1

**Provincial Statutory General Corporate Income Tax Rates, Selected Provinces, 2000 to 2014**




Notes: Statutory general CIT rates are those applicable as of December 31 of the reference year. The average for other provinces refers to the unweighted average of all provinces except Quebec, Ontario, Alberta and British Columbia.

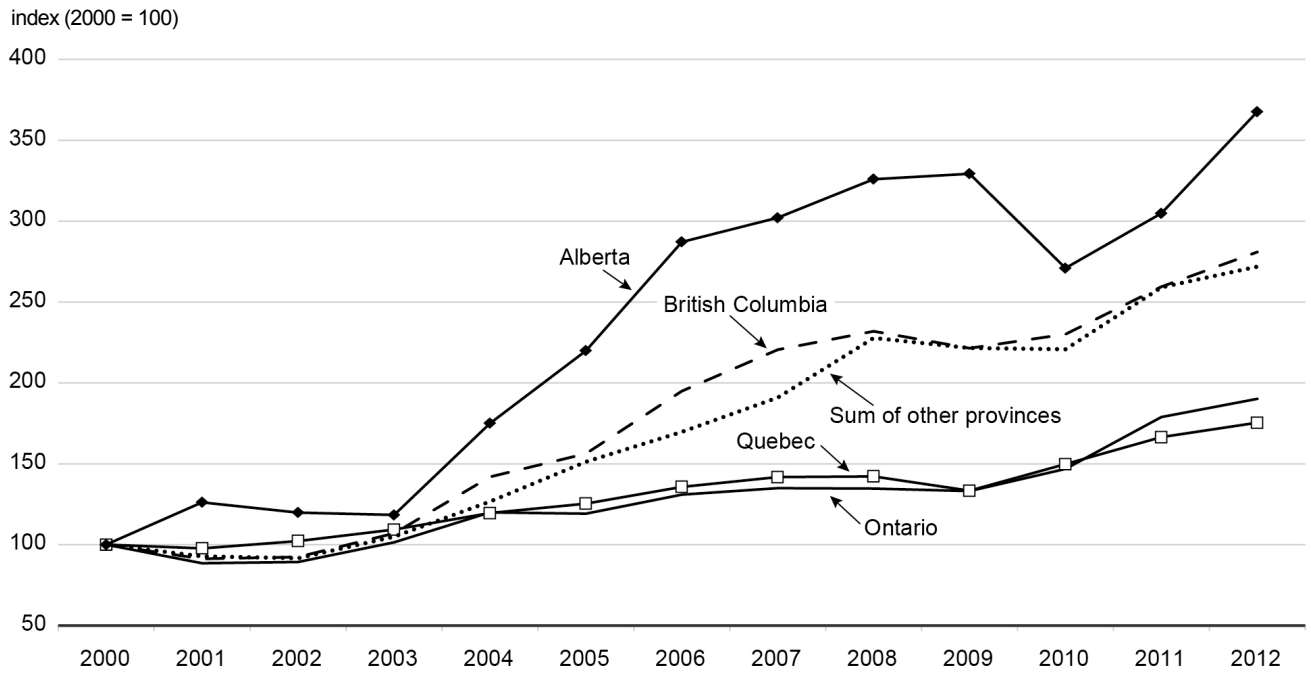
Source: Department of Finance.

## Recent Trends in Provincial Taxable Income

Chart 2 compares the trends in corporate taxable income in each of the four largest provinces from 2000 to 2012, as well as that of other provinces. It shows that taxable income increased in all provinces over the last decade, although at varying paces. Overall, growth in taxable income in Alberta was relatively strong, while growth in Quebec and Ontario was below average.

The impact of economic cycles on taxable income is to some extent smoothed by the ability of corporations to carry over unused losses to past and future taxation years.[4] For instance, one could expect that a marked reduction in taxable income would be observed in 2009 because of the recent recession. However, losses incurred in 2009 were used in part to reduce taxable income reported in years 2006 to 2008, and in part to reduce taxable income reported after 2009, therefore diminishing the observable impact of the recession on taxable income.

Chart 2
**Growth in Provincial Corporate Taxable Income, Selected Provinces, 2000 to 2012**




Note: Taxable income is after adjustments for loss carry-backs, and excludes the taxable income of tax-exempt corporations and federal Crown corporations not subject to provincial corporate income taxes.

Source: Department of Finance.

[4] The federal tax system allows capital and non-capital losses to be carried over to other taxation years. Unused capital and non-capital losses can be carried back to the previous three taxation years. Non-capital losses can be carried forward for up to 20 years, while capital losses can be carried forward indefinitely. The carry-forward period for non-capital losses was seven years before March 23, 2004 and was 10 years after March 22, 2004 and before 2006.

## Tax Planning Transactions

A business conducting income-earning activities in more than one province may do so under two broad corporate structures: it may operate as a single corporation with permanent establishments in more than one province ("multi-jurisdictional corporation"), or it may operate via a group of commonly-controlled corporations, each having a permanent establishment in one or more province ("corporate groups").

Multi-jurisdictional corporations in Canada must allocate taxable income to each province where the corporation has a permanent establishment using a general allocation formula or, for corporations in certain specific sectors, using a formula that applies exclusively to those sectors. The general formula allocates income based on the proportions of salaries and wages paid and gross revenue earned in each province where the corporation has a permanent establishment.[5] Under this regime, a multi-jurisdictional corporation would allocate a greater share of its taxable income to a province if either the share of salaries and wages paid to employees that report to permanent establishments located in that province increases, the share of gross revenue attributable to that province increases, or a corporation that previously had no permanent establishment in that province decides to establish one. Therefore, corporations subject to the allocation formula have limited flexibility to undertake interprovincial tax planning without a concurrent shift in business activity.

Corporations that are members of a corporate group are taxed on a stand-alone basis. Although there is no formal rule for transferring income, losses or other tax attributes among members of a corporate group, corporations could use related-party transactions and various provisions of the *Income Tax Act* to shift income among group members. For example, a loan from one group member to another would reduce the taxable income of the borrowing corporation, as interest payments on this loan would represent a tax-deductible expense, and would increase the taxable income of the lender, as the interest revenue would be included in the taxable income of that corporation. Similarly, transfers of property with an accrued gain between group members on a tax-deferred basis may result in the gain being realized on the final disposition of the property by another group member. These transactions may be undertaken for genuine business reasons and the end result on income allocation may well be reflective of where the substantive activities take place, but when such transactions coincide with an increase in taxable income allocated to low-tax rate jurisdictions and a decrease in taxable income allocated to high-tax rate jurisdictions, it remains that the corporate group as a whole would pay a lower amount of provincial taxes than it would in the absence of these transactions.

[5] The allocation formulas are defined under the *Income Tax Regulations* and apply to income earned by corporations located in provinces that have signed a Tax Collection Agreement. The corporate income allocation rules of the provinces that have not signed a Tax Collection Agreement for corporate income tax (Quebec and Alberta) are generally harmonized with the federal rules. The definition of permanent establishment in the context of the corporate income allocation between provinces draws significantly from that used in international tax treaties, which refers to a fixed place of business of a corporation and generally implies the performance of at least minimal economic activities. However, the definition used for allocation purposes between provinces is broader than that of tax treaties, making it easier for provinces to establish a nexus vis-à-vis a particular corporation. For example, unlike the tax treaty definition, a corporation owning land in a province would be deemed to have a permanent establishment even where that corporation does not otherwise have a fixed place of business in that province.

Interprovincial CIT rate differentials are not the only reason that corporate groups may engage in tax-motivated intra-group transactions. As noted, under the *Income Tax Act*, a corporation that incurs a net loss in a given taxation year can apply the loss against income of a previous or future taxation year; however, the loss cannot directly be transferred to another corporation and applied against the income of that other corporation (except in some limited circumstances, for instance when the corporation is being acquired and the acquirer continues the same business). This implies that the loss would be of limited value to a corporate group if the corporation that incurred the loss has no or little taxable income in past and future taxation years and cannot apply the loss during the carry-over period. As such, corporate groups have an incentive to enter into related-party transactions that will effectively enable the use of losses accumulated by one member of the group to offset income earned by other members of the group. Corporate groups are often able to use the existing flexibility in the tax system to transfer income or losses between related corporations through financing arrangements, reorganizations (such as amalgamations or wind-ups), and transfers of property on a tax-deferred basis, in order to access these losses. Such transactions affect the distribution of taxable income across provinces if the corporations that incurred the losses and the corporations that apply the losses to reduce their taxable income face different provincial income allocations.

## Statistical Evidence of Interprovincial Tax Planning

Direct measurements of the magnitude and directions of interprovincial tax planning transactions are not currently available. In principle, tax planning could be measured in one of two ways: either by identifying and measuring the impact of the types of transactions used to shift income across provinces, or by comparing the allocation of taxable income among provinces to a theoretical benchmark that would represent how income should be allocated between provinces in the absence of tax planning.

Both of these approaches face significant challenges. Measuring the impact of related-party transactions is often not possible due to a lack of data, and it can be difficult to distinguish between transactions that are motivated by tax planning considerations from those related to genuine business motivations. As for the second approach, determining how income would be allocated in the absence of tax planning would also raise conceptual issues, and would require making assumptions about the appropriate way to allocate profits, revenues and expenses that are common to members of a group.

Nevertheless, in the absence of a satisfactory benchmark or direct measurements of related-party transactions, it would be expected that if corporations were engaging significantly in interprovincial tax planning activities, a disconnect would be observed between the relative amount of taxable income reported in a given jurisdiction and the relative amount of economic activity in that jurisdiction. For example, interprovincial tax planning could result in the share of taxable income attributed to a low-tax rate province being higher than its share of overall economic activity.

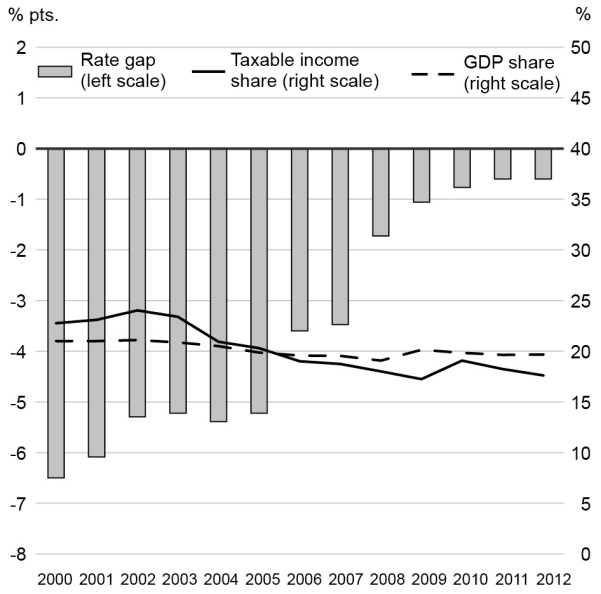
For each of the four largest provinces, Chart 3 compares the gap between the province's share of total taxable income and its share of nominal gross domestic product (GDP, a standard measure of economic activity) against the gap between the province's CIT rate and the unweighted average CIT rate for all provinces.[6] Interprovincial tax planning would be suspected if a reduction in a province's CIT rate compared to the average provincial CIT rate coincides with an increase in its share of taxable income, without a concurrent increase in its share of GDP.

[6] Table A2 in Annex 1 provides information about the shares of taxable income reported by corporate groups, and compares these shares to shares of GDP by province in 2005 and 2012.

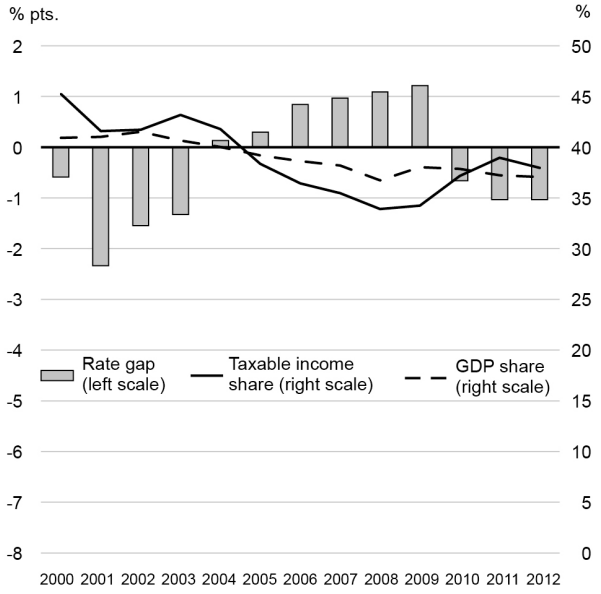
Chart 3

**Provincial Shares of Total Taxable Income and Nominal GDP, and Gap Between Provincial Corporate Income Tax Rate and Provincial Average Corporate Income Tax Rate, Selected Provinces, 2000 to 2012**

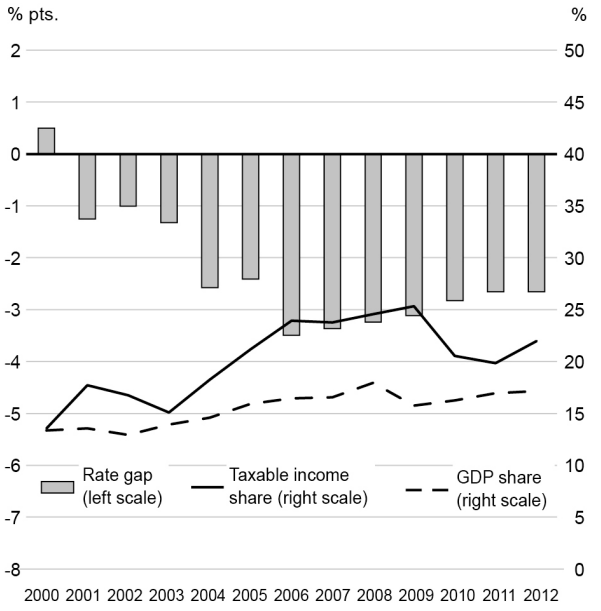
**Quebec**



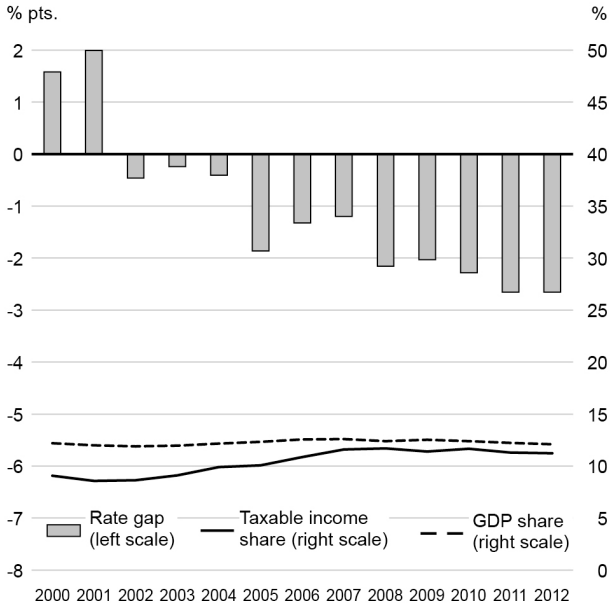

**Ontario**




**Alberta**




**British Columbia**




Notes: The rate gap is the difference between a province's CIT rate and the unweighted average CIT rate for all provinces other than the province shown. Taxable income is after adjustments for loss carry-backs, and excludes the taxable income of tax-exempt corporations and federal Crown corporations not subject to provincial corporate income taxes.

Source: Department of Finance.

Chart 3 shows that overall, discrepancies between taxable income shares and GDP shares seem to be negatively correlated with provincial tax rate differentials:

- Quebec's CIT rate increased after 2005, which led to a marked narrowing in the tax rate gap between Quebec and other provinces. Quebec's share of taxable income was higher than its share of nominal GDP in the early 2000s, when Quebec still had the lowest CIT rate among provinces. Since 2006, however, its taxable income share has moved below its GDP share.
- In the early 2000s, when Ontario's CIT rate was lower than the average for all other provinces, its taxable income share was generally higher than its share of GDP. Once Ontario's CIT rate moved above the national average, its share of taxable income moved below that of GDP.
- Coinciding with the widening of the gap between Alberta's CIT rate and the average for all other provinces, Alberta's taxable income share increased rapidly from 2003 to 2009 and has remained above its share of GDP.
- British Columbia's CIT rate was higher than the average for all other provinces in 2000 and 2001, and subsequently has been lower than the average with a gradually increasing gap. Coinciding with the widening of the CIT rate gap, British Columbia's taxable income share increased relative to that of GDP up until 2007, and has since remained slightly below the GDP share.

While the trends observed in Chart 3 provide general indications, it is difficult to draw firm conclusions from this analysis, as there are a number of other factors that may be at play and that may explain the apparent correlation between CIT rates and taxable income shares. As a measure of overall economic activity, GDP reflects not only trends in corporate activity, but also the economic activity of the unincorporated sector, individuals and governments. As such, GDP trends may differ significantly from trends in corporate taxable income for reasons that are not attributable to tax planning. A gap between a province's shares of taxable income and GDP may also be attributable to factors other than interprovincial tax planning—for instance, a gap could arise if taxable income and GDP are affected differently by provincial economic shocks (which would be expected since GDP trends do not account for loss carry-overs).

# Econometric Analysis

## Introduction

Given the difficulties associated with measuring interprovincial tax planning directly, this study relies on econometric analysis to produce indirect measures of the prevalence of interprovincial tax planning. While numerous studies have used econometric methods to measure tax planning at the international level, very few have focused on interprovincial tax planning in Canada (often referred to as "income shifting" in the literature). Two examples of studies on interprovincial tax planning in Canada include those by Lachance and Plante (1994), and Mintz and Smart (2004). These studies both found statistical evidence of interprovincial tax planning in Canada.

Lachance and Plante (1994) used provincial-level data to estimate the impact of CIT rate reductions in Quebec during the early 1980s on corporate tax revenues from the manufacturing sector in that province. Similar to the concept introduced in the previous section, their empirical analysis was based on the notion that, without income shifting activities, the share of taxable income reported in the manufacturing sector in Quebec should reflect the share of manufacturing production in the province.[7] Their results confirm that there is a positive relationship between taxable income and production activity, and that reductions in Quebec's CIT rate had a positive impact on Quebec's share of taxable income. Overall, they concluded that the reductions of Quebec's CIT rate resulted in a transfer of taxable income into the province without an equivalent increase in production.

Mintz and Smart (2004) studied income shifting across all Canadian provinces. Using corporate income tax records that were aggregated into sub-categories based on province, industry, year, and type of firm defined based on the ability of a firm to engage in income shifting (e.g., whether a firm paid taxes in only one province or not, whether a firm was a subsidiary), they compared the elasticity of taxable income with respect to CIT rates for firms with income shifting opportunities to that of firms without shifting opportunities. Their estimate of the elasticity of taxable income is higher for categories of firms with shifting opportunities compared to categories without shifting opportunities.[8] As such, the authors concluded that "evidence suggests that income shifting has pronounced effects on provincial tax bases".

These two studies faced limitations that are related to the use of aggregated data. In the case of Lachance and Plante (1994), their measure of taxable income reflected the total for all corporations in Quebec, regardless of differences such as the extent to which each corporation could engage in interprovincial tax planning activities. With more detailed data on taxable income, Mintz and Smart (2004) made progress in narrowing in on those corporations with the potential to shift income. However, their data restrictions limited their ability to clearly distinguish between corporations that have the opportunity to engage in interprovincial tax planning and those without. In particular, they could not identify members of corporate groups and how they are related.

[7] The share of taxable income refers to Quebec's share of total taxable income reported by the manufacturing sector in Canada. Analogously, the share of production refers to Quebec's share of Canadian GDP in the manufacturing sector.

[8] The CIT rate used in this study is specified as the net-of-tax rate, which is equal to one minus the combined federal and provincial statutory CIT rate. More specifically, the estimation results suggest that a 1% increase in the net-of-tax rate is expected to result in a 4.9% increase in taxable income for "potential shifters" compared to only 2.3% for "non-shifters".

In contrast, this study uses corporation-level tax data to examine the determinants of taxable income within groups of commonly-controlled corporations. Similar to Mintz and Smart (2004), the approach compares the elasticity of taxable income to provincial CIT rates for corporations that are expected to have interprovincial tax planning opportunities (referred to as "potential shifters") to that of corporations without such opportunities ("non-shifters"). Using corporation-level data for groups of commonly-controlled corporations as opposed to aggregated data has two significant advantages. First, by observing the provincial CIT rates faced by each member of a group, it is possible to clearly identify corporations with an incentive to conduct interprovincial tax planning. Second, access to financial and taxation information for each corporation makes it easier to control for heterogeneity across corporations. Corporations differ not only in their ability to use tax planning strategies (interprovincial or other) to reduce taxable income, but also in their ability to generate taxable income in the first place. The greater the ability to control for this heterogeneity, the greater the ability to isolate the impact of provincial CIT rates on reported taxable income from that of other factors related to differences between corporations.

The elasticity of taxable income with respect to provincial CIT rates for corporations with and without interprovincial tax planning opportunities is estimated using regression analysis. This approach isolates the impact of provincial CIT rates from that of other factors that influence taxable income. In particular, the specification tests a dimension that has not been previously explored, which is whether the availability of unused losses within a same corporate group has an impact on the elasticity of taxable income. The presumption is that when corporate groups can reduce taxable income through a more tax-efficient use of losses, provincial CIT rates may play a secondary role in tax planning decisions, because groups would transfer income from profitable corporations to loss-making corporations, and these corporations may not necessarily be located in high-tax provinces and low-tax provinces respectively. As such, it is assumed that the elasticity of taxable income with respect to CIT rates would be lower for corporations that are part of groups that have accumulated unused losses.[9]

The rest of this section explains how corporations with and without interprovincial tax planning opportunities were identified, summarizes the key differences between these two groups of corporations, provides details on the econometric approach adopted in this study, and presents the results.

[9] It is not expected that groups with losses have a completely inelastic response to tax rates: for example, when more than one member of a group are profitable, corporations may first seek to use the losses against the income of the member located in the province with the highest tax rate.

## Identifying Members of Corporate Groups

All of the corporations included in the regression analysis belong to groups of commonly-controlled corporations. These groups are identified based on shareholder information reported for tax purposes, as well as inter-corporate ownership information collected by Statistics Canada under the *Corporations Returns Act*.[10] This information is used to link corporations together according to the degree of joint ownership between corporations. To be included in the regression analysis, at least 50% of a corporation's share capital must be held together by other members of a corporate group. Corporate groups are identified for the years 2005 to 2012, but the data does not allow individual groups to be analyzed over time. As such, this analysis makes use of pooled cross-section data for the years 2005 to 2012.

As noted, the dataset is divided into "potential shifters" and "non-shifters". These two groups are defined as follows:

- Corporations are identified as potential shifters when corporate group members are present in at least two provinces. Corporations are also classified as potential shifters when all members of a group operate in the same province but face different CIT rates, for instance a province's general CIT rate and manufacturing CIT rate.[11] Multi-jurisdictional corporations, which are single corporate entities with permanent establishments in more than one province, are generally included in the analysis when they are part of a corporate group.[12]
- When all the members of a corporate group operate in the same province and face the same provincial CIT rate, they are classified as non-shifters, meaning that they have no flexibility to transfer income to a member in another province that has a different CIT rate.

Groups of commonly-controlled corporations identified using tax and administrative data account for nearly 68% of corporate taxable income reported in Canada between 2005 and 2012. Certain corporations or corporate groups are excluded from the analysis, notably groups with income taxed at the federal small business tax rate, groups in which all members have zero net income, and corporations with no evidence of business activity.[13] After these exclusions, the subset of corporate income tax files retained for this analysis accounts for 59% of corporate taxable income reported between 2005 and 2012.

[10] All corporations that are part of a group of commonly-controlled corporations with combined assets exceeding $200 million, revenue exceeding $80 million, or debt obligations or equity owing to non-residents exceeding a net book value of $1 million are required to report their financial and ownership information to Statistics Canada on an annual basis. Prior to 2007, these thresholds were $15 million, $10 million, and $200,000 respectively. For more information see www23.statcan.gc.ca/imdb-bmdi/document/2503_D4_T1_V1-eng.pdf.

[11] Income from manufacturing and processing activities is subject to a lower CIT rate in the Yukon, Saskatchewan, Ontario and Newfoundland and Labrador.

[12] The provincial CIT rate faced by multi-jurisdictional corporations is calculated as the average of the CIT rates of the provinces in which the corporation has permanent establishments, and is weighted according to the corporation's allocation of taxable income across provinces.

[13] See Annex 2 for a detailed explanation of these exclusions.

## Descriptive Statistics

This section provides information about the characteristics of corporations identified as potential shifters and those identified as non-shifters. The sample used for the econometric analysis includes roughly 236,000 potential shifters and 335,000 non-shifters (these numbers represent the total for the 2005–2012 period).[14] Several differences can be observed between these two groups of corporations (Table 1).

Potential shifters account for roughly 42,000 corporate groups while non-shifters account for about 112,000 corporate groups. Potential shifters tend to belong to larger groups than is the case for non-shifters. Groups of potential shifters have 5.6 members on average, compared to 3.0 members for groups of non-shifters. Potential shifters also tend to be larger than non-shifters in terms of average capital stock ($18.8 million versus $2.2 million) and average wage bill ($8.2 million versus $0.9 million).

About 50% of potential shifters have a "foreign connection", that is own foreign affiliates or reported non-arm's length transactions with non-residents. This compares to only 7% for non-shifters. Potential shifters are also more likely to carry a balance of unused investment tax credits (12% versus 7%).

Roughly 66% of potential shifters are Canadian-controlled private corporations (CCPCs), compared to 95% of non-shifters.[15] The taxable income of potential shifters is concentrated in the finance and insurance (29%), manufacturing (17%), and mining and oil and gas extraction (12%) sectors, while that of non-shifters is concentrated in the construction (18%), finance and insurance (13%) and manufacturing (11%) sectors.

[14] Since data for the years 2005 to 2012 are pooled together into one sample, corporations that operated in more than one year (or over the whole period) will appear in the data several times.

[15] A CCPC is a corporation that resides in Canada and is not public or controlled by public corporations or non-residents.

Table 1
**Key Characteristics, Potential Shifters Versus Non-Shifters, 2005 to 2012**

| | Potential shifters | Non-shifters |
|---|---|---|
| Number of corporations | 236,008 | 334,539 |
| Number of corporate groups | 42,001 | 111,694 |
| Average number of corporations per corporate group | 5.6 | 3.0 |
| Average capital stock (millions of dollars) | 18.8 | 2.2 |
| Average wage bill (millions of dollars) | 8.2 | 0.9 |
| Share of corporations with a foreign connection (%) | 48.6 | 7.1 |
| Share of corporations with unused investment tax credits (%) | 12.0 | 6.8 |
| Share of corporations that are CCPCs (%) | 66.1 | 95.3 |
| Average net income (millions of dollars) | 8.4 | 0.6 |
| Share of corporations with current-year non-capital losses (%) | 29.2 | 22.9 |
| Average unused non-capital losses at beginning of year (millions of dollars) | 2.1 | 0.2 |
| Unused non-capital losses at beginning of year as a share of net income (%) | 24.9 | 29.2 |
| Share of corporations with unused non-capital losses at beginning of year (%) | 43.2 | 40.2 |
| Share of corporations in groups with unused non-capital losses at beginning of year (%) | 71.8 | 50.2 |
| Average taxable income (millions of dollars) | 3.9 | 0.4 |
| Distribution of taxable income by industry (%) | | |
| Mining and oil and gas extraction | 12.0 | 2.9 |
| Construction | 2.5 | 18.0 |
| Manufacturing | 16.8 | 10.8 |
| Wholesale trade | 8.8 | 9.5 |
| Retail trade | 3.1 | 7.1 |
| Finance and insurance | 29.3 | 12.7 |
| Real estate, rental and leasing | 3.0 | 8.8 |
| Professional, scientific and technical services | 3.7 | 5.7 |
| Management of companies and enterprises | 11.0 | 8.6 |
| Other | 9.9 | 15.9 |

Notes: Capital stock measures the stock of tangible and intangible capital. Wage bill refers to employee wages and salaries. Taxable income reflects net income before application of loss carry-backs. See Annex 3 for further explanation.
Source: Department of Finance.

Table 1 also compares the net income and loss profiles of potential shifters and non-shifters. Although on average potential shifters reported higher net income for tax purposes than non-shifters ($8.4 million on average versus $0.6 million), they were also more likely to report a current-year non-capital loss.[16] Roughly 29% of potential shifters reported current-year non-capital losses, compared to 23% of non-shifters.

[16] Net income for tax purposes differs from taxable income when certain additional tax deductions are claimed, chiefly the deductions for charitable donations, taxable dividends and loss carry-forwards.

Potential shifters also have larger beginning-of-year pools of unused non-capital losses than non-shifters. However, expressed as a share of net income, the unused losses of non-shifters at the beginning of year were slightly more important than that of potential shifters (29% versus 25%). While potential shifters are slightly more likely to have unused beginning-of-year losses (43% compared to 40%), they are much more likely to be part of a group where at least one member has unused losses (72% compared to 50%). Potential shifters with group loss pools belong to larger groups on average: 7.2 members compared to only 3.6 members for potential shifters without group losses (not shown in Table 1). Finally, the average taxable income reported by potential shifters is roughly $4 million compared to $0.4 million for non-shifters.

Table 2 presents the relative importance of potential shifters and non-shifters as groups of taxpayers. The taxable income of potential shifters that are part of groups that do not have beginning-of-year unused non-capital losses represented 23% of the corporate income tax base in Canada over the period, while that of potential shifters in groups with beginning-of-year unused losses represented 29%. Non-shifters accounted for a much smaller share of the tax base (5% for non-shifters in groups with no unused losses, and 2% for non-shifters in groups with unused losses). The remainder of the tax base is composed of corporations that are not part of corporate groups and corporations excluded from the sample for reasons explained in Annex 2.

Table 2
**Distribution of Total Corporate Income Tax Base, 2005 to 2012**
%

| | |
|---|---|
| Corporations in corporate groups | |
| Potential shifters | |
| In groups without unused non-capital losses at beginning of year | 22.5 |
| In groups with unused non-capital losses at beginning of year | 29.1 |
| Non-shifters | |
| In groups without unused non-capital losses at beginning of year | 5.4 |
| In groups with unused non-capital losses at beginning of year | 2.4 |
| Excluded from sample | 8.4 |
| Corporations not in corporate groups | 32.2 |
| All corporations | 100.0 |

Note: A corporate group is considered to have a loss pool if the sum of group losses accounts for at least 1% of group net income.
Source: Department of Finance

## Estimates of Elasticity of Taxable Income

The elasticity of taxable income with respect to provincial CIT rates is estimated using regression analysis that controls for other factors that can influence taxable income, including corporation-specific factors such as the ability to use losses and investment tax credits, the stock of capital, wages and salaries paid, foreign connections, CCPC status, and industry.[17] The analysis also controls for year-specific factors that are intended to capture shocks that are common to all provinces over time.

The model compares the elasticity of potential shifters to that of non-shifters and measures the extent to which the ability to access pools of unused losses affects the elasticity of taxable income to provincial CIT rates. A corporation is considered to have the ability to access pools of unused losses so long as at least one member of the group of which the corporation is a member carries pools of unused losses at the beginning of the year.

The estimation sample used in this analysis poses certain econometric challenges because taxable income cannot be negative and a large number of corporations report zero taxable income in any given year. To circumvent these challenges, the impact of provincial CIT rates on taxable income is summarized by estimating first the degree to which provincial CIT rates may affect the likelihood that a corporation reports positive taxable income, and then the elasticity of taxable income with respect to provincial CIT rates for those corporations that report positive taxable income. Estimates for these two steps are consistent; for ease of exposition, Table 3 presents the estimates for the second step only, while complete results can be found in Annex 3.

Table 3
**Estimates of Elasticity of Taxable Income to Provincial Corporate Income Tax Rates Among Corporations With Positive Taxable Income**
%

| | Potential shifters | Non-shifters |
|---|---|---|
| Expected change in taxable income from a 1% increase in the provincial CIT rate | | |
| Groups without unused non-capital losses at beginning of year | -1.1 | -0.2 |
| Groups with unused non-capital losses at beginning of year | -0.4 | -0.2 |

Note: All coefficients are significant at 1%.

[17] See Annex 3 for a complete list of variables included in the regression analysis. Given that the purpose of this paper is to detect interprovincial tax planning, the CIT rate variable is based on the provincial rate only, instead of the combined federal and provincial CIT rate. Interpreting the elasticity of taxable income to provincial CIT rates requires caution, and the results presented in this paper are not directly comparable to the results presented in Mintz and Smart (2004) and other studies that use combined federal and provincial CIT rates.

The elasticity of taxable income to provincial CIT rates for non-shifters with positive taxable income is estimated to be -0.2. This implies that a 1% increase in the provincial CIT rate (for example, an increase from 10% to 10.1%) was associated over the sample period with a 0.2% decline in taxable income, after controlling for other factors that affect taxable income. The results also suggest that access to a pool of unused losses does not affect the elasticity of taxable income to provincial CIT rates for non-shifters.

Results for potential shifters with positive income indicate that when a corporation does not have access to a loss pool, a 1% increase in the provincial CIT rate was associated with a 1.1% decline in taxable income over the sample period. This response is notably higher than that of non-shifters. This is consistent with the expectation that taxable income is more sensitive to provincial CIT rates for members of corporate groups that have activities in multiple provinces and that may have the flexibility to enter into related-party transactions to transfer profits across provinces.[18]

Access to a pool of unused losses reduces the elasticity of taxable income for potential shifters. In this case, the elasticity of taxable income declines from -1.1 to -0.4, a level that is in line with the elasticity observed for non-shifters. This implies that potential shifters with members carrying losses (which account for roughly 70% of potential shifters in the sample) seem to be significantly less sensitive to provincial CIT rates than members of groups without unused losses. This is consistent with the expectation (described at the beginning of this section) that provincial CIT rates may play a secondary role in tax planning decisions when groups have unused losses located in particular provinces that can be used to offset income earned in other provinces.

[18] Some authors, rather than using the tax rate as one of the explanatory variables, use a variable defined as one minus the tax rate (see footnote 8). A coefficient of -1.1 for the elasticity of taxable income with respect to provincial CIT rates translates into an elasticity of 3.3 with respect to one minus the tax rate. In comparison, Mintz and Smart (2004) obtained an elasticity of 4.9; note however that the elasticity obtained in this study is in respect of provincial CIT rates only, while the elasticity estimated in Mintz and Smart (2004) was in respect of the combined federal and provincial CIT rate.

# Conclusion

This paper uses econometric techniques to estimate the elasticity of taxable income to provincial CIT rates. It does so separately for corporations with the potential to shift income between provinces and corporations without interprovincial shifting opportunities.

The results suggest that provincial CIT rates have a negative impact on taxable income—that is, an increase in a province's CIT rate is generally associated with a decrease in the amount of taxable income reported in that province. This negative relationship is not only driven by interprovincial tax planning, as non-shifters (i.e., corporations without the possibility to engage in interprovincial tax planning) also display a negative elasticity, albeit of a smaller size.

The results suggest that caution may be warranted before concluding that income shifting has an important effect on provincial tax bases. Corporations that display the highest elasticity to corporate income tax rates (potential shifters without access to pools of unused losses) represent only about 22% of the tax base. It is difficult to conclude that interprovincial CIT rate differences for the remainder of corporations affects taxable income significantly, as other potential shifters do not display an elasticity that is very different from that of non-shifters, which have no ability to conduct provincial CIT rates arbitrage. The lower elasticity found for the group of potential shifters with loss pools could be interpreted as implying that the location of losses, rather than (or in addition to) the CIT rate itself, is an important consideration in the direction of interprovincial tax planning transactions. Together, these results suggest that it would be unlikely that any single province is systematically affected, either positively or negatively, by the interprovincial tax planning of corporate groups—for example, when losses are available within a corporate group, the location of losses is likely to be a factor in the direction of tax planning transactions and one that would vary along economic cycles.

Although this analysis addresses limitations from previous studies through the use of micro-level data of corporate groups in Canada, other limitations remain. The model that has been estimated includes many variables to control for differences existing between potential shifters and non-shifters, yet unobserved differences between the two groups may still exist, and these differences could potentially account for some of the observed differences in the behaviours of these two groups. Furthermore, whether a corporate group is classified as potential shifter or non-shifter could be endogenous, as groups that are more responsive to provincial CIT rates may for that reason be more likely to operate in multiple provinces. This study could not control perfectly for such selection biases, and may thus overstate the differences between potential shifters and non-shifters. Some caution in generalizing the results must also be taken. In particular, because the analysis is based strictly on corporations that operate in groups of commonly-controlled corporations, the results are not necessarily representative of all corporations operating in Canada. In addition, as the analysis focused on corporations that are members of corporate groups, and that as such have greater flexibility to undertake tax planning transactions in order to minimize total tax liabilities, the elasticity estimates produced in this analysis are likely higher than they would be for the average of all corporations operating in Canada.

# Annex 1 – Additional Statistics

Table A1
**Provincial Statutory General Corporate Income Tax Rates, 2000 to 2014**
%, unless otherwise indicated

| | 2000 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Change 2014 vs. 2000 (% pts.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Newfoundland and Labrador | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 0.0 |
| Prince Edward Island | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 0.0 |
| Nova Scotia | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 0.0 |
| New Brunswick | 17.0 | 13.0 | 13.0 | 13.0 | 13.0 | 12.0 | 11.0 | 10.0 | 10.0 | 12.0 | 12.0 | -5.0 |
| Quebec | 9.0 | 8.9 | 9.9 | 9.9 | 11.4 | 11.9 | 11.9 | 11.9 | 11.9 | 11.9 | 11.9 | 2.9 |
| Ontario | 14.5 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 12.0 | 11.5 | 11.5 | 11.5 | 11.5 | -3.0 |
| Manitoba | 17.0 | 15.0 | 14.5 | 14.0 | 13.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | -5.0 |
| Saskatchewan | 17.0 | 17.0 | 14.0 | 13.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | -5.0 |
| Alberta | 15.5 | 11.5 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | -5.5 |
| British Columbia | 16.5 | 12.0 | 12.0 | 12.0 | 11.0 | 11.0 | 10.5 | 10.0 | 10.0 | 11.0 | 11.0 | -5.5 |
| Yukon | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 0.0 |
| Northwest Territories | 14.0 | 14.0 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | -2.5 |
| Nunavut | 14.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | -2.0 |
| Maximum | 17.0 | 17.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | -1.0 |
| Minimum | 9.0 | 8.9 | 9.9 | 9.9 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 1.0 |
| Range | 8.0 | 8.1 | 6.1 | 6.1 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | -2.0 |
| Average | 15.0 | 13.7 | 13.2 | 13.1 | 13.0 | 12.9 | 12.6 | 12.5 | 12.5 | 12.7 | 12.7 | -2.3 |

Notes: Statutory general corporate income tax rates applicable as of December 31 of the reference year. The average rate refers to the unweighted average of all provinces.
Source: Department of Finance.

Table A2
**Provincial Shares of Total Taxable Income Reported by Corporate Groups and Nominal GDP, 2005 and 2012**
%

| | 2005 | | 2012 | |
|---|---|---|---|---|
| | Taxable income share | Nominal GDP share | Taxable income share | Nominal GDP share |
| Newfoundland and Labrador | 1.6 | 1.6 | 1.2 | 1.9 |
| Prince Edward Island | 0.2 | 0.3 | 0.2 | 0.3 |
| Nova Scotia | 1.9 | 2.3 | 1.6 | 2.1 |
| New Brunswick | 1.3 | 1.8 | 1.1 | 1.7 |
| Quebec | 20.3 | 19.9 | 17.6 | 19.7 |
| Ontario | 38.4 | 39.2 | 38.0 | 37.1 |
| Manitoba | 1.9 | 3.0 | 2.6 | 3.2 |
| Saskatchewan | 2.7 | 3.2 | 4.2 | 4.3 |
| Alberta | 21.2 | 15.9 | 22.0 | 17.1 |
| British Columbia | 10.1 | 12.3 | 11.2 | 12.1 |
| Yukon | 0.1 | 0.1 | 0.1 | 0.1 |
| Northwest Territories | 0.4 | 0.3 | 0.2 | 0.3 |
| Nunavut | 0.0 | 0.1 | 0.0 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

Sources: Department of Finance; Statistics Canada.

# Annex 2 – Data Exclusions

The following corporations and corporate groups are excluded from the sample used for the regression analysis presented in this paper:

- Corporate groups with income from an active business carried on in Canada falling below the business limit for the small business deduction are excluded.
- Corporate groups in which all corporations have negative net income are excluded. As a group, these corporations are not likely to engage in tax planning.
- Groups in which corporations face the same tax rate but operate in different provinces are excluded, because it would not be possible to classify appropriately these groups as either potential shifters or non-shifters. This is so because even when facing the same provincial income tax rate, the incentive to undertake interprovincial tax planning may exist if a rate differential existed in a previous year. This cannot be ascertained as it is not possible to analyze corporate groups over time.
- Corporations with no sign of business activity (those with zero net income, zero taxable income, zero capital, and zero salary and wages payments) are removed from the sample because they are not likely to participate in the interprovincial tax planning activities of the group.
- Tax-exempt entities and Crown corporations are not subject to provincial corporate income tax and are therefore excluded.

# Annex 3 – Regression Model and Detailed Results

## Specification

A log-linear equation in which taxable income is expressed as a function of the provincial CIT rate and other explanatory variables is used to estimate the elasticity of taxable income. The estimated coefficient for the provincial CIT rate relates to the elasticity of taxable income with respect to provincial CIT rates. This term is expected to be negative.

The potential impact of the ability to use losses on the elasticity of taxable income is accounted for by including an interaction term between the provincial CIT rate and a dummy variable that indicates the presence of a beginning-of-year non-capital loss pool within the group. For this purpose, a group is not considered to have a loss pool unless the sum of group losses accounts for at least 1% of the group net income. The dummy variable is equal to one when a corporation belongs to a group with a loss pool and zero otherwise. The estimated coefficient for this interaction term can be regarded as an adjustment to the elasticity of taxable income when a corporation has access to a group loss pool. Under the assumption that corporations operating in corporate groups with pooled losses are less sensitive to provincial CIT rates, this term is expected to be positive (i.e., it would bring the elasticity closer to zero). The actual elasticity of taxable income for corporations with a group loss pool is the sum of the coefficient on the provincial CIT rate and the interaction term. For corporations without access to a group loss pool, the estimated elasticity of taxable income is captured by the coefficient on the provincial CIT rate. Note that the interaction term between the provincial CIT rate and the group loss dummy is generally insignificant for non-shifters. As such, this term is not accounted for in Table 3 of the text.

Since this study is interested in the sensitivity of taxable income to provincial CIT rates at the time when income transfer decisions are made, loss carry-backs and their subsequent impact on taxable income are deliberately excluded from taxable income. In other words, the measure of taxable income employed in the regression analysis does not reflect losses that are applied to taxable income in prior years.

In addition to controlling for factors such as capital and wages, which measure the productive capacity of a corporation, the regressions control for overall macroeconomic conditions (growth in provincial real GDP and the GDP price index), and corporation-specific factors such as foreign connections, access to accumulated provincial investment tax credits (ITCs), CCPC status, and industry. Finally, the regressions also control for year effects, which are intended to capture shocks that are common to all provinces in a particular year. All monetary values (such as taxable income, capital, and provincial GDP) are expressed in current dollars.

Beyond tax rate differences across provinces, the availability of provincial ITCs varies across jurisdictions. Corporations may change their tax planning behaviour when provincial taxes payable can be offset by provincial ITCs. In order to control for this potential impact, the model includes a variable that reflects the size of total provincial corporate ITCs relative to total corporate taxable income in the province where a corporation is located. This information is not available at the corporation level, as the database does not include provincial CIT information for provinces not part of a Tax Collection Agreement.

## Estimation Method

The estimation sample used in this analysis poses certain econometric challenges. First, a large number of corporations report zero taxable income in any given year. Second, taxable income is censored at zero (such that negative values are never observed), which implies that the relationship between taxable income and its explanatory factors is not linear. Consider for example the impact of GDP growth on taxable income. Setting aside the role of loss carry-backs, strong GDP growth should on average lead to an increase in taxable income while negative GDP growth could potentially result in losses. However, these losses are only observed as zero values (rather than negative values). As such, the impact of strong GDP growth will not have the same relative impact on taxable income as that of negative GDP growth, making the relationship non-linear.[19]

The implication is that ordinary least squares (OLS) estimation, which assumes a linear relationship between taxable income and the explanatory variables, may not yield reliable coefficient estimates. To address this issue, a probit regression is used to estimate the impact of provincial CIT rates on the probability (or likelihood) that a corporation reports positive taxable income while an OLS regression is used on the portion of the sample with positive taxable income. Table A3 provides detailed estimation results. Estimates listed in the left panel of the table (for potential shifters and non-shifters) are OLS coefficient estimates that include corporations with zero taxable income as well as those with positive income. The middle panel reports coefficient estimates from a probit regression where the dependent variable is a dummy variable equal to one for corporations with positive taxable income and zero otherwise. These estimates indicate the direction in which a given explanatory variable affects taxable income. The final panel presents OLS estimates for the portion of the sample with positive taxable income. These estimates are presented in Table 3 of the paper and can be interpreted as taxable income elasticity estimates, conditional on having positive income.

[19] Although it would be possible to estimate a linear specification (as opposed to a log-linear specification) and thereby be able to include negative income values directly in the model, the log-linear specification has the attractive property that the coefficients can be interpreted directly as elasticity estimates.

Table A3
**Detailed Regression Results**
Dependent variable: log (taxable income)

| | Full sample OLS coefficients | | | Probit coefficients | | | 2nd stage OLS coefficients | | |
|---|---|---|---|---|---|---|---|---|---|
| **Explanatory variables** | **Coefficient** | | **Cluster robust standard error** | **Coefficient** | | **Cluster robust standard error** | **Coefficient** | | **Cluster robust standard error** |
| **Potential shifters** | | | | | | | | | |
| log(provCIT) | -2.37 | ** | 0.23 | -0.44 | ** | 0.06 | -1.09 | ** | 0.13 |
| log(provCIT)*Group loss dummy | 1.53 | ** | 0.26 | 0.28 | ** | 0.06 | 0.67 | ** | 0.15 |
| log(wages) | 0.24 | ** | 0.00 | 0.04 | ** | 0.00 | 0.13 | ** | 0.00 |
| log(capital) | 0.17 | ** | 0.00 | 0.02 | ** | 0.00 | 0.14 | ** | 0.00 |
| log(ownership concentration) | -0.03 | | 0.15 | -0.04 | | 0.03 | 0.13 | | 0.09 |
| Provincial tax credits | 0.07 | ** | 0.01 | 0.01 | ** | 0.00 | -0.01 | | 0.01 |
| GDP price | 1.43 | ** | 0.49 | 0.49 | ** | 0.11 | -0.20 | | 0.34 |
| GDP price, previous year | 0.87 | * | 0.45 | 0.12 | | 0.11 | 0.63 | * | 0.33 |
| Real GDP growth | 0.01 | | 0.01 | 0.00 | | 0.00 | 0.02 | ** | 0.01 |
| Constant | 10.63 | ** | 0.58 | 1.07 | ** | 0.14 | 11.76 | ** | 0.33 |
| Group loss dummy | -6.86 | ** | 0.64 | -1.32 | ** | 0.15 | -2.28 | ** | 0.38 |
| ITCs | 0.05 | ** | 0.01 | 0.00 | | 0.00 | 0.06 | ** | 0.00 |
| Non-CCPC | 0.59 | ** | 0.05 | 0.03 | ** | 0.01 | 0.95 | ** | 0.04 |
| Foreign connection | 0.39 | ** | 0.04 | 0.03 | ** | 0.01 | 0.55 | ** | 0.03 |
| Industry controls | | Yes | | | Yes | | | Yes | |
| Year controls | | Yes | | | Yes | | | Yes | |
| R-squared | | 0.23 | | | n.a. | | | 0.31 | |
| Log pseudolikelihood | | n.a. | | | -144,589 | | | n.a. | |
| Number of observations | | 236,008 | | | 236,008 | | | 121,810 | |
| **Non-shifters** | | | | | | | | | |
| log(provCIT) | -0.70 | ** | 0.12 | -0.18 | ** | 0.03 | -0.24 | ** | 0.06 |
| log(provCIT)*Group loss dummy | -0.01 | | 0.16 | 0.02 | | 0.04 | 0.10 | | 0.09 |
| log(wages) | 0.30 | ** | 0.00 | 0.06 | ** | 0.00 | 0.13 | ** | 0.00 |
| log(capital) | 0.17 | ** | 0.00 | 0.04 | ** | 0.00 | 0.08 | ** | 0.00 |
| log(ownership concentration) | 0.05 | | 0.08 | 0.01 | | 0.02 | 0.03 | | 0.04 |
| Provincial tax credits | 0.22 | ** | 0.01 | 0.06 | ** | 0.00 | 0.02 | ** | 0.00 |
| GDP price | 0.88 | * | 0.36 | 0.47 | ** | 0.10 | -0.16 | | 0.20 |
| GDP price, previous year | 2.54 | ** | 0.36 | 0.48 | ** | 0.10 | 1.41 | ** | 0.21 |
| Real GDP growth | 0.01 | | 0.01 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Constant | 6.10 | ** | 0.30 | 0.24 | ** | 0.09 | 10.47 | ** | 0.14 |
| Group loss dummy | -3.33 | ** | 0.40 | -0.87 | ** | 0.11 | -0.77 | ** | 0.22 |
| ITCs | 0.06 | ** | 0.01 | 0.01 | ** | 0.00 | 0.03 | ** | 0.00 |
| Non-CCPC | -0.77 | ** | 0.07 | -0.17 | ** | 0.02 | -0.06 | | 0.06 |
| Foreign connection | 0.04 | | 0.06 | -0.05 | ** | 0.01 | 0.41 | ** | 0.04 |
| Industry controls | | Yes | | | Yes | | | Yes | |
| Year controls | | Yes | | | Yes | | | Yes | |
| R-squared | | 0.32 | | | n.a. | | | 0.26 | |
| Log pseudolikelihood | | n.a. | | | -181,976 | | | n.a. | |
| Number of observations | | 334,539 | | | 334,539 | | | 193,529 | |

Notes: Significance level is indicated by * for 5 % and ** for 1 %. Standard errors are clustered by individual corporations.

Although the specifications employed in this analysis have tried to control for the key factors underlying taxable income (e.g., capital, wages, economic conditions), it is possible that other factors not accounted for are also at play. In particular, the possibility arises that provincial CIT rates may themselves be endogenous to factors that determine taxable income. For instance, to the extent that the decline in the CIT rate in Alberta was coincident with exceptionally strong growth in that economy, the model could be overestimating the impact of provincial CIT rates. However, results obtained when Alberta is removed from the estimation sample do not suggest that this is the case.

## Impact of Convergence in Provincial Corporate Income Tax Rates

With increased convergence in provincial CIT rates, it could be expected that the benefit from interprovincial tax planning would be reduced, in particular if fixed costs must be incurred to engage in interprovincial tax planning. To test whether the importance of interprovincial tax planning has decreased in recent years, the above analysis was repeated over two separate periods, 2005–2009 (a period during which provincial CIT rates converged) and 2010–2012 (a period when provincial CIT rate differentials were at a minimum). Table A4 presents the results from this additional analysis.

Table A4
**Sensitivity of Taxable Income to Provincial Corporate Income Tax Rates, 2005–2009 Versus 2010–2012**

| | Potential shifters | Non-shifters |
|---|---|---|
| Expected change in the probability of reporting positive taxable income from a 1% increase in the provincial CIT rate among all sample corporations | | |
| 2005–2009 | | |
| Groups without unused non-capital losses at beginning of year | -0.2 | -0.1 |
| Groups with unused non-capital losses at beginning of year | -0.1 | -0.1 |
| 2010–2012 | | |
| Groups without unused non-capital losses at beginning of year | -0.2 | 0 |
| Groups with unused non-capital losses at beginning of year | 0 | 0 |
| Expected change in taxable income from a 1% increase in the provincial CIT rate among corporations with positive taxable income | | |
| 2005–2009 | | |
| Groups without unused non-capital losses at beginning of year | -1.4% | 0% |
| Groups with unused non-capital losses at beginning of year | -0.5% | 0% |
| 2010–2012 | | |
| Groups without unused non-capital losses at beginning of year | -0.9% | -0.7% |
| Groups with unused non-capital losses at beginning of year | -0.3% | 0.1% |

Notes: All coefficients reported are significant at 1% or 5%. Estimates are reported as zero in the table when the estimated coefficients are statistically insignificant. The group loss term is not statistically significant for non-shifters (and is thus not reflected in the table) except for corporations with positive taxable income over 2010–2012. The probabilities of reporting positive taxable income are the marginal effects calculated from probit regressions.

The results shown in Table A4 suggest that as expected, potential shifters have been somewhat less responsive to provincial CIT rates since 2010 than during the earlier period. Interprovincial CIT rate differentials should not be driving the tax planning of non-shifters, and as such little difference would be expected in the estimates for non-shifters for the two periods. The results seem to indicate some changes in the impact of provincial CIT rates on non-shifters between these periods, more specifically a reduction in the impact of provincial CIT rates on the probability of reporting positive taxable income, but an increase in the elasticity of taxable income to provincial CIT rates for those corporations reporting positive taxable income that do not have access to unused losses. These results are not in line with expectations, and may reflect post-crisis dynamics that are not properly accounted for in the model.

## Variable Definitions

**Taxable income:** Taxable income for tax purposes, as calculated on the corporate income tax return, before revisions for loss carry-backs. Taxable income is non-negative. To include observations with zero taxable income in the full-sample OLS estimates, the log of taxable income is calculated as log(taxable income + 1).

**ProvCIT:** Provincial CIT rate. For corporations that are not in the manufacturing industry, the general statutory CIT rate is used. For corporations in the manufacturing industry, the preferential rate for manufacturing and processing income is used if there is one in place. For multi-jurisdictional corporations, a weighted average rate is calculated using taxable income allocated to each jurisdiction as weights.

**Group loss dummy:** Equal to one if at least one member of the corporate group has unused non-capital losses at the beginning of the year that are no less than 1% of the group's net income, and zero otherwise.

**Wages:** Employee wages and salaries paid by the corporation, taken mainly from T4 reports and supplemented with information from tax returns for multi-jurisdictional corporations. The log of wages and salaries is calculated as log(wage bill + 1).

**Capital:** Stock of the corporation's tangible capital (such as buildings and machinery) and intangible capital (such as patents and research and development). This information is extracted from the General Index of Financial Information, and supplemented with information on end-of-year undepreciated capital costs as reported on schedule 8 of the T2 corporation tax return. The log of capital is calculated as log(capital + 1).

**Ownership concentration:** The percentage of the corporation's share capital that is owned by other members of the corporate group.

**GDP growth:** GDP growth by province in real dollars.

**GDP price index:** GDP price index by province.

**Provincial tax credits:** Total provincial corporate investment tax credits, as a percentage of total corporate taxable income in the province where a corporation is located.

**ITCs:** Stock of unused provincial investment tax credits. The log of ITCs is calculated as log(ITCs + 1).

**Non-CCPC:** Equal to one if the corporation is not a Canadian-controlled private corporation, and zero otherwise.

**Foreign connection:** Equal to one if any corporation of a group has a foreign affiliate or has non-arm's length transactions with non-residents, and zero otherwise.

**Industry:** Industry of operation as reported on the corporate income tax return.

# References

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