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FISCAL AND TAX POLICY

Uncertain Returns: The Impact of the Capital Gains Hike on Ottawa's Personal Income Tax Revenue

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- Ottawa's announcement in Budget 2024 of a hike in the capital gains inclusion rate from 50 percent to 67 percent on amounts over $250,000 has come with some impressive estimates of swelling personal income tax (PIT) revenues. Budget 2024 projected an increase of $8.8 billion over five years. The Parliamentary Budget Officer (PBO) has estimated $5.8 billion. Our estimate is lower: $3.3 billion over the next five years. We outline some of the possible sources of the discrepancies. Alongside model differences, the projected PIT revenue from higher inclusion rates depends on key assumptions about the cyclical nature of capital gains realizations and the adjustments firms and individuals may make in response to the tax change.
- Regardless of the magnitude of the estimated PIT revenue gains, our analysis highlights two important insights.
  - First, the newly reformed alternative minimum tax (AMT) will interact with the higher inclusion rate on personal capital gains exceeding $250,000, resulting in minimal additional PIT revenue from large capital gains beyond what the AMT would have collected.
  - Second, the majority of net PIT revenue gains from the reform will come from Canadian-Controlled Private Corporation (CCPC) owners, ranging from doctors and lawyers to entrepreneurs and large-scale operators, who will face a higher inclusion rate on capital gains earned within their corporations, and a corresponding reduction in the amount of capital gains they can pay out as tax-free capital dividends.
- We do not attempt to model corporate income tax (CIT) revenues. However, the budget's estimated cumulative five-year increase of $10.6 billion in CIT revenues appears plausible when considering historical data on capital gains earned by corporations, particularly CCPCs, which earn the lion's share.

Introduction

The federal budget tabled in April announced several changes to capital gains taxes.[1] Effective June 25, 2024, the lifetime capital gains exemption increased from $1.02 million to $1.25 million with indexing set to resume in 2026. The capital gains inclusion rate increased from one-half to two-

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1 In August 2024, Finance Canada provided additional details on capital gains tax changes, primarily focusing on the Canadian Entrepreneurs' Incentive (CEI). This E-Brief does not include CEI modelling. Further clarifications addressed how transitional rules affect the capital dividend account for year 2024. Our calculations incorporate these updates.

thirds. However, for individuals, the inclusion rate of capital gains under $250,000 will continue to be one-half. No such reductions will be available to corporations and most trusts (Canada 2024).[2]

The budget projections showed that the higher inclusion rate will cumulatively generate an additional $10.6 billion in corporate income tax (CIT) revenues and $8.8 billion in personal income tax (PIT) revenues for the federal government over the next five years. The Parliamentary Budget Officer (PBO 2024) recently issued a lower PIT revenue estimate of $5.8 billion over five years.

In this E-Brief, we offer our own estimate of the additional federal PIT revenues generated by this change, using Statistics Canada's Social Policy Database and Model (SPSD/M) enhanced with additional non-model estimates (see the Appendix for methodological details).[3] The model does not allow us to provide an estimate of the change in corporate tax revenues, so we focus on personal income tax revenues.[4] Our model also takes into account significant interactions with the new alternative minimum tax provisions – interactions that may be greater than those considered in the model used for the budget's estimate.

Our estimate of additional PIT revenues resulting from the higher inclusion rate is lower than the budget's estimate (and the PBO's) – at around $3.3 billion over the next five years. The budget lacks detail on its estimation assumptions, so we cannot fully explain the difference. However, we can speculate on several factors that may contribute to the discrepancy.

First, the annual value of capital gains realizations depends on asset market conditions, and the most recent data available (from the 2021 tax year) reflect a peak year (Statistics Canada 2023). At the time, near zero interest rates combined with fiscal stimulus and quantitative easing created conditions in which demand for assets was greater than normal.

We account for the cyclical nature of capital gains realizations – due to swings in asset prices, for example – in our projections to avoid extrapolating from an exceptionally high year, but we do not know the extent to which, if at all, the budget projections made similar adjustments.

Second, taxpayers respond to changes in capital gains taxation by altering the timing and amount of their realizations. We do not know the budget's assumptions in this regard, but we provide the details of our assumptions.

Third, changes in the corporate inclusion rate affect personal tax revenues through their impact on taxable dividend income. Non-taxable capital gains earned within a CCPC can be distributed tax-free to their owners as capital dividends. The higher inclusion rate at the corporate level will reduce non-taxable capital gains, reduce capital dividends, and increase personal income tax revenues. We find that this effect accounts for most of the net

2 Graduated rate estates, which are subject to graduated tax rates for up to three years, and qualified disability trusts qualify for the $250,000 exemption.

3 We use version 30.1 of Statistics Canada's Social Policy Database and Model (SPSD/M) enhanced with additional non-model estimates. Note that our model excludes PIT revenue from trusts.

4 The Parliamentary Budget Officer (PBO) estimated $11.7 billion in corporate income tax (CIT) revenues over five years, while Budget 2024 projected $10.6 billion. From 2018 to 2021, capital gains earned by corporations averaged $89 billion annually (data obtained from Canada Revenue Agency). A rough calculation suggests CIT revenue easily exceeding $2 billion per year, indicating that both the Budget 2024 and PBO's CIT revenue estimates appear plausible. Note that data obtained from the CRA show that CCPC owners generate the majority of corporate capital gains, indicating that CCPC owners will likely bear the brunt of the tax increase.

PIT revenue gains resulting from the change. The magnitude is highly sensitive to assumptions – here too, we note the lack of information about the assumptions underlying the budget projections.

Our analysis underscores the complexity of projecting revenue gains from changes to the capital gains tax and highlights projections' dependence on critical yet uncertain assumptions. However, the two main insights from this exercise do not depend on the magnitude of the revenue gains. First, most of the revenue gains from the tax increase on personal capital gains over $250,000 are offset by a corresponding reduction in alternative minimum tax (AMT) revenues.[5] Second, most of the net PIT revenue gains will come from Canadian-Controlled Private Corporation (CCPC) owners, as more of their corporate capital gains will now be taxed as non-eligible dividends at the personal level.

Estimating the Impact on Personal Income Tax Revenues

Our estimate of the revenue yield of the higher inclusion rate involves three steps. First, we estimate the behavioural effect of the higher inclusion rate on individual capital gains realizations. Then, we look at the impact of the higher personal capital gains inclusion on PIT revenues, accounting for the interaction with the changes to the AMT announced in 2023. Finally, we estimate the impact of heavier taxation of capital gains at the corporate level on dividend distribution and taxes on those dividends at the personal level.

Impact on Capital Gains Realizations

Baseline Capital Gains Realizations

Capital gains realizations are highly cyclical, varying with asset values and investment behaviour. When projecting future capital gains realizations, the US Congressional Budget Office (CBO) assumes that these realizations will revert to their historical average relative to the size of the economy in the long run (CBO 2023). Capital gains realizations as a share of GDP are highly correlated between the United States and Canada.[6] So we adopt a similar approach for Canada, projecting that without the tax change, the value of capital gains realizations will gradually decline to their 2019 share of GDP over the next decade from their 2021 peak (see Figure A1). From this baseline, we assume that taxpayers will react to the tax increase in two ways.

Transitory Responses: The first behavioural impact is transitory. It relates to individuals who have accelerated their capital gains transactions to avoid the June 25th, 2024, rule change and benefit from the lower inclusion rate. This acceleration will boost realizations and revenue in the first year but result in lower revenues due to correspondingly reduced realizations in subsequent years. We do not know the exact magnitude of this reaction.

5 The tax increase on capital gains over $250,000 will reduce the tax owing under the alternative minimum tax. The AMT is explained as follows: "The AMT is designed to target high-income individuals and trusts by having them pay a minimum amount of tax notwithstanding that they are entitled to various exemptions and deductions under the *Income Tax Act* (the Act). The AMT involves a complex calculation that adjusts an individual's regular taxable income by limiting access to certain exemptions, deductions and credits that are otherwise allowed." See PWC at: https://www.pwc.com/ca/en/services/tax/publications/tax-insights/changes-alternative-minimum-tax-enacted-2024.html

6 The correlation coefficient between Canadian capital gains realizations as a share of GDP and US capital gains realizations as a share of GDP between 2015 and 2021 was 0.99.

Therefore, we based our estimate on a study that found a strong transitory reaction to eliminating the broad lifetime capital gains exemption in the 1980s, tempered because of the much more limited group impacted this time and the limited time available to accelerate gains (Lavecchia and Tazhitdinova 2021). With this study in mind, we assume that capital gains realizations in the 2024/25 fiscal year will be about $10.8 billion higher due to this transitory reaction, and cumulatively $10.1 billion lower over the next four years, with half of the corresponding unwinding of realizations happening in 2025/26 (Table 1).

Permanent Responses: The second behavioural reaction is permanent. In the long run, the level of capital gains will decrease as capital owners react to the tax. Capital owners often delay selling appreciated assets to defer tax liability, a behaviour known as the lock-in effect, which impedes efficient capital allocation in the economy. Increasing the inclusion rate amplifies this effect by further discouraging investors from realizing gains. Additionally, capital gains taxes deter entrepreneurial activity and risk-taking by reducing the after-tax return on equity-financed investments. This impact is compounded by the fact that capital losses can only offset capital gains, limiting their utility.[7]

Ample academic literature quantifies the permanent reaction of taxpayers to capital gains tax increases. The behavioural response is measured through the "elasticity" of capital gains taxation, indicating how changes in the capital gains tax rate affect capital gains realized. For example, an elasticity of -0.5 means that a 10 percent increase in the capital gains tax rate results in a 5 percent fall in capital gains realizations. Recent studies indicate an elasticity of -0.3 is appropriate for the US economy (CRS 2021). However, Canada's system of deemed realization at death,[8] which differs from the US approach, is expected to moderate responses to capital gains tax changes. Therefore, we conservatively apply a lower elasticity of -0.15 for Canada. This adjustment reduces the portion of gains subject to the higher inclusion rate for affected individuals. We estimate that capital gains realizations will be $0.6 billion lower than otherwise in 2024/25 due to this effect, and $2.4 billion lower than otherwise in 2028/29 (Table 1).

After accounting for both transitory and permanent responses, capital gains realizations are projected to be significantly higher in 2024/25 ($131.9 billion) compared to future years (ranging from $110.3 billion in 2025/26 to $115.7 billion in 2028/29). We find that about 40 percent of the gains are subject to the higher inclusion rate, except in the first year due to the realizations brought forward to avoid the higher rate. This suggests that the tax change should yield substantial additional tax revenues in the first fiscal year (Table 1).

7 We do not account for the new "Canadian Entrepreneurs' Incentive" in Budget 2024, which provides a preferential rate on the disposition of qualifying shares for eligible individuals, up to a lifetime limit of $2 million. However, we do not anticipate a significant impact on our assumed elasticity given that eligibility is limited to a small number of individuals and phased in gradually over many years.

8 In Canada, when an individual dies, they are generally deemed to have disposed of all their capital property at fair market value immediately before death. This means that any capital gains accrued on those assets during the person's lifetime are considered realized at the time of death, even though the assets may not have been sold by the estate. The estate of the deceased is responsible for paying taxes on the capital gains, which means that taxes cannot be eliminated or deferred indefinitely, as may be possible in the United States.

Table 1: Projected Capital Gains Realizations and Impact of the Higher Capital Gains Inclusion Rate on Net Federal PIT Revenues* ($ millions)

	2024/25	2025/26	2026/27	2027/28	2028/29	Total
Projected Capital Gains Realizations						
Baseline Projection	121,686	117,954	116,783	117,247	118,829	592,498
Impact of Transitory Responses	*10,750*	*-5,366*	*-2,700*	*-1,342*	*-664*	*677*
Impact of Permanent Responses	*-584*	*-2,335*	*-2,340*	*-2,371*	*-2,418*	*-10,047*
Capital Gains Realizations After Transitory and Permanent Responses	131,852	110,254	111,743	113,534	115,747	583,129
Share of Realized Capital Gains						
Included in Taxable Income at Two-Thirds (percent)	23	40	40	40	40	
Included in Taxable Income at One-Half (percent)	77	60	60	60	60	
Net Revenue Impact of Two-Thirds Inclusion of Capital Gains Exceeding $250,000	**1,656**	**-724**	**-204**	**113**	**300**	**1,141**
Memo:						
Under the Old AMT Regime	*2,448*	*615*	*967*	*1,171*	*1,300*	*6,501*
*Difference***	*-791*	*-1,340*	*-1,171*	*-1,058*	*-1,000*	*-5,360*
Net Revenue Impact of Changes in Dividend Income						
Ineligible Dividends	*235*	*478*	*525*	*564*	*632*	*2,434*
Eligible Dividends	*-18*	*-62*	*-61*	*-62*	*-61*	*-265*
Net Impact	**217**	**416**	**464**	**502**	**571**	**2,170**
Total Net Revenue Impact	**1,873**	**-308**	**260**	**615**	**871**	**3,310**
Reference						
Budget 2024	*1,995*	*2,050*	*760*	*1,775*	*2,265*	*8,805*
Parliamentary Budget Officer	*2,020*	*265*	*838*	*1,287*	*1,355*	*5,765*

*Net federal revenues are the changes in taxes less transfers.

**Although not shown here, total tax revenue in each of these years remains higher under the current AMT regime than under the old one. This is because the current AMT already generates significant revenues, so the differences presented reflect that most of the potential additional net revenues from higher capital gains inclusion have already been captured by the new AMT regime.

Source: Authors' calculations as explained in the text. See the Appendix for the methodology.

Revenue Impact of Individual Capital Gains Inclusion and the Role of the AMT

Without the reforms to the Alternative Minimum Tax (AMT) introduced in the 2023 federal budget – which includes 100 percent of capital gains when calculating AMT liability (Canada 2023) – we find that over the projection horizon, the higher inclusion rate for personal capital gains in excess of $250,000 would generate about $6.5 billion in additional capital gains tax revenue (Table 1). Although the yearly pattern of net revenue gains differs from the budget estimates, the total sum is similar.

However, under the current reformed AMT regime these net revenue gains are reduced. This is because the current AMT regime derives almost all its revenue from its already higher capital gains inclusion and the partial denial of prior-year capital losses (Laurin and Dahir 2023). The result is that there is less additional revenue to be generated from increasing the inclusion rate on very high gains. In effect, most of the tax revenue initially raised by the higher inclusion rate will no longer be collected by the minimum tax, which only serves as a backstop. Additional revenues due to the minimum tax are much lower with the higher inclusion rate for regular tax, which has the added effect of reducing the amount of AMT carried over to future years.[9] For illustrative purposes, we show the revenue gains generated under the AMT before the 2023 reforms in Table 1. All things considered, we find that the higher PIT inclusion rate will net $1.1 billion in total over the projection period (Table 1).[10]

Impact on Dividend Income

So far, we have only discussed the direct impact of the increase in the personal capital gains inclusion rate on PIT revenue. However, that is not the whole story. The increase in the corporate capital gains inclusion rate will also have an impact on personal income tax revenue through its impact on taxable dividends.

Non-Eligible Dividends: Owners of Canadian Controlled Private Corporations (CCPCs) can add the non-taxable portion of their corporations' capital gains (previously 50 percent) to their Capital Dividend Accounts (CDAs) – a notional accounting of tax-free surpluses. Surpluses from this account can be paid out as tax-free capital dividends to shareholders. The corporate inclusion rate's increase from one-half to two-thirds reduces the tax-free portion of capital gains, which will result in an increase in taxable non-eligible dividends reported at the personal level. CCPCs earn a considerable amount of capital gains. Our projections indicate that non-eligible dividends taxed at the personal level will cumulatively increase by nearly $11 billion over the five-year forecast period (see the Appendix for more details). As shown in Table 1, this increase generates substantial PIT revenues.

Eligible Dividends: Corporations other than CCPCs cannot pass through the non-taxable portion of their capital gains to their shareholders free of taxes. The increase in the corporate capital gains inclusion rate will increase the amount of tax corporations pay and, therefore, reduce their after-tax income. This means that for the same amount of corporate income, eligible dividends to shareholders will be lower, which in turn will reduce the PIT base and PIT revenue. We estimate eligible dividends will decrease by approximately $1.2 billion over five years (more details on the calculations in the Appendix).

9 If a tax filer is subject to the AMT, the additional amount of tax they paid due to the minimum tax can be carried forward for seven years and used to reduce regular tax liability up to the amount of regular tax that exceeds the AMT calculation for that subsequent year.

10 An overwhelming majority of the net revenue gain – about $900 million – is from the reduced use of AMT carryovers.

Net Revenue Impact from Changes in Dividend Income: We estimate the rise in non-eligible dividends will increase personal income tax revenues by a total of $2.4 billion over five years, partially offset by a small decrease of $265 million due to lower eligible dividends. Overall, the higher corporate capital gains inclusion rate will generate an additional $2.2 billion in PIT revenue over the next five years (Table 1).

Conclusion

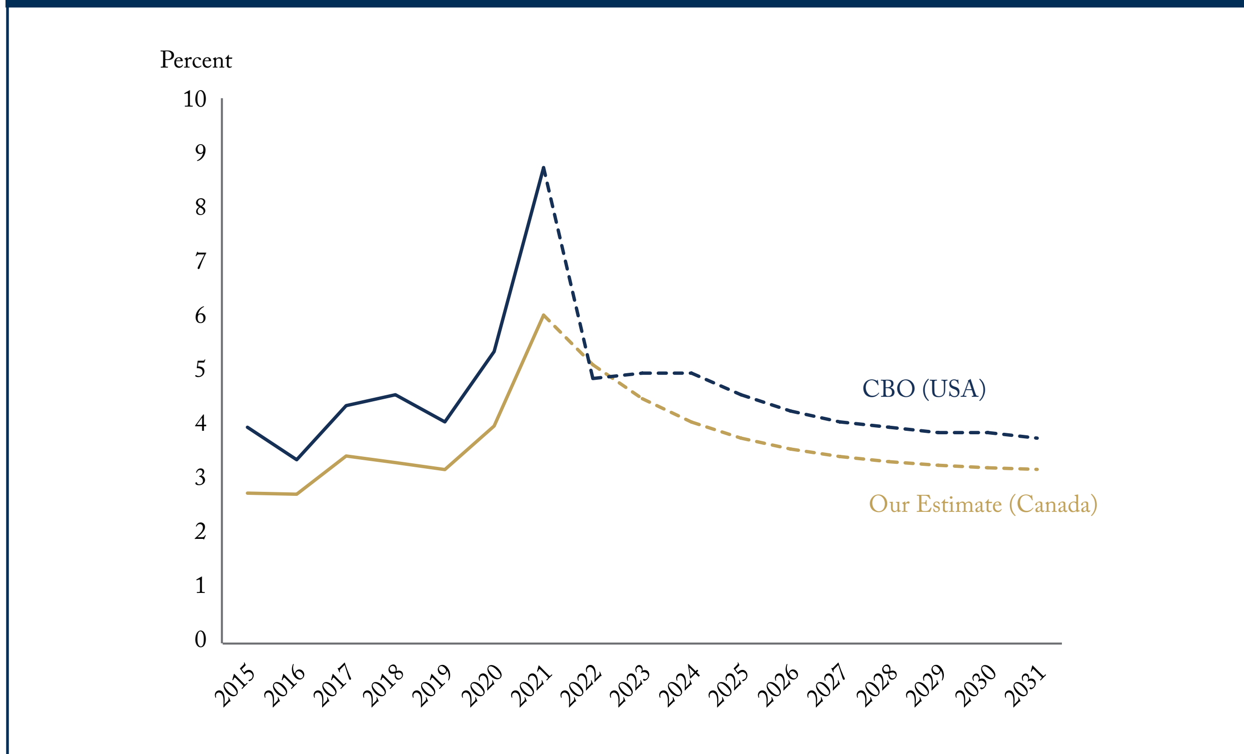
The capital gains tax increase will generate an estimated $3.3 billion ($1.1 billion plus $2.2 billion) in total revenue over five years (Table 1). This estimate is considerably lower than the federal budget projection, and the pattern of yearly revenue gains also considerably differs in the second and third years of implementation. We are uncertain about the reasons for the discrepancies since budgets do not typically contain the detailed assumptions behind their revenue projections. Our analysis demonstrates that projecting revenue gains from capital gains tax changes is complex and crucially depends on uncertain assumptions.

It is possible that the budget projections anticipated higher capital realizations than we do, or perhaps anticipated a less steep unwinding pattern that would subject more new capital gains to taxation over the projection horizon. Other factors may also be at play, such as different projections of CCPCs' capital gains realizations and dividend distributions.

Regardless of the magnitude of the estimated PIT revenue gains, our analysis highlights two important insights about their sources. First, the AMT interacts with the higher inclusion rate on personal capital gains exceeding $250,000, resulting in minimal additional PIT revenue from large capital gains beyond what the AMT would have collected. Second, most of the net PIT revenue gains will come from CCPC owners, who will face a higher inclusion rate on capital gains earned within their corporations, and face a corresponding reduction in the amount of capital gains they can pay out as tax-free capital dividends.

Appendix: Methodology

Figure A1: Capital Gains Realizations as a Share of GDP, CBO Projections (USA) and Our Baseline Estimate (Canada), 2015 to 2031



Notes: Years after 2021 are projections.

Sources: Budget 2024; CBO's June 2024 report, "The Budget and Economic Outlook: 2024 to 2034;" StatsCan Table: 36-10-0222-01, 2023 T1 Final Statistics; and authors' calculations.

Estimating Baseline Capital Gains Realizations

Capital gains realizations are cyclical, and 2021 (the last year of available data) was a peak year due to robust financial market returns in Canada and the United States (Statistics Canada 2023). Accounting for this, the Congressional Budget Office's projections for future capital gains realizations assumed realizations will revert to a level consistent with their historical average (approximately their 2019 share of GDP) over the next decade from their peak in 2021(CBO 2023). We used capital gains data from T1 statistics, historical GDP data, and budget projections to estimate a trajectory of capital gains realizations. Our baseline projection for capital gains realizations as a share of GDP for Canada is compared alongside the CBO's June 2024 projection for the United States in Figure A1. We adjusted Statistics Canada's Social Policy Database and Model (SPSD/M) database, version 30.1, for years 2024 to 2028 to reflect our capital gains projection.

Estimating PIT Revenues from Increasing the Capital Gains Inclusion Rate

We modelled and simulated changes to the individual capital gains inclusion rate using SPSD/M, version 30.1. The SPSD/M is a sophisticated tax micro-simulation tool developed by Statistics Canada. It combines administrative data from personal income tax returns with survey data on family incomes and expenditure patterns to create a detailed and statistically representative database of the Canadian population.

We modelled the increase in the individual inclusion rate by modifying the algorithm that computes taxable capital gains included in total income (line 15000). We included two-thirds of capital gains (current gains minus current year losses) and then subtracted a portion to ensure that capital gains under $250,000 are included at one-half. We then modified the calculation of deductions for the lifetime capital gains exemption and previous years' capital losses to reflect gains included at two-thirds. We also adjusted the calculation of the employee stock option deduction to allow individuals to deduct half the taxable benefit up to a combined stock option/capital gains limit of $250,000; for simplicity, we assumed that all tax filers prioritized the preferential treatment for their capital gains. Additionally, we modified the rate applied to business investment losses to two-thirds.

AMT carryforwards are modelled outside SPSD/M using the most recent CRA tax data from 2011 to 2021 and then projected forward using SPSD/M's estimated change in additional taxes due to the AMT.

Estimating Changes in Dividend Distributions

CRA data show that taxable capital gains earned by CCPCs represented about 17 percent of non-eligible dividends in 2019, the last year before the pandemic. After adjusting for the same transitory and permanent responses we assumed for personal capital gains, we assume that the reduction of adjusted capital gains added to CDAs is taxed in the hands of the corporation and distributed to owners as taxable non-eligible dividends. In our model, non-eligible dividends increase by 3.5 to 3.9 percent annually throughout the forecast period.

Taxable capital gains earned by other corporations (non-CCPCs) represented about 7 percent of eligible dividends in 2019 (data obtained from the CRA). After adjusting for the same transitory and permanent responses as we performed on personal capital gains, we assume that eligible dividends are reduced by the corporate taxes paid on the adjusted corporate capital gains. Eligible dividends in our model are reduced by about 0.6 percent annually over the projected period.

References

Laurin, Alexandre, and Nicholas Dahir. 2023. *Capital Gains and Charitable Donations: The Silent Targets of Federal AMT Reforms*. Commentary. Toronto: C.D. Howe Institute. November.

Lavecchia, Adam, and Alisa Tazhitdinova. 2021. "Permanent and Transitory Responses to Capital Gains Taxes: Evidence from a Lifetime Exemption in Canada." NBER Working Paper Series. February.

Canada. 2023 Budget. Department of Finance Canada. March.

______. 2024 Budget. Department of Finance Canada. April.

Canada Revenue Agency (CRA) T1 Statistics. 2015 – 2021. Accessed at: https://www.canada.ca/en/revenue-agency/programs/about-canada-revenue-agency-cra/income-statistics-gst-hst-statistics/t1-final-statistics.html.

Congressional Budget Office (CBO). 2023. "CBO's Projections of Realized Capital Gains Subject to the Individual Income Tax." Washington D.C. February.

______. 2024. "An Update to the Budget and Economic Outlook: 2024 to 2034." Washington D.C. June.

Congressional Research Service (CRS). 2021. "Capital Gains Tax Options: Behavioural Responses and Revenues." Washington D.C. January.

Parliamentary Budget Officer (PBO). 2024. "Increasing the Capital Gains Inclusion Rate." Legislative Costing Note. August.

Statistics Canada. 2023. "High-income Canadians and Capital Gains, 2021." The Daily. November.

______. Table 36-10-0222-01. "Gross domestic product, expenditure-based, provincial and territorial, annual (x 1,000,000)."

______. Table 33-10-0498-01. "Balance sheet, income statement and taxation statistics with selected financial ratios, by total all industries. "

______. Table 33-10-0500-01. "Balance sheet, income statement and taxation statistics with selected financial ratios, by non-financial industries."

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