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The Economic Costs of Capital Gains Taxes in Canada

by Jason Clemens, Charles Lammam, and Matthew Lo

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This collected series of essays is dedicated to explaining the many benefits available to Canadians from further reducing the taxation of capital gains. This first essay is meant to provide readers with a general understanding of capital gains taxes, the economic costs imposed by extracting taxes from capital gains, and some basic information about capital gains taxes in Canada and other industrialized countries. Simply put: this essay aims to establish a foundation from which to review the options available for further capital gains tax relief, which are detailed in a comparative sense in the following four essays.

The economics of capital gains taxes: A literature review

A capital gain (or loss) generally refers to the price of an asset when it is sold compared to its original purchase price. A capital gain occurs if the value of the asset at the time of sale is greater than the initial purchase price. A capital loss occurs if the value of the asset at the time of sale is less than the purchase price.

Capital gains taxes, of course, raise revenues for government but they do so with considerable economic costs. Capital gains taxes impose costs on the economy because they reduce returns on investment and thereby distort decision making by individuals and businesses. This can have a substantial impact on the reallocation of capital, the available stock of capital, and the level of entrepreneurship.

Veldhuis, Godin, and Clemens (2007) carried out an extensive literature review on the economic costs of capital gains taxes with a particular focus on the effect on the reallocation of capital, the stock of capital, entrepreneurship and risk-taking, compliance costs, administrative costs and tax avoidance, and the marginal efficiency cost. This analysis draws heavily on their work and incorporates new empirical and theoretical research on these subjects.

Lock-in effect

Capital gains are taxed on a realization basis. This means that the tax is only imposed when an investor opts to withdraw his or her investment from the market and realize the capital gain. One of the most significant economic effects is the incentive this creates for owners of capital to retain their current investments even if more profitable and productive opportunities are available. Economists refer to this result as the "lock-in" effect. Capital that is locked into suboptimal investments and not reallocated to more profitable opportunities hinders economic output. Consider an investor who wishes to divest an asset and reinvest the proceedings in a new project. The profit received from the sale of the asset is reduced by the capital gains tax. In order for the investor to reallocate his or her capital, the new investment must provide a rate of return high enough to recoup the funds paid in taxes plus yield a reasonable rate of return.

While the magnitude of the lock-in effect depends on numerous factors (such as the rate of return on the initial and new investments and the investor's time horizon), economic costs result because capital gains taxes discourage the reallocation of capital from lower to higher yielding uses. That is, capital gains taxes cause the economy to lose the extra output that the reallocation of capital would have produced. The lock-in of capital prevents the development of some new, potentially profitable, businesses that are engines of productivity, employment, and wealth creation.

Numerous academic studies have investigated the lock-in effect.[1] An influential paper by Harvard economist Martin Feldstein and his colleagues

1 Many studies provide empirical evidence of the lock-in effect. For instance, Jog (1995) finds evidence of a lock-in effect in Canada by examining the change in capital gains realizations after the 1985 introduction of a capital gains exemption. See also Landsman and Shackelford (1995), Shackelford (2000), Blouin et al. (2000), and Dai et al. (2006), for empirical evidence of the lock-in effect.

Joel Slemrod and Shlomo Yitzhaki (1980) was one of the first to provide an empirical analysis of the effect of taxation on the realization of capital gains, using the sale of corporate stocks at a profit as their test. The authors found that the realizing of capital gains is sensitive to the marginal tax rate. Their research concluded that a 10.0 percentage point increase in the capital gains tax rate reduced the probability of selling a stock by 6.5 percentage points.

Paul Bolster, Lawrence Lindsey, and Andrew Mitrusi (1989) evaluated the impact of the US government's elimination of the lower, long-term tax rate on capital gains in 1986 on stock market activity. The authors examined trading volume on the New York Stock Exchange and the American Stock and Options Exchange from 1976 to 1987. They found that trading volume significantly increased in the months leading up to the tax change and that trade volume significantly declined after the change was implemented: trading volume was 15.0 percent lower in January 1987 compared to the same month in previous years. The empirical results suggest that the expected increase in the capital gains tax rate induced investors to reallocate capital prior to the change in order to avoid higher taxes.

Peter Kugler and Carlos Lenz (2001) examined the impact of the lock-in effect on the overall economy by studying the effect of capital gains taxes in different jurisdictions with otherwise similar economic conditions and tax systems. The authors examined the experience of regional governments ("cantons") in Switzerland that eliminated their capital gains taxes. The authors' statistical analysis showed that the elimination of capital gains taxes had a positive and economically significant effect on the long-term level of real income in seven of the eight cantons studied. Specifically, the increase in the long-term level of real income ranged between 1.1 percent and 3.0 percent, meaning that the size of the economy was 1 percent to 3 percent larger due to the elimination of capital gains taxes.

Zhonglan Dai, Edward Maydew, Douglas Shackelford and Harold H. Zhang (2006) analysed the impact on asset prices from a reduction in the long-term capital gains tax rate with a particular focus on the lock-in effect and the impact on equity trading volumes. The authors used the capital gains tax cut set out in the US government's 1997 Taxpayer Relief Act to test the relationship between a tax reduction and asset prices and market activity. The analysis finds that equity prices were, on average, 8 percent higher than the normal weekly returns in the week leading up to the tax reduction, and

subsequently 1 to 2 percent lower following the tax cut, indicating that capital gains taxes have a significant effect on stock price movements.

James Chyz and Oliver Li (2012) also examined the lock-in effect with relation to the 1997 Taxpayer Relief Act, but with a specific focus on the extent to which a change in the capital gains tax rate affects investors' short-term incentives to sell shares with embedded gains as well as their long-term portfolio allocation decisions. Using a database containing holdings information of approximately 1400 institutional investors, the authors find that tax-sensitive[2] investors reduced holdings of shares with embedded gains after the tax cut was enacted. Taken together with Dai et al. (2006), these findings show that capital gains taxes not only affect the stock price, but also trading volumes.

Benjamin Ayers, Craig Lefanowicz, and John Robinson (2007) conducted a study on how capital gains taxes affect corporate acquisition activities[3] using a set of panel data on corporate acquisitions from 1973 to 2001.[4] After conducting aggregate level and industry level analyses, the study finds that, on average, a 5 percentage point decrease in the capital gains tax rate will increase the annual number of acquisitions by approximately 50 acquisitions—an increase in acquired value of $26.5 billion. This is important because it shows that not only do capital gains taxes affect asset prices and market activity, they also influence corporate acquisition activity and the movement of capital across different organizations.

The "user cost of capital" and the stock of capital

Capital gains taxes have a significant impact on the stock of capital in Canada by increasing the cost of capital to Canadian businesses. By triggering market responses such as the lock-in effect, capital gains taxes make the gathering of capital more difficult, and create more obstacles for investment activities. Capital gains taxes make capital investments more expensive and therefore

2 Tax-sensitive institutional investors include mutual funds and their managers and investment advisors. Less tax-sensitive institutional investors included tax-exempt institutions such as pension funds, university endowments, and foundations, as well as insurance companies which are less likely to exhibit trading behaviour that is influenced by changes in individual tax rates.

3 Corporate acquisition activity is defined as the percentage of traded firms acquired in a calendar year.

4 The sample consists of firms traded on the New York Stock Exchange, the American Stock Exchange, and the NASDAQ over this period.

less investment occurs. Less capital has a number of negative consequences including decreasing the productivity of Canadian workers and ultimately lowering Canadian living standards.

Several studies have investigated the link between the supply and cost of venture capital financing and capital gains taxation, and found theoretical and empirical evidence suggesting a direct causality between a lower tax rate and a greater supply of venture capital.[5]

The extent to which capital gains taxes reduce the stock of capital depends on how sensitive businesses are to the cost of capital. That is, the critical question is at which point firms change their capital investment in response to changes in the cost of capital. Robert Chirinko and Andrew Meyer (1997) quantify the sensitivity of investment spending on the user cost of capital and estimate a 1 percent increase in the user cost of capital resulting from an increase in business taxes. Kevin Milligan, Jack Mintz, and Thomas Wilson (1999) sought to estimate the sensitivity of investment to changes in the user cost of capital in Canada and found that decreasing capital gains taxes by 4.0 percentage points leads to a 1.0 to 2.0 percent increase in investment.

Guenther and Willenborg (1999) examined the effects of a reduced capital gains tax rate on initial public offerings of qualified small business stock. In particular, the authors studied the effect of the US government's 1993 decision to reduce the capital gains tax rate on small business (defined as having assets of less than $50 million) stock purchased from the corporation by individuals, and found that the policy increased the price that small businesses were able to charge for their stock. This is consistent with past research finding that capital gains tax rate reductions lower the cost of capital for such businesses.

Huizinga, Voget, and Wagner (2012) conducted an empirical study to measure the impact of capital gains taxes on the cost of capital in the context of international corporate mergers and acquisitions (M&As). Using a dataset of 5,349 M&As in OECD countries from 1985 to 2007, the analysts find that the effective tax rate on capital gains reflected in takeover prices (after accounting for deductions of realized losses on other shares) is 7 percent, and

5 See Poterba (1989a, 1989b); Gompers and Lerner (1998), Jeng and Wells (2000), Keuschnigg (2003, 2004), Keuschnigg and Nielsen (2001, 2003a, 2003b, 2004a, 2004b, 2004c), and Armour and Cumming (2006).

that it raises the cost of capital by 5.3 percent. This indicates that capital gains taxation is a significant cost to firms when issuing new equity.

Entrepreneurship and risk-taking

Entrepreneurs risk their own capital (and that of venture capitalists and other financiers) and time in the hopes of ultimately profiting from an unproven technology, product, or service. The trade-off is that they expect to be compensated if the business matures and generates financial returns. This process is key to a successful economy because it produces new technologies, products, and services, and ultimately leads to job creation and increased wealth.

Capital gains taxes reduce the return that entrepreneurs and investors receive from the sale of a business. This diminishes the reward for entrepreneurial risk-taking and reduces the number of entrepreneurs and the investors that support them. The result is lower levels of economic growth and job creation.

Capital gains taxes also affect an entrepreneur's ability to attract managers from traditional business sectors. Start-up firms cannot typically offer salaries that are competitive with established businesses and therefore often recruit managers using equity stakes. Capital gains taxes reduce the returns that these managers receive, thereby diminishing the likelihood that start-ups will be able to attract the talent that growth requires.

There is a growing body of academic research investigating the impact of capital gains taxes on entrepreneurship. Most studies focus on how a lower rate of return resulting from capital gains taxes affects the actors in the entrepreneurial process—the entrepreneurs and their financiers. New research has sought to better understand the impact of capital gains taxes on entrepreneurial innovation and the development of new ideas.

Professor James Poterba (1989a) provided the theoretical groundwork for examining the impact of capital gains tax policy on entrepreneurship. He highlighted an important link between capital gains taxes and the demand for venture capital funding—potential entrepreneurs compared the compensation obtained from employment at an established firm to the expected pay-off from a start-up where a larger share of their compensation would consist of a capital gain. Poterba concluded that, by changing the relative tax burden, a reduction in capital gains taxes would lead more high-quality people into entrepreneurship and increase the demand for venture capital.

Harvard economists Paul Gompers and Josh Lerner (1998) tested Poterba's theoretical assumptions by undertaking an empirical examination of the key drivers of venture capital funding. Analysing the stock of venture capital and tax rates on capital gains from 1972 to 1994, Gompers and Lerner found that a one percentage point increase in the rate of the capital gains tax was associated with a 3.8 percent reduction in venture capital funding.

Christian Keuschnigg and Soren Bo Nielsen (2003a) carried out a new theoretical study to understand what policies encourage individuals to seek regular employment and which ones lead them to pursue entrepreneurial activities (or enter the "entrepreneurial market" as the authors described it).[6] Similarly to Poterba, the study found that capital income taxation reduces the supply of entrepreneurs in the market.

Keuschnigg and Nielsen later revisited this topic in two other studies. In Keuschnigg and Nielson (2004a), the authors investigated the effect that taxes (and other public policies such as subsidies to support new firms) had on the creation and success of businesses that were supported by venture capital. The authors found that "even a small capital gains tax … diminishes incentives to provide entrepreneurial effort" (2004a: 1033). Keuschnigg and Nielson (2004b) look specifically at the effects that capital gains taxes have on start-up businesses, and how entrepreneurs react to this particular type of tax. The study concluded that capital gains taxes create significant obstacles for start-up businesses, since a capital gains tax "discourages managerial advice, raises venture returns, and retards entrepreneurship" (2004b:24). Through this collection of studies, Christian Keuschnigg and Soren Bo Nielson presented a clear picture that illustrates the detrimental effect of capital gains taxes on entrepreneurial activities.

Donald Bruce and Mahammed Mohsin (2006) presented an empirical analysis of tax policy and entrepreneurship in the United States. The authors examined the effect of personal income tax rates, capital gains taxes, and corporate income tax rates on self-employment rates—a proxy for entrepreneurship. They found that a one percentage point reduction in the capital gains tax rate is associated with a 0.11 to 0.15 percentage point increase in the self-employment rate.

6 The entrepreneurial market refers to the entrepreneurial labour market, where households can choose to be either normal workers facing fewer risks and less returns, or entrepreneurs who face greater risks and higher returns.

Da Rin et al. (2006) examine the effect of a number of government policies on start-up business in 14 European countries between 1988 and 2001. The authors used two measures to determine whether policies were effective: (i) the proportion of high-technology investments to total venture investments (high-tech ratio), and (ii) the proportion of early-stage investments to total venture investments (early-stage ratio). The authors found that three policies were effective in increasing the proportion of high-tech and early-stage ventures: (1) opening a new venture stock market, (2) reducing the capital gains tax, and (3) reducing labour regulation.

Compliance costs, administrative costs, and tax avoidance

Capital gains taxes impose economic costs in the form of changing incentives for productive behaviour. But capital gains taxes also impose direct costs related to compliance and administration.

The Fraser Institute has published research that measures compliance costs such as expenses related to professional services and reporting, and calculating and remitting tax payments. Using survey data and multivariate analysis, this research estimates the extent to which different factors—such as socio-demographic characteristics, the use of different tax provisions, and different types of income including capital gains income—influence tax compliance costs. The most recent study (Speer & Palacios and Lugo & Vaillancourt, 2014) finds that individuals who reported capital gains income incurred, on average, higher compliance costs than those who did not report any such income. Specifically, the direct compliance costs for those individuals reporting capital gains income was, on average, 13.8 percent higher. This provides some sense of the compliance costs associated with capital gains taxation.

These findings are consistent with research in other jurisdictions on the compliance costs associated with capital gains taxes.

Blumenthal and Slemrod (1992) found that American taxfilers who received capital gains income incurred higher compliance costs than those who reported no such income. Using a survey of 2000 Minnesota households, the authors found that capital gains income increased the time that individuals spent complying with the tax system by 7.9 hours, increased the financial resources they spent on professional tax services by about $21, and increased the total cost of compliance by $143 (all figures in 1989 US dollars). Tran-Nam et al. (2000) found that capital gains taxes imposed significant costs on

Australian firms—6.8 percent of total income tax revenue collected (including income tax revenue generated from capital gains).

In addition to compliance costs for individuals, families, and businesses, there are also costs borne by governments in administering capital gains taxes, and ultimately these costs are covered by taxpayers. There is no empirical research on the administrative costs associated with capital gains taxes but the rules and regulations related to the capital gains tax regime require tax collection agencies to dedicate resources to their enforcement. These administrative costs ought to be considered when conceptualizing the total cost of taxation.

Capital gains taxes also contribute to tax avoidance. The level of tax avoidance is the extent to which actual tax revenue collected by a government differed from what would have been collected if every taxfiler paid exactly what is required by law. Tax avoidance has important implications for tax efficiency since resources expended on avoidance could be put to more productive uses.

Poterba's study in the *American Economic Review* (1987) was a path-breaking work in measuring the relationship between capital gains taxes and tax avoidance. He found that capital gains taxes have a significant effect on tax avoidance. In particular, he found that a 1.0 percent decrease in the capital gains tax rate increased the reported tax base by 0.4 percent. In addition, he estimates that for a taxpayer with an income of $100,000 and capital gains of $20,000, a reduction in his or her tax rate from 45 percent to 33 percent (as set out in the US Tax Reform Act of 1986) would reduce the probability of tax avoidance from 72 percent to 55 percent.

A study by Wayne Landsman, Douglas Shackleford, and Robert Yetman (2002) supports his findings with evidence from a unique data set of shareholder information from the 1989 leveraged buyout of RJR Nabisco. The authors estimate that a one percentage point increase in the marginal tax rate on capital gains is associated with a 0.42 percent increase in tax avoidance. They also found that the average level of avoidance was 11 percent of total gains capital.

At present there are no specific estimates of the extent to which Canadian taxfilers avoid capital gains taxes. But the international evidence suggests that there is indeed some degree of avoidance associated with capital gains taxes.

Marginal efficiency cost

All taxes impose efficiency (economic) costs on society because they distort the behaviour of individuals, families, and businesses. Numerous studies—both academic and commissioned by governments—have estimated the economic costs of different types of taxes. The research relies on what is referred to as the marginal efficiency cost. This methodology provides a means to estimate the cost of different taxes by calculating the efficiency cost of raising one additional dollar of revenue. The goal is to understand what types of different taxes impose the least cost on the economy.

As discussed, the evidence shows that capital gains taxes bring considerable economic costs. This type of taxation reduces the after-tax rate of return on capital investments, creates an incentive for investors to hold onto current assets even though more profitable and productive investments exist, and lowers the return that entrepreneurs, venture capitalists, and other investors derive from risk-taking, innovation, and work effort. These diminished incentives caused by capital gains taxes impede the turnover of older, less profitable investments, reduce the supply of entrepreneurs and the investors that finance them, and reduce the overall level of accumulated capital.

The empirical literature on marginal efficiency cost finds that capital-based taxes impose greater economic costs than other forms of taxation. One of the most widely cited calculations of marginal efficiency costs are those by Dale Jorgensen and Kun-Young Yun (1991). The authors estimate the marginal efficiency costs of select US taxes and find that capital-based taxes (such as capital gains taxes) impose a marginal cost of $0.92 for one additional dollar of revenue compared to $0.26 for consumption taxes.

The Canadian government's Department of Finance published a study by Baylor and Beausejour (2004) that calculated the long-term economic costs imposed by the main taxes in Canada. The authors estimated the benefits from a $1 tax reduction for a number of different types of taxes, and their results support Jorgensen and Yun's findings for the US. Baylor and Beausejour find that a $1 decrease in personal income taxes on capital (such as capital gains, dividends, and interest income) increases society's well-being by $1.30; by comparison, a similar decrease in consumption taxes only produces a $0.10 benefit.

The efficiency of taxation was also explored and discussed by the Quebec government's Ministry of Finance in the province's 2005–2006

budget. The report investigated the effects that different types of taxes have on the economy. The department found that a reduction in capital gains taxes yields more economic benefits than a reduction in other types of taxes such as sales taxes. Reducing the capital gains tax by $1 would yield a $1.21 increase in the GDP, whereas a decrease of $1 in the sales tax would only increase GDP by $0.54.[7] This comparison exemplifies the economic benefits that are relinquished with significant capital gains taxation.

Canada's capital gains tax regime

Canada does not maintain a separate and distinct capital gains tax as capital gains are subject to income taxes. Depending on who holds the asset (individual or business), capital gains are taxed at either personal or corporate income tax rates.

The federal capital gains tax was introduced in 1971 in response to a report by the Royal Commission on Taxation (Carter Commission), which recommended that capital should be taxable like other forms of income. The first capital gains tax provided a preferential tax rate through what is referred to as an inclusion rate, the portion of a capital gain that is subject to income tax. The inclusion rate was set at 50 percent but later increased to 75 percent in 1990 where it remained for about a decade. The rate was lowered to two-thirds in February 2000 and then subsequently lowered back to 50 percent in October 2000 where has remained to the present.[8]

Canada has a progressive personal tax system with tax rates increase according to income. This means that the most important rate is a taxpayer's marginal tax rate—the rate applied to the next dollar of one's income. **Table 1** shows, for 2014: (1) federal and provincial top marginal rates for personal income and the income thresholds at which they apply; (2) federal and provincial top marginal rates for capital gains tax; and (3) the combined federal-provincial top marginal rates for capital gains. As 50 percent of capital gains are included in taxable income, the marginal tax rate for capital gains is half the applicable income tax rate.

7 The GDP refers to the inflation-adjusted (real) GDP.

8 See Golombek (2012).

Table 1: Personal income tax rates and capital gains tax rates in Canada

	Personal income tax		Capital gains tax	
	Top marginal rate	Threshold for top marginal rate	Top marginal rate	Combined federal-provincial top marginal rate
Federal	29.00%	$136,270	14.50%	—
British Columbia	16.80%	$150,000	8.40%	22.90%
Alberta	10.00%	N/A *	5.00%	19.50%
Saskatchewan	15.00%	$123,692	7.50%	22.00%
Manitoba	17.40%	$67,000	8.70%	23.20%
Ontario	13.16%	$220,000	6.58%	21.08%
Quebec	25.75%	$100,970	12.88%	27.38%
New Brunswick	17.84%	$127,802	8.92%	23.42%
Nova Scotia	21.00%	$150,000	10.50%	25.00%
Prince Edward Island	18.37%	$63,969	9.19%	23.69%
Newfoundland & Labrador	13.30%	$68,508	6.65%	21.15%

Note: * Alberta has a single 10% income tax for all personal income; therefore, the threshold for the top rate does not apply.

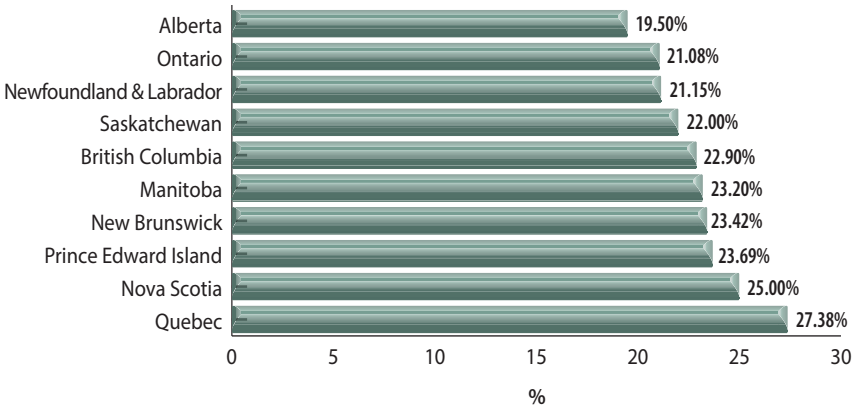
Source: http://www.cra-arc.gc.ca/tx/ndvdls/fq/txrts-eng.html.

While Canadians in all provinces face the same federal top personal tax rate on capital gains (14.5 percent), provincial rates vary greatly. Alberta had the lowest provincial top marginal capital gains tax rate in Canada at 5.0 percent. Quebec had the highest top provincial marginal capital gains tax rate at 12.9 percent.

The level of income at which the top provincial income tax rate applies also differs greatly among the provinces. Prince Edward Island had the lowest threshold at which the top rate applied ($63,969) while British Columbia ($150,000), Nova Scotia ($150,000), and Ontario ($220,000) had the highest.

This is important because it means that Prince Edward Island's top marginal tax rate on capital gains applies much lower than in other provinces, since its top threshold is more than twice as low as that of provinces such as British Columbia and Nova Scotia. Alberta is the only province that has a single personal income tax rate applying to all levels of income. It is important to note that the new government in New Brunswick has expressed its

Figure 1: Combined federal-provincial capital gains tax rates, 2014



Source: http://www.cra-arc.gc.ca/tx/ndvdls/fq/txrts-eng.html.

intention to raise the province's top marginal personal income tax rate but has yet to enact the proposed changes.

Figure 1 shows the combined federal-provincial top capital gains tax rates in Canada for each province in 2014. Alberta had the lowest combined rate at 19.5 percent, with Ontario (21.08 percent) and Newfoundland and Labrador (21.15 percent) ranking second and third. It is worth noting that this is an improvement for Newfoundland and Labrador. In 2006, its combined top marginal capital gains tax rate of 24.3 percent was the highest in the country. Quebec's combined rate of 27.38 percent was the highest in 2014.

The amount of government revenue generated by capital gains taxation is not available to the public in government publications. Canadian governments lump tax revenues deriving from capital gains within the larger personal and corporate income tax categories in their budgets and annual reports.

According to the federal Department of Finance, in 2011, the federal tax revenue gained from capital gains taxation was $2.8 billion compared with the revenue gained from all personal income taxes of $120.5 billion and total revenue of $249.1 billion.[9] This means that capital gains taxes only represent 2.3 percent of the federal income tax revenue and 1.1 percent of overall federal government revenue.

9 The figures were obtained during an exchange between S. Speer and the Department of Finance Canada, on May 30, 2014.

Experience with capital gains taxes in other jurisdictions suggests that higher capital gains taxes are self-defeating as a means of raising more revenue, and that lowering tax rates on capital gains can be positive for the tax base. Moore and Kerpen (2001) studied changes in capital gains tax rates in the United States over a thirty-year period and found a consistent pattern of revenue increases associated with capital gains tax reductions, and revenue declines with tax increases.

Capital gains taxes: equity questions

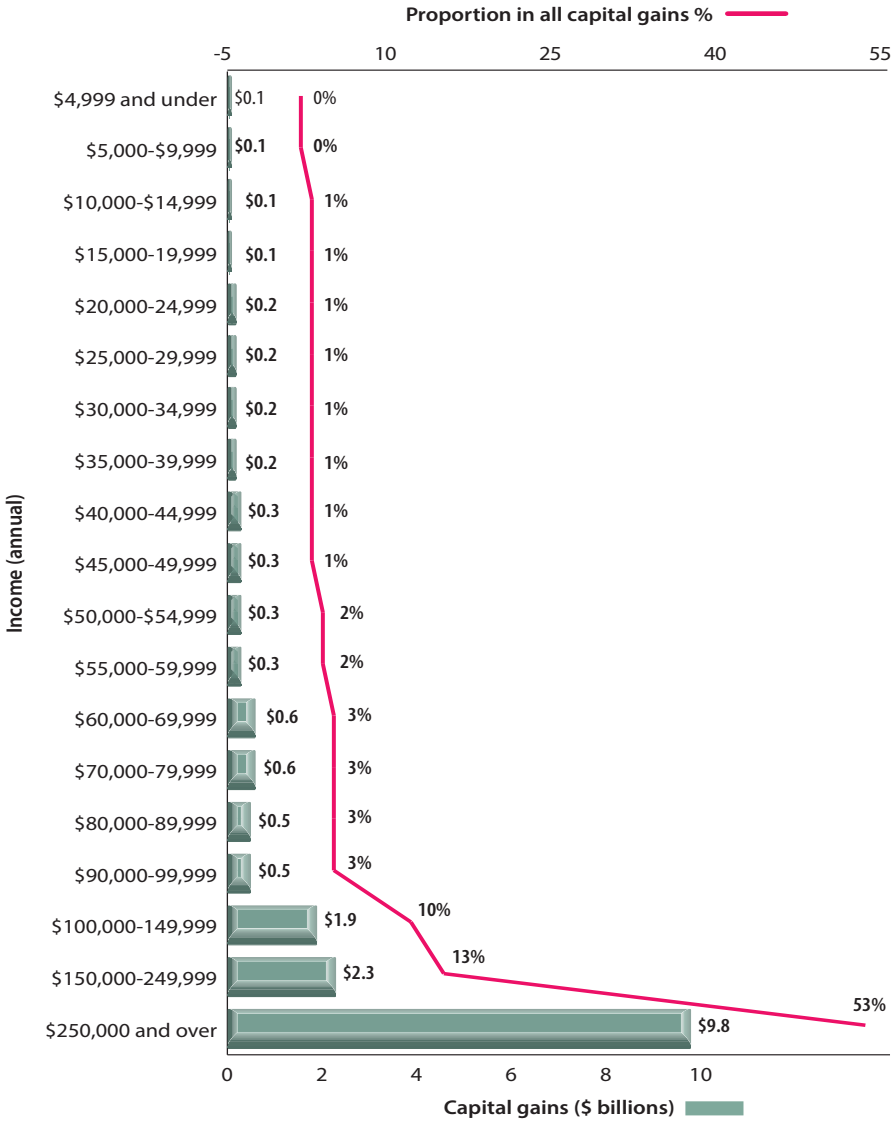
Yet in spite of the clear economic costs associated with capital gains taxation and limited government revenues, its proponents tend to support it on equity grounds. It is frequently claimed that only a small percentage of high-income earners realize capital gains, and the perceived unequal distribution of capital gains has in effect become the primary argument against capital gains tax reductions. As a Standing Senate Committee report summarized in 2000:

> … the arguments in favour of lowering the capital gains tax are primarily economic. … The arguments against a significant reduction in the capital gains tax are based primarily on the grounds that the direct effect of such a reduction has a disproportionate impact on higher-income taxpayers. (Parliament of Canada, May 3, 2000: Introduction)

This equity argument against capital gains tax reductions has been advanced by researchers in Canada and elsewhere. Daniel Feenberg and Lawrence Summers (1990), Jesper Roine and Daniel Waldenstrom (2012), and Thomas Hungerford (2013) have studied the capital gains income distribution in different jurisdictions and concluded that the concentration of capital gains with a small percentage of high-income earners is a source of inequality and a justification for maintaining capital gains taxes. Jackson (2004), Yalnizyan (2010), and Macdonald (2014) have reached similar conclusions about the income distribution of capital gains realizations in Canada and also argued for higher capital gains tax rates in order to offset the perceived inequity.

Government data on taxable capital gains are often cited as evidence of the unequal distribution. As per figure 2, income statistics provided by the Canada Revenue Agency for 2011 show that Canadians earning $250,000 or more reported 53 percent of taxable capital gains.

Figure 2: Taxable capital gains in Canada for 2011



Source: http://www.cra-arc.gc.ca/gncy/stts/gb11/pst/fnl/pdf/tbl2-eng.pdf.

There are problems with relying on tax data to evaluate the distribution of capital gains, however. The first issue is that a considerable percentage of Canadians receive capital gains in Tax-Free Savings Accounts (TFSAs), Registered Retirement Savings Plans (RRSPs), Registered Pension Plans (RPPs), and in their primary residences, but these capital gains are either non-taxable or are treated as regular income and therefore are not reflected in the tax data as capital gains. The point is that government policy already exempts capital gains from taxation for a large share of taxpayers in the name of encouraging investment, savings, and homeownership.

The TFSA was created in 2009 and allows for Canadians to contribute up to $5,500 annually in a tax-free account. Any capital gains or dividends earned in a TFSA are non-taxable and therefore do not show up in taxable capital gains data. According to the Department of Finance (2013), approximately 8.2 million Canadians hold TSFAs with a total value of $62 billion in assets. Analysis from the department found that, in 2011, more than 25 percent of the total value in TFSA contributions was made by individuals with incomes between $20,000 and $40,000, and more than 20 percent was made by individuals earning less than $20,000. If capital gains incurred in TFSAs were accounted for, the distribution of capital gains would likely be less concentrated than suggested by the tax data.[10]

RRSPs are tax-preferred individual accounts designed to help Canadians save for retirement.[11] An individual's contribution is tax deductible. Current rules require individuals to convert their RRSP savings into Registered Retirement Income Funds (RRIFs) no later than the age of 71, and to begin drawing down the savings thereafter as part of their annual income (Canadian Revenue Agency, 2014). Any capital gains incurred in an RRSP are then taxed as regular income. This means that the individual does not benefit from the 50 percent inclusion rate for taxable capital gains. It also means that any capital gains incurred in RRSPs are not reflected in the tax data.

10 The current government has committed to increase the annual contribution limit to $10,000 once the budgetary deficit is eliminated. One study (Milligan, 2012) considered the impact such a policy change would have on tax treatment of capital gains. The author found that raising the contribution limit would result in fewer than 4 percent of households reporting taxable capital gains income from savings in 20 years.

11 Individuals can contribute up to 18 percent of their earned income with a maximum of $24,270 in 2014.

This likely has implications for the income distribution of capital gains. In 2011, 5.9 million Canadians contributed to an RRSP and the value of contributions that year was $34.4 billion (Statistics Canada, 2014). In total, all assets held in RRSPs were valued at $775 billion in 2011 (CBC, 2013). It is difficult to estimate the extent to which RRSPs holders are incurring capital gains in their respective accounts but it is likely that some percentage is and these data are not reflected in taxable capital gains.

RPPs are employment-based pension plans that are based on employee and/or employer contributions. Contributions are also tax deductible. A defined benefit or defined contributions are then distributed to plan participants during retirement. Any capital gains incurred in an RPP are then taxed as regular income. This means that the individual does not benefit from the 50 percent inclusion rate for taxable capital gains. It also means that any capital gains incurred in RPPs are excluded from the tax data.

This also likely has consequences for the income distribution of capital gains. According to Statistics Canada, 32 percent of the labour force in Canada participated in some type of RPP in 2011.[12] The total market value of all RPP assets in 2012 is $1.3 trillion.[13]

In addition to TFSAs, RRSPs, and RPPs, capital gains realized from the sale of an individual's primary residence are not subject to taxation. The home ownership rate in Canada is now approximately 70 percent—among the highest rates in the industrialized world (Cross, 2014). Any data on the distribution of capital gains resulting from the sale of an individual's primary residence is excluded from the data on taxable capital gains.

The result is that a considerable percentage of capital gains income is earned in tax-sheltered vehicles. A 1999 Canadian study estimated that, as of 1989, roughly one-third of personal investment assets gave rise to income that is taxable under the income tax.[14] The authors noted that the two-thirds value given for the proportion of personal investment assets not giving rise to

12 According to Statistics Canada (2013a), 6.1 million Canadian workers had RPPs in 2011, of which 3.1 million were employed in the public sector and 2.9 million in the private sector. In terms of percentages within the public and private sectors, 88.2 percent of employees in the public sector have RPPs and 24 percent in the private sector have access to RPPs (Palacios and Clemens, 2013).

13 See Statistics Canada (2013b).

14 See Poddar and English (1999).

taxable income was an underestimate, because the data for the components of household wealth was not comprehensive (it excluded offshore investments, for example) and it did not account for post-1989 trends in savings and investments. It also now excludes the enactment of TFSAs. Bibbee (2008: 32) estimates that approximately 90 percent of individuals will ultimately be able to hold all of their financial assets in tax-sheltered vehicles as the TFSA matures over time.

The second challenge with relying on tax data is that it includes taxable capital gains income in people's annual income, which inflates an individual's annual income due to one-time asset sales and contributes to the concentration of taxable capital gains among high-income earners. This method of presenting the income distribution of taxable capital gains therefore provides a flawed picture. By presenting income levels net any taxable capital gains, this method overstates the income distribution by pushing those with large one-time capital gains into higher income groups. But these gains are often atypical and can create a misleading picture about the income levels of those who incur capital gains. For instance, the owners of a small business may have lower incomes and reinvest earnings back into their business to build up a nest egg for retirement. It will appear that in the tax year such people sell their business and retire they are high-income earners, even though it is a one-time spike in their personal income. Put simply, the lumpy nature of asset dispositions results in statistics on the incomes of those with capital gains that tend to overstate their wealth.

A more appropriate measure of the distribution of taxable capital gains would be pre-taxable capital gains income. Grubel (2003) discussed in detail economist Joel Emes's attempt to understand the extent to which the current method affected the income distribution of taxable capital gains. With data from Revenue Canada, Emes found that, in 1992, 78 percent of capital gains taxes were paid by families with incomes above $100,000, and that only 8 percent were paid by families with incomes below $50,000. Backing out capital gains income, however, changed the income distribution considerably. Using this method, Emes found that families with income above $100,000 paid 26.8 percent of capital gains taxes and those with incomes below $50,000 paid 52.1 percent of such taxes. A similar analysis for 2010 finds a comparable

distributional breakdown after accounting for pre- and post-taxable capital gain income.[15]

Concern about the income distribution of capital gains ignores the fact that a significant number of Canadians across income scales realize capital gains even if these are not reflected in the tax data. Any debate about the equity of capital gains taxes therefore needs to account for this reality. Tax policy can sometimes involve important trade-offs between the principles of equity and economic efficiency and any debate about capital gains taxes should not overstate the potential equity concerns.

Lessons from abroad

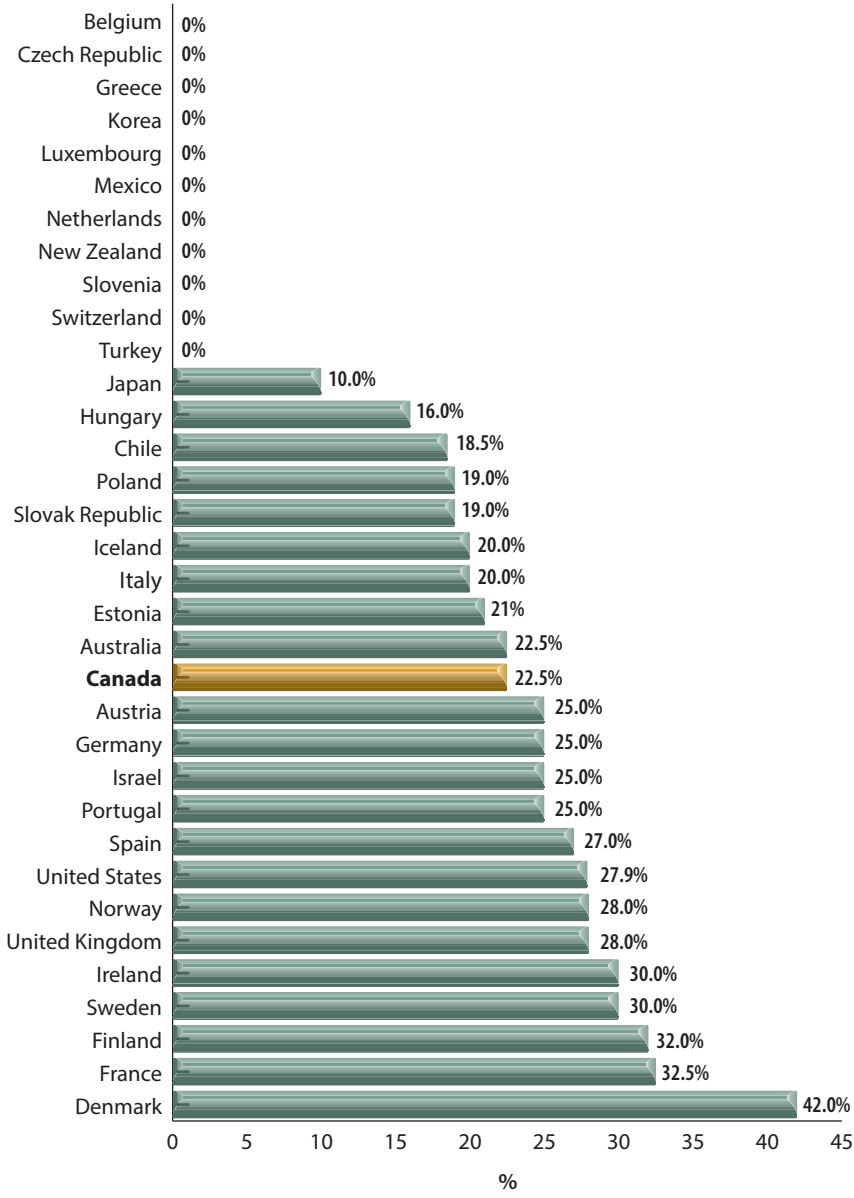
The structure and rates of capital gains vary considerably by country. Some countries have a separate and distinct tax on capital gains. Others such as Canada tax capital gains through the regular income tax system. The rates of tax and levels of income at which those rates apply also differ among countries.

Figure 3 shows the top personal capital gains tax rates in 2013 for 34 countries comprising the Organisation for Economic Co-operation and Development (OECD). Eleven of those countries do not levy personal capital gains taxes. Canada has the fourteenth highest personal capital gains tax rate among these countries, at 22.25 percent. The United States ranks eighth highest with a capital gains tax rate of 27.9 percent. Denmark has the highest capital gains tax rate of 42 percent.

As in the discussion of Canadian provinces, it is important to note that capital gains tax rates presented in Figure 3 apply at different levels of income in the various countries. That is, while the tax rates may be the same in two countries, the level of income at which those rates apply could be markedly different.

15 Further analysis using panel data to track incomes and tax payments over time could allow one to examine these results over a multi-year period.

Figure 3: OECD top capital gains tax rates, 2013



Source: http://taxfoundation.org/article/top-capital-gains-tax-rate-oecd-2011-2014.

Conclusion

As the economic literature shows, capital gains taxes carry considerable economic costs. The empirical research finds that capital gains taxation can have a substantial impact on the reallocation of capital, the stock of capital, and the levels of entrepreneurship. The ultimate outcome is less investment and less economic activity.

These economic costs have to be measured against the tax revenue that capital gains taxation generates and how such a policy affects the tax system's overall efficiency and equity. Neither consideration outweighs the high costs that capital gains taxes impose on the economy.

As discussed, capital gains tax revenue represents only 2.3 percent of the federal income tax revenue and 1.1 percent of overall federal government revenue. It seems hard to justify the current capital gains tax regime with its high economic costs in exchange for such a relatively small revenue source.

As for equity considerations, the argument in favour of capital gains taxes is weaker than commonly presented. Government policy already exempts capital gains from taxation for a large share of taxpayers in the name of encouraging investment, savings, and homeownership. It is also the case that tax data reflects net income—including any one-time taxable capital gains, which cause individuals to be pushed into higher income groups than would normally be the case. Concerns about the income distribution of capital gains therefore ignore the fact that a significant number of Canadians across income scales realize capital gains even if it is not reflected in the tax data. Any debate about the equity of capital gains taxes therefore needs to account for this reality. Tax policy can sometimes involve important trade-offs between the principles of equity and economic efficiency, and any debate about capital gains taxes should not overstate the potential equity concerns.

In sum, this essay has reviewed the economic literature on capital gains taxes and sought to contextualize Canada's current tax treatment in this body of research. It has also addressed common arguments in favour of maintaining high capital gains tax rates—namely the revenue implications and equity concerns—and shown that the trade-off between the high economic costs of capital gains taxes and these considerations would point in the direction of further capital gains tax reform. In so doing, the essay sets the foundation for readers to evaluate subsequent chapters on capital gains tax regimes in different countries.

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