

**The taxation of capital gains:
principles, practice, and directions for reform**

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The taxation of capital gains: principles, practice, and directions for reform

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Abstract

Capital gains are particularly complex to tax given their infrequency, the different ways in which they are generated, and worries about harming productivity. There are theoretical arguments in support of everything from zero rates to high rates of tax on capital. In this paper, I first discuss the impact of capital gains on inequality, which often motivates discussions about how gains should be taxed. I then set out the principles that determine how gains should be taxed, in particular how the tax rate should relate to income tax rates. I propose that capital gains tax rates be equalized with income tax rates, subject to provisions to allow gains to be ‘smoothed’ over time and to remove inflation from the tax base. I highlight key transitional issues in moving to such a tax structure. Finally, I discuss the specific lessons for Canada.

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1 Introduction

The taxation of capital is one of the most contested and controversial topics in public economics. Papers developing theoretical arguments range from clear conclusions that capital should go entirely untaxed² to a “presumption that it would be taxed, and possibly at high rates.”³ What makes policy recommendations around taxing capital all the more difficult is there are so many ways in which returns are generated, each with different properties, and each affecting the administrative constraints that sit alongside theoretical arguments about the appropriate tax rate. Are the returns merely the payment for deferring consumption, or do they also reflect the compensation for taking risks? If the latter, is any good outcome the product of luck, effort, or skill? Are returns received as some flow of income, or as the increase in the value of some asset – a capital gain – that is accrued but not realized until the asset is sold?

Capital gains, in particular, have a number of features that make them especially complex. First, they are typically received infrequently. This means that treating them as income, and taxing them at annual income tax rates – even with only a partial inclusion rate – may in principle lead to unusually high tax rates for someone who otherwise has a persistently low income. It also puts them outside many statistical measures of income inequality, since most statistical agencies use the standards proposed by the ‘Canberra Handbook’,⁴ which excludes from income ‘irregular receipts’ such as gains, making them generally less visible.⁵

Second, while prototypical examples of gains involve buying and selling assets, such as shares and second homes, by value much of the gains relate to the sale of small businesses. In the UK – where the gap between top income tax rates (including payroll taxes statutorily incident on employees) and capital gains tax rates is 19 percentage points – around 71 percent of all taxable gains relate to the sale of private businesses.⁶ Differentials between the taxation of labour income and of gains create strong incentives to work in ways that allow the returns to be taken as capital gains, even where they are largely the product of labour effort: in the US, 82 to 83 percent of the value of small businesses appears to derive from the labour of the owner.⁷ As Kay and King note “The problem is that capital gains may arise for a variety of reasons and we would wish to differentiate between the components

² Anthony B. Atkinson and Joseph E. Stiglitz, “The design of tax structure: Direct versus indirect taxation” (1976) 6:1–2 *Journal of Public Economics*; Christophe Chamley, “Optimal Taxation of Capital Income in General Equilibrium with Infinite Lives” (1986) 54:3 *Econometrica*; Kenneth L. Judd, “Redistributive taxation in a simple perfect foresight model” (1985) 28:1 *Journal of Public Economics*.

³ Joseph E. Stiglitz, “Pareto efficient taxation and expenditures: Pre- and re-distribution” (2018) *NBER Working Paper No. 23892*.

⁴ The Canberra Group Handbook on Household Income Statistics, or Canberra Handbook, is an international guide on the production of national household income statistics. It defines income as “all receipts whether monetary or in kind (goods and services) that are received...at annual or more frequent intervals, but excludes windfall gains and other such irregular and typically one-time receipts.” Since gains are typically received at less than annual frequency, they are not included in income, and therefore not part of standard income inequality measures, although adjusted inequality series accounting for a more comprehensive income definition are sometimes produced (Corlett, Advani and Summers, 2020; Larrimore, Burkhauser, Auten and Armour, 2021).

⁵ Arun Advani, Tahnee Ooms, and Andy Summers, “Missing Incomes in the UK: Evidence and Policy Implications” (2021) *CAGE Working Paper No. 543*; Arun Advani and Andy Summers, “Measuring and taxing top incomes and wealth” (2021) *CAGE Working Paper No. 580*.

⁶ Arun Advani and Andy Summers, “Capital gains and UK inequality” (2020a) *CAGE Working Paper No. 465*.

⁷ Matthew Smith, Danny Yagan, Owen Zidar, and Eric Zwick, “Capitalists in the Twenty-first Century” (2019) 134:4 *Quarterly Journal of Economics*.

of capital gains, some of which are equivalent to other components of income and others of which are not.”⁸ This creates some pressure towards equalizing rates between labour income and capital gains.

Third, common to much of the discussion around capital taxation, are debates about productivity effects: do low rates stimulate investment, and what do those with high gains do with the money? Since such a large share of gains come from business investment, policymakers are often concerned with stifling such activity. If those receiving gains from business are serial investors, producing innovation and jobs, this may provide some rationale to keep rates low. On the other hand, if recipients of gains largely bank them and retire, there is much less case for treating gains differently to other sources of income. Lacking clear evidence on this question, the debate has largely been based on preconceptions. In a letter to the *Times* newspaper in 1995, British MPs David Shaw and Bernard Jenkin wrote “Capital formation is a more valuable activity for the economy than mere earning. It is also much more difficult to achieve. It is therefore wrong for taxation to regard income and capital gains similarly.”⁹ By contrast, in the light of recent evidence, the current Conservative UK Chancellor of the Exchequer (Finance Minister) Rishi Sunak criticised a relief that reduced capital gains tax (CGT) rates for owner-managers, saying it was “expensive...ineffective...and unfair,” noting that “less than 1 in 10 claimants [said] the relief has been an incentive to set up a business.”¹⁰

The tensions set out here are seen clearly in the policy sphere. In the UK, capital gains taxation has been reformed regularly, with major reforms in 1988, 1998, 2008, 2010, and 2016. Unlike the Canadian reforms, UK reforms have often entirely changed the approach to capital gains tax. When CGT was introduced in 1965, it was as a backstop to income tax, to stop remuneration being shifted out of the income tax base. It was introduced at a flat rate of 30 percent, unrelated to individual income tax rates. Reform in 1988 fully aligned CGT with income tax rates while providing an inflation allowance, essentially in line with comprehensive income tax principles (discussed below). Motivated by trying to increase long-term investment, reform in 1998 brought in a system of ‘taper relief’: inclusion rates which varied by asset type and declined with holding length. Subsequent reform in 2008 returned the UK to a flat rate CGT, unrelated to income tax rates, now at 18 percent. In 2010 rates began to vary again with income, with the introduction of a higher 28 percent rate for individuals paying the higher rate of income tax. Finally, in 2016 variation by asset class was reintroduced as the prevailing CGT rates were cut by 8 percentage points, except in the case of carried interest and residential property.¹¹ Students of the UK CGT system have therefore had the luxury of experiencing the full range of CGT options.

The papers in this policy forum tackle precisely the concerns laid out above. Gagné-Dubé et al. examine the impact of gains on inequality, highlighting particularly the extent to which ‘lumpiness’ – the infrequency with which gains are received – can distort the apparent inequality by gains.¹² Taking into account the effects of capital gains on redistribution, Smart and Hasan Jafry argue that gains should be taxed more similarly to income, raising the inclusion rate – the share of gains that are

⁸ John A. Kay and Mervyn A. King, “The British tax system” 5th edition (1990) Oxford: Oxford University Press.

⁹ “Letter: Capital growth and tax reform”, *Times*, 27 October 1995. Reported in Antony Seely, “Capital gains tax: background history” (2010) *House of Commons Library standard note SN860*.

¹⁰ Rishi Sunak, Budget 2020. <https://www.gov.uk/government/speeches/budget-speech-2020> [accessed on 27 September 2021].

¹¹ Antony Seely, “Capital gains tax: background history” (2010) *House of Commons Library standard note SN860*; Antony Seely, “Capital gains tax: recent developments” (2020) *House of Commons Library briefing paper 5572*.

¹² Tommy Gagné-Dubé, Matis Allali, Luc Godbout, and Antoine Genest-Grégoire, “La concentration réelle des gains en capital au Canada: une analyse longitudinale” (2021) 69:4 *Canadian Tax Journal*.

taxable – from 50 percent to 80 percent.^{13,14} Finally, Evans et al. use the Australian experience of CGT reform to highlight that, at least when moving from 100 percent to 50 percent inclusion rates, there were no Laffer effects: revenues fell as a result of the large reduction in inclusion.¹⁵

Taking up those themes, I first discuss the role of gains on inequality, contrasting the evidence from Canada with my own work in the UK. I then discuss the principles and practice of how gains should be taxed, focusing primarily on the tax rate – how much capital gains should be taxed – in keeping with the focus of this Policy Forum. Next I discuss key transition issues and the role of politics in reform. Finally, I provide some directions for reform, thinking both about CGT and the wider system of capital taxation within Canada.

2 The impact of capital gains on inequality

Individual incomes are typically measured and taxed annually, so inequality measures naturally focus on cross-sectional differences between individuals in a given year. One limitation of this approach is that irregular receipts such as gifts, inheritances, and capital gains are completely ignored by statistics which follow international standards.¹⁶ If capital transfers and capital gains are concentrated among those with the highest incomes, traditional measures will underestimate ‘true’ inequality in access to resources.

However, merely adding capital gains received in a year to income for that year, and then using this to construct measures of income, is also problematic. Gagné-Dubé et al. highlight the problems caused by the lumpiness of gains for augmented measures of income inequality. Their key result is that gains are actually much less unequally distributed than they otherwise seem. A simple thought experiment suffices to show why: if everyone received 250,000CAD in gains precisely once in their life,¹⁷ recipients would find themselves in the top 1 percent in the year they receive the gains.¹⁸ Looking at an annual snapshot would suggest gains are highly concentrated, and those with gains are very well off. From an egalitarian standpoint, one might call for high tax rates to reduce this inequality. But taking a lifetime perspective, one could instead see that gains are perfectly equally distributed. In this case fairness concerns dissipate, and the only relevant issue in tax design is to find the most efficient way to tax gains given the structure of the tax system, behavioural responses to different taxes, and government spending needs.

¹³ Michael Smart and Sobia Hasan Jafry, “Inequity and inefficiency in the tax treatment of capital gains” (2021) 69:4 *Canadian Tax Journal*.

¹⁴ The inclusion rate is closely related to the ratio between the tax rate on capital gains and the tax rate on income. If there were only a single tax rate on income, then the inclusion rate is the same as this ratio. Where there are multiple income tax bands, these things are not equivalent, since the inclusion rate reduces the amount of gain that is taxable, which may move an individual into a lower tax band than if a 100 percent inclusion rate were used.

¹⁵ Chris Evans, Youngdeok Lim, John Minas, and François Vaillancourt, “The Australian experience with capital gains preferential tax treatment: Possible lessons for Canada” (2021) 69:4 *Canadian Tax Journal*.

¹⁶ This is true both of statistics consistent with the Canberra Handbook definition of income, and of the more recent ‘Distribution of National Accounts’ (DINA) approach to measuring inequality (Piketty, Saez and Zucman, 2018, 2019). DINA measures of inequality include only income that is measured in national accounts, so changes in asset values (capital gains) and transfers of existing resources (gifts and inheritances) are excluded, though such receipts are patently important for individual welfare. Individual research studies have sometimes included capital gains, though usually not gifts and inheritances, in income inequality measures.

¹⁷ For purposes of this example, assume interest rates and inflation are both zero, to ease exposition.

¹⁸ Statistics Canada, High income tax filers in Canada

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110005501> [accessed on 27 September 2021].

This parable highlights the need to think about gains (and indeed incomes) over the lifecycle. However, the natural question is how close to this hypothetical equal distribution are gains? What Gagné-Dubé et al. show is that, although gains are more equally distributed when taking a lifetime perspective, they are still much more concentrated than incomes. While 65.9 percent of gains (by value) go to tax filers with more than 250,000CAD in total remuneration (income plus gains), only 21.7 percent go to people who are above this threshold on the basis of income only. In part this is not surprising: in the absence of systematic capital losses, clearly a larger number of filers will be above 250,000CAD in income plus gains than will be above this based on income alone. However, gains are still much more concentrated than income: while the top 1 percent of tax filers by income (receiving more than 244,800CAD) receive 10 percent of all income, they receive 24 percent of all gains.¹⁹ Egalitarian concerns are therefore still relevant.

Similar evidence is provided in the UK by Advani and Summers.²⁰ They show four key facts relevant to thinking about inequality in receipts of gains. First, gains are highly concentrated: an individual in the top 1 percent of the population by income is 50 times more likely to report any taxable gains than someone in the bottom 40 percent.²¹ Even conditional on having any gains there are large differences: the average person with gains who is in the top 1 percent by income receives 6.7 times as much in gains as the average person with gains who is in the bottom 40 percent by income.²²

Second, these gains are very lumpy. A third of individuals who received more than £20,000 in gains in 2017 also received at least as much in the previous four years (on average). But the remaining two-thirds received less than this—possibly nothing at all.

Third, including capital gains raises the top share. The UK top 1 percent share considering income only is 13.8 percent. Including gains but maintaining the ranking of individuals, this rises to 15.2 percent. If individuals are re-ranked, so that gains allow people to move around the distribution, this rises further to 16.8 percent. About half of the rise in the top 1 percent share that would be created by treating gains as income is therefore from re-ranking. A similar pattern is shown for Canada by Saez and Veall, and for Sweden by Roine and Waldenström.^{23,24}

Fourth, to ameliorate concerns that this re-ranking is entirely due to lumpiness, Advani and Summers develop a series based on income plus *accrued* gains.²⁵ The re-ranked top 1 percent share including accrued gains is 16.7 percent. This top share is essentially the same as when realized gains are used,

¹⁹ Income share figure from Statistics Canada, High income tax filers in Canada <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110005501> [accessed on 27 September 2021]. Capital gains numbers from Smart and Hasan-Jafry (this volume), who provide the share of gains for individuals over 250,000CAD in income; for individuals over 244,800 this share will be even larger, but no figure for this is available.

²⁰ Advani and Summers, 2020a, footnote 6 supra.

²¹ Note that Advani and Summers look at the distribution of income and gains across the entire adult population in the UK, rather than only among taxpayers, since the full population is the welfare-relevant group for a government. This difference in the populations considered means that the numbers for the UK and Canada are not directly comparable.

²² Note that, as for Canada, these numbers focus on *taxable* capital gains. As I discuss below, many gains are not taxed. In the UK the largest exclusion is primary residences (main owner-occupied housing). Corlett et al. (2020) suggest these gains are worth more than three times as much as taxable capital gains (£170bn in the 2017-18 tax year, compared with £55bn in taxable gains).

²³ Roine and Waldenström also summarise evidence that including gains raises top shares across a range of high-income countries.

²⁴ Emmanuel Saez and Michael R. Veall, “The Evolution of High Incomes in Canada, 1920-2000” (2003) *NBER Working Paper No. 9607*; Jesper Roine and Daniel Waldenström, “On the role of capital gains in Swedish income inequality” (2012) 58:3 *Review of Income and Wealth*.

²⁵ Advani and Summers, 2020a, footnote 6 supra.

although at the individual level it will be slightly different people who are in this top 1 percent.²⁶ Capital gains are therefore much more concentrated than incomes, even accounting for ‘lumpiness’ in realizations.

Similar results based on accruals are seen elsewhere. In Norway, Alstadsæter et al. link income tax and company records to attribute accrued gains that relate to undistributed business income.²⁷ They find this substantially increases top shares relative to when only income is considered, with the top 1 percent share almost doubling in some years. Doing the same exercise in Chile, Lopez et al. find that this increases the top 1 percent share by around 50 percent.²⁸ In the US, Larrimore et al. go further, showing that the top 1 percent share rises when including accrued business gains, but also that this remains true once accrued property gains – which are often thought to be more important at the middle of the distribution – are included.^{29,30} Even on an accruals basis, capital gains *are* concentrated at the top.

Consequently, equity concerns about the distribution of gains are justified: for any given preferences about the acceptable level of inequality, redistributive policies have more work to do once gains are taken into account. Perversely from an equity standpoint, the availability of low tax rates for gains also means that tax systems actually do much less redistribution of these gains. In the UK, gains increase post-tax inequality proportionally more than pre-tax inequality because they are much more lightly taxed.³¹

The favourable tax treatment of capital gains also creates horizontal inequities, by widening the dispersion in the effective average tax rate – the share of remuneration paid in tax – across individuals with the same level of remuneration.³² In the UK, the headline top tax rate on employment income – including both income tax and payroll tax that is statutorily incident on employees – is 47 percent, and begins at an income of £150,000. The average effective rates paid at the top are much lower: the mean effective tax rate paid by someone with total remuneration of £10 million, who would be over the top threshold every year even if this money were divided over a 40-year working life, is just 21 percent.³³ This masks substantial heterogeneity: a quarter of individuals here are paying more than 40 percent, while another quarter pay around 10 percent.

3 At what rate should capital gains be taxed?

Given the concentration of capital gains among those with high incomes, even accounting for the lumpiness of receipts, Smart and Hasan Jafry (henceforth SHJ) consider the arguments for and against

²⁶ Advani and Summers also provide evidence on how the inclusion of gains changes the types of individuals who are in the top 1 percent: they are older, more likely to be female, and more likely to be business owners.

²⁷ Annette Alstadsæter, Martin Jacob, Wojciech Kopczuk, and Kjetil Telle, “Accounting for business income in measuring top income shares: Integrated accrual approach using individual and firm data from Norway” (2016) *NBER Working Paper No. 22888*.

²⁸ Ramón E. López, Eugenio Figueroa, and Pablo Gutiérrez, “Fundamental accrued capital gains and the measurement of top incomes: an application to Chile” (2016) 14:4 *Journal of Economic Inequality*.

²⁹ Larrimore et al. (2021) use a slightly different income concept as their baseline, compared to the other papers described here. A parallel set of findings from adding retained business profit, using yet another income concept, has been found by other authors in the US, but the precise figures have been a matter of ongoing debate (see Piketty, Saez and Zucman, 2018; Auten and Splinter, 2019; Saez and Zucman, 2020).

³⁰ Jeff Larrimore, Richard V. Burkhauser, Gerald Auten, and Philip Armour, “Recent trends in US income distributions in tax record data using more comprehensive measures of income including real accrued capital gains” (2021) 129:5 *Journal of Political Economy*.

³¹ Advani and Summers, 2020a, footnote 6 supra.

³² Evans et al., 2021, footnote 15 supra.

³³ Arun Advani and Andy Summers, “How much tax do the rich really pay? New evidence from tax microdata in the UK” (2020b) *CAGE Policy Briefing No. 27*.

taxing gains at lower tax rates, and make the case for raising the Canadian inclusion rate from 50 percent to 80 percent. This approach is largely supported by Evans et al., based on the evidence from Australia. Below I discuss some key principles in the taxation of gains, the considerations when determining the optimal rate, and the empirical evidence for various elements that influence the optimal structure of CGT, relating these to the arguments in SHJ and Evans et al.

3.1 Principles

At first blush, there is a simple answer to how one should tax capital gains. We have a system for taxing income, so why not tax gains at the same rates? Why should gains be different?

This line of reasoning was adopted when (Labour) Chancellor James Callaghan introduced CGT in the UK.³⁴ He explained in his budget speech that “...gains confer much the same kind of benefit on the recipient as taxed earnings... [and] the present immunity from tax of capital gains has given a powerful incentive to the skilful manipulator.”³⁵ This combines two key rationales for a CGT.

First, that income tax should cover a comprehensive measure of income, which would incorporate gains. The same point was made in 1988 by (Conservative) Chancellor Nigel Lawson when he aligned capital gains tax rates with income tax, saying “there is little economic difference between income and capital gains.”³⁶ Second, that in the absence of a CGT individuals have strong incentives to structure their income so that it can be received as capital gains.

There are three arguments against this approach to merely aligning CGT rates with income tax rates. First, in the absence of any other adjustment, aligning rates imposes a tax on the ‘normal rate of return’: the risk-free return to saving. This distorts the timing of consumption, making it cheaper to consume now than later. This could be avoided by providing a ‘rate of return allowance’, to exempt some gains from the tax, as recommended by the Mirrlees Review (which recommended this for all returns on capital).³⁷

Whether or not it is useful to provide such an allowance depends on a wider set of factors: for example, it would not be optimal if savings rates are positively correlated with incomes, or if leisure time is complementary with other consumption. The issues here are subtle,³⁸ but the likelihood is that the assumptions needed for the exclusion of the normal rate of return are not met.

Second, in the absence of any other adjustment, aligning rates also imposes a tax on inflation. Inflation increases the difference between the nominal price at which assets are bought and sold. Particularly in periods of high inflation this is highly problematic. As Chancellor Geoffrey Howe noted in 1979, “The objection to CGT in its present form is that most of the yield comes from paper gains arising from inflation. The tax is, therefore, a capricious and sometimes savage levy on the capital itself.”³⁹ It is

³⁴ A forerunner to CGT was introduced in 1962 by Selwyn Lloyd, covering short term gains, but Callaghan introduced the first broad CGT in the UK in 1965. See Seely (2010, footnote 11 supra) for details.

³⁵ James Callaghan, Budget 1965. <https://api.parliament.uk/historic-hansard/commons/1965/apr/06/i-capital-gains-tax> [accessed on 27 September 2021].

³⁶ Nigel Lawson, Budget 1988. <https://api.parliament.uk/historic-hansard/commons/1988/mar/15/taxes-on-capital> [accessed on 27 September 2021].

³⁷ James Mirrlees, Stuart Adam, Timothy Besley, Richard Blundell, Stephen Bond, Robert Chote, Malcolm Gammie, Paul Johnson, Gareth Myles, and James Poterba, “The Mirrlees Review: Conclusions and recommendations for reform” (2011) 32:3 *Fiscal Studies*.

³⁸ See Banks and Diamond (2010), and Advani and Summers (2021) for discussions.

³⁹ Geoffrey Howe, Budget 1979. <https://hansard.parliament.uk/commons/1979-06-12/debates/289bffad-6e56-4ca6-9dd1-0d812cf5856c/BusinessTaxation%E2%80%94IncludingCapitalTaxation> [accessed on 27 September 2021].

difficult to find a supporting argument that inflation ought to be taxed if it can be avoided.⁴⁰ The most direct solution to this is therefore to have an allowance that removes inflationary gains from the tax base. If a rate of return allowance were being used, and this excluded the *nominal* risk-free rate, then no separate allowance is needed. Without a rate of return allowance, an indexation allowance would instead need to be introduced to remove inflationary gains. This approach was taken in the UK from 1988 to 1998, and in Australia between 1985 and 1999.⁴¹

Third, while we have thus far discussed principled approaches for how the taxation of capital gains should relate to the taxation of income, an alternative approach to determining tax rates focuses instead on the outcomes achieved. This is more in keeping with economic traditions of utilitarianism, as well as policymakers' practical approaches to making tax policy.

3.2 Setting the rate

Moving from these high-level principles to a practical discussion of how to set the rate, there are three issues to consider: 'fiscal externalities' (the effect on other tax bases), distributional effects, and the effect on investment.

The fiscal externality from a particular rate of capital gains taxation is the extent to which changing CGT rates affects the tax revenue from *other* tax bases. As described earlier, CGT was introduced in the UK precisely because of concern that the income tax base was being eroded. Minimising the extent of this erosion is best achieved by equalising the rates of CGT with the income tax schedule.

A second determinant of the optimal CGT rate is the distributional effects of CGT. While one needs to be careful to account for lifecycle effects and lumpiness, to the extent that CGT is relatively concentrated among top income individuals, this tends to suggest relatively high rates of tax. This can be achieved by having a high inclusion rate, or by a separate CGT schedule which taxes gains at high rates. Related, but distinct, is the question of whether all incomes should be treated equally: if so then the high rate of tax should be achieved through a high inclusion rate, rather than a separate, high CGT rate.

Finally, higher CGT rates reduce the return to investment. To the extent that this discourages productive investments that have positive externalities, this creates pressure for lower rates. SHJ argue that the size of such effects is small. An important consideration here is whether low rates are the solution, even if such effects exist: low rates affect all recipients of gains, many of whom may not be engaged in such investments. A better solution, if support for productive investment is desired, would be to adjust the tax base by providing larger allowances for capital actually invested. This directly benefits individuals who are putting capital at risk, and does so in proportion to what they put at risk, rather than benefitting everyone who receives gains regardless of what risk was taken.⁴²

3.3 Empirical evidence

There are a number of important questions on which empirical evidence is needed, in order to determine quantitatively the appropriate taxation of capital gains. How does tax revenue vary with the CGT rate? How do investment decisions respond to the rate of CGT? How much do individuals restructure their income to reduce their tax rate? Do savings rates vary with lifetime incomes? Do

⁴⁰ Though note SHJ make an argument for taxing inflation as a second-best solution to solving a different difficulty with capital gains tax: that individuals are able to defer the tax.

⁴¹ See Section 4.3 for a discussion of why such allowances have in some cases been removed in favour of a lower inclusion rate, and why these reforms should be reversed.

⁴² It is also worth noting that most countries have a number of other investment reliefs already, so while it is important that policy does not overly discourage investment, there is also the risk of providing multiple reliefs for the same investment.

work decisions vary with the taxation of savings? This list is not exhaustive, and I have discussed some of these briefly above. Here I focus on the first three.

3.3.1 The revenue-maximising rate of CGT

Recent empirical work on CGT has concentrated on estimates of the elasticity of revenues with respect to the tax rate, which can be used to calculate the revenue-maximising rate of CGT. This is a key parameter for politicians interested in how much revenue can be raised, although it should not be the only factor determining the tax rate chosen.

Using a CGT reform in Canada that abolished the lifetime exemption of 100,000CAD, Lavecchia and Tazhitdinova find that long-run gains were not affected, suggesting revenue gains from relatively high CGT rates.⁴³ They do find short-run effects, with many individuals realizing gains before the reform takes effect, underscoring the need to think carefully about any transition when reforms are implemented.

Agersnap and Zidar estimate that in the US optimal CGT rates are 38–47 percent, similar to top income tax rates.⁴⁴ Sarin et al. highlight the importance of (i) long-run estimates, to account for the voluntary nature of realizations, (ii) the increasing importance of gains from sources that cannot be retimed, and (iii) fiscal externalities when estimating responses.⁴⁵ They argue this is why recent realization elasticity estimates are lower than those in older papers, which do not fully account for such effects. New, lower estimates of the realization elasticity imply that the realized capital gains are less sensitive to tax rates than previously thought. They conclude that substantial revenue could be raised in the US by increasing CGT rates to 40 percent; even more if base-broadening reforms were introduced alongside increases in the tax rate. Evans et al. (this volume) provide a longer discussion of realization elasticities, and evidence from other research, covering Canada and Australia.

3.3.2 The effect of CGT on investment decisions

There is much less evidence specifically looking at the effects of CGT rates on actual investment decisions. However, one can learn something about the relevant effects from looking at evidence on responses to other taxes and reliefs. There are two key facts.

First, general savings decisions do not appear to respond substantially to tax policy. Surveying the evidence, Advani and Tarrant find little responsiveness of savings to tax policy.⁴⁶ This suggests blanket reductions in CGT rates as a way to increase investment are likely to have a high deadweight cost, i.e. the revenue cost will be large relative to the amount that individuals respond, but direct evidence from CGT reforms would be beneficial to reduce the uncertainty about this conclusion.

Second, investment decisions are responsive to targeted tax policy. For example, Guceri and Liu show that R&D tax credits in the UK do have a positive and significant impact on the level of R&D undertaken, with “around \$1 in additional private R&D spending per dollar foregone in tax revenue.”⁴⁷ If support for investment is desired, targeted support policies are therefore more likely to be appropriate. Similarly, Miller and Smith find “Tax base reforms that reduce the upfront cost of capital

⁴³ Adam M. Lavecchia, and Alisa Tazhitdinova, “Permanent and Transitory Responses to Capital Gains Taxes: Evidence from a Lifetime Exemption in Canada” (2021) *NBER Working Paper No. 28514*.

⁴⁴ Ole Agersnap and Owen Zidar, “The tax elasticity of capital gains and revenue-maximizing rates” (2021) *American Economic Review: Insights*.

⁴⁵ Natasha Sarin, Lawrence H. Summers, Owen M. Zidar, and Eric Zwick, “Rethinking how we score capital gains tax reform” (2021) *NBER Working Paper No. 28362*.

⁴⁶ Arun Advani and Hannah Tarrant, “Behavioural responses to a wealth tax” (2021) *42 Fiscal Studies*.

⁴⁷ Irem Guceri and Li Liu, “Effectiveness of Fiscal Incentives for R&D: Quasi-experimental Evidence” (2019) *11:1 American Economic Journal: Economic Policy*.

investment, such as tax credits for new equity investments, are better targeted at [increasing] investment than lower capital gains tax rates.”⁴⁸

3.3.3 The effect of tax differentials on how income is received

There is substantial quantitative evidence that individuals respond strongly to differences in tax rates by restructuring their income. Kopczuk and Zwick provide evidence of growth in ‘pass-through’ firms (‘S-corporations’ and partnerships) in the US, as individuals take advantage of lower taxation of personal income relative to corporate plus dividend taxation.⁴⁹ By contrast, Miller, Pope, and Smith show that in the UK the reverse has happened, with rising incorporation to benefit from the lower taxation from this organisational form.⁵⁰ Advani and Summers show that the lower taxation of capital gains has led to substantial restructuring of activities to benefit from lower tax rates.⁵¹

The implication of these strong responses is that differences in the taxation of capital gains and income creates substantial revenue losses, as remuneration is restructured, with little positive effect. This creates pressure for alignment between CGT and income tax, with full inclusion.⁵²

4 Directions for reform

4.1 Equalizing tax rates between income and gains

Both SHJ and Evans et al. argue for an increase in the tax rate on capital gains. SHJ explicitly recommend maintaining the existing capital gains tax base, which taxes the *nominal* increase in value, but raising the inclusion rate. They argue it should be raised to 80 percent in Canada, on the basis that the evidence finds few positive effects on capital investment and competitiveness from the current 50 percent inclusion rate, and that frictions caused by lock-in are small. Evans et al. focus largely on revenue – rather than wider economic effects – and implicitly argue for a 100 percent inclusion rate, on the basis that there is little evidence of ‘Laffer effects’, where revenue rises as tax rates fall.

My own reading of the evidence is largely in line with Evans et al. There are some good recent papers, discussed in the previous section, but the evidence base is still rather underdeveloped, and for now there is not enough breadth of evidence to draw strong conclusions. I would therefore not support the view that the evidence is settled and there are few negative consequences to taxing gains at a greater rate. In line with Evans et al., my view is that the evidence on economic effects isn’t settled, but in the absence of any evidence justifying clearly a departure from neutrality, I would favour gains being taxed more in line with income,⁵³ for reasons relating to the scope for avoidance.

As described previously, the introduction of CGT in the UK was partly predicated on the notion that there was ‘leakage’ from the income tax base: some individuals were structuring their activities in a way that allowed them to receive remuneration as capital gains and thereby avoiding tax entirely. Since the introduction of CGT, complete avoidance is not possible in this way. However, the preferential treatment of gains relative to income in many countries does still provide incentives for such restructuring of activities. The quantitative evidence provided above is clear: these incentives are acted upon, creating losses in tax revenue.

⁴⁸ Kate Smith and Helen Miller, “Capital taxation and entrepreneurship” (2021) *mimeo*.

⁴⁹ Wojciech Kopczuk and Eric Zwick, “Business Incomes at the Top” (2020) 34:4 *Journal of Economic Perspectives*. See also Smith et al., 2019, footnote 7 *supra*.

⁵⁰ Helen Miller, Thomas Pope, and Kate Smith, “Intertemporal income shifting and the taxation of owner-managed businesses” (2019) *IFS Working Paper WP19/25*.

⁵¹ Advani and Summers, 2020a, footnote 6 *supra*.

⁵² See also Advani and Summers, 2021, footnote 5 *supra*.

⁵³ I return below to the issue of *how* this should be done, where I disagree with both SHJ and Evans et al.

It is also the case that, by value, most gains should be thought of as business income. In the UK, Advani and Summers find that half of gains going to top individuals⁵⁴ come from the disposal of owner-managed business assets, and another quarter come from unlisted shares, much of which will also be owner-managed businesses.^{55,56} By contrast, in Canada revenue losses from business owners extracting income in the form of capital gains “appear relatively small for the present”, despite the large incentives to engage in such behaviour (SHJ). Smith et al. show that for such companies, most (82–83 percent) of the value comes from the owner-manager, suggesting that these gains in large part represent labour income.⁵⁷ Miller, Pope, and Smith document that in the UK the differential between labour income taxation and the taxation of dividends paid out through a company has been a key driver in rising incorporations.⁵⁸ Since CGT rates are even lower, the incentives are that much starker. Equalizing rates removes the need to police boundaries between income tax and gains. Without any compelling case for non-neutrality, this equalization at least removes incentives to restructure economic activity to reduce tax.

4.2 Introduce averaging provisions

Alignment of income tax and CGT rates returns us to the thorny problem raised by Gagné-Dubé et al.: what to do about those on low incomes who receive large gains? While it is true that by value the majority of gains go to a narrow slice of the population, the majority of people receiving CGT are much less well off (since there is a long tail of individuals receiving some gains). Concentration does not excuse neglect of gains for the rest of the population.

A better solution would be to average the value of the gains over some period. Modern tax authorities already retain the information needed to do this, and indeed often have such provisions for lumpy incomes. For example, in the UK, ‘creators of literary or artistic works’ can average their incomes over two years to lower the tax they pay.⁵⁹

In principle, it would be optimal to average over the holding period for the asset, if this were possible. However, in practice this rapidly becomes complex for some assets, so may not be implementable.⁶⁰ In that case a fixed window, consistent with the average holding length (potentially by asset class) could be used. While picking any given fixed window is arbitrary, picking a window of one year is unlikely to be a more rational solution.

4.3 Remove inflation from the tax base

When inflation is high, much of the tax owed will be due in respect of purely nominal gains. SHJ argue that “the taxation of nominal gains should be regarded as a rough-and-ready corrective device to address the deferral advantage that investors receive in our realization-based tax system.” This may perhaps be a reasonable approximation at the present time (although this is not completely clear),

⁵⁴ Top individuals are individuals who receive at least £100,000 in gains. Around 88% of all taxable gains go to this group.

⁵⁵ A further 5% come from ‘carried interest’: this is not business income, but labour income of fund managers that is taxable as gains. Increases in the value of additional properties, often thought of as the archetypal example of gains, make up only 5%, the same as carried interest.

⁵⁶ Advani and Summers, 2020a, footnote 6 supra.

⁵⁷ Smith et al., 2019, footnote 7 supra.

⁵⁸ Miller, Pope, and Smith, 2019, footnote 50 supra.

⁵⁹ <https://www.gov.uk/government/publications/averaging-for-creators-of-literary-or-artistic-works-hs234-self-assessment-helpsheet/hs234-averaging-for-creators-of-literary-or-artistic-works-2015--2> [accessed on 27 September 2021].

⁶⁰ The difficulty comes when, for example, someone owns shares of a company and shares have been both bought and sold at multiple points in time. To accurately construct the appropriate holding period the full distribution of buying and selling times needs to be known, which rapidly becomes onerous.

but given the political and efficiency costs of regularly changing systems of capital taxation, it would seem wiser to design a system that is robust to higher-inflation environments that may occur.⁶¹ If inflation were to reach double digits, as in many high-income countries in the 1970s, it would be hard to argue that the sale of an asset one year after purchase ought to incur CGT on the nominal gain for reasons of deferral of tax until the end of the tax year.

Conversely, and consistent with Evans et al., inclusion rates of less than 100 percent are also not a good way to remove inflation from the tax base. If the ratio between real and nominal rate of return was fixed and known, then an adjustment to the inclusion rate would serve as an inflation correction: for example, if inflation were always 2 percent and the real return was always 2 percent, so that the nominal return was 4 percent, then a 50 percent inclusion rate is equivalent to removing inflation from the base. Clearly neither inflation nor the real return are known in advance, nor are they in fixed proportion over time.

Since there is neither equity nor efficiency rationale to tax inflationary gains, and since no alternative proxy is available, the natural way to remove inflation from gains is to allow the indexation of base costs and subsequent investments in capital. This approach was taken by the UK between 1988 and 1998, and by Australia between 1985 and 2000—in both cases alongside a 100 percent inclusion rate and a CGT schedule that matched the income tax schedule. Doing this directly removes nominal gains, so that CGT is applied only to real increases in asset prices.

The main case made against such indexation, to remove inflation, is the complexity. When indexation was scrapped in the UK in 1998, the Chancellor explained that “In a low inflation environment a complex system of indexation is no longer necessary.”⁶² Since then two things have changed. First, the complexity of indexation has been substantially reduced: instead of manual calculations on paper forms, this information can be collected and indexation directly calculated via the computerised systems already used for collecting tax information. Second, inflation has been rising. Even at a rate of 2 percent a year for a decade, this would lead to a nominal gain of 22 percent that would unnecessarily be taxed. For an asset held for two decades the nominal gain is 49 percent. Particularly if governments seek to encourage long-term investment, the taxation of nominal gains can be very problematic. Correcting this by creating an inflation allowance is, as argued above, a more appropriate solution than offering a lower headline tax rate (as the UK did in 1998).

A second argument that may be made against such indexation is that the above logic applies just as well to other returns on capital: yet in most jurisdictions there is no allowance for inflation when taxing dividends or interest.⁶³ For these other returns, the case for indexation is perhaps even stronger, since the effects of compounding mean that the same rate of tax has a larger effect on the real return.⁶⁴ In the context of CGT reform, assuming wider reforms are off the table, the question is whether an

⁶¹ Auerbach and Siegel (2000) provide evidence that wealthier individuals have more flexibility in the timing of their capital gains realizations, and realise more gains when the tax rate they face is temporarily lower. This ability to ‘wait out’ reforms is an important reason for ensuring consistency in the taxation of gains, and therefore for any future reform to be able to cater, as far as possible, for future changing circumstances.

⁶² Seely, 2010, footnote 7 *supra*.

⁶³ It is also worth noting that for a given asset, indexation should only be applied once: it should not be the case that there is an allowance against the capital gain on shares and also dividends received from the same shares. Doing so would overcompensate for the effects of inflation.

⁶⁴ For example, suppose inflation is constant at five percent for a period of 10 years, and the tax rate on capital income and capital gains is 40 percent. An asset worth 100CAD at the start of the period would be worth 163CAD in nominal terms, in the absence of tax. If this return were taxed as a capital gain, the owner would pay 25CAD in tax – despite no real return – keeping 138CAD. If instead the asset had paid out a nominal return of five percent, this return were taxed each year, and the after-tax return were reinvested, the asset value at the end of the decade would be 134CAD.

inflation allowance for CGT is sensible *in the absence of such allowances on other returns*. Without such allowances, there remains a ‘wedge’ between the taxation of gains, and of returns received in other forms, which makes it more tax efficient to structure capital returns in the form of gains. The key trade-off is whether the benefits of indexing gains – reducing some of the distortion in the decision to save/invest – outweighs the cost of individuals substituting between asset classes. There is little concrete empirical evidence with which to evaluate this trade-off. However, given the many distortions known to be caused by the current system, the overall case for reform is strong. Coupled with policymakers’ existing concerns about discouraging investment that have led to lower rates on gains, and the lack of any strong evidence of large negative consequences from distortions between asset classes, an inflation allowance would seem sensible for capital gains even if it were not in place for all other forms of returns.

4.4 Other considerations

As described in Section 3, a key area of disagreement between the comprehensive income and comprehensive consumption approaches to taxation is the treatment of the normal rate of return. Given the strong assumptions that are needed to justify the exclusion of the normal rate of return, and limited evidence that this exclusion has substantial positive consequences, my own view is that there is no compelling case for exclusion. It is unclear what is the optimal rate of taxation for the normal rate, and whether it is higher or lower than the prevailing income tax rate, but there is no strong reason to think it should be zero.

A separate issue, not discussed thus far, is whether capital gains ought to face some higher rate to compensate for the benefit of tax deferral. The idea, discussed in some detail in SHJ, is that the compound returns made on capital go untaxed until realization. If an individual has the option of saving or investing in an asset that produces gains, with the same nominal rate of return in each case, the after-tax return from the asset will be higher than the after-tax return from saving, because in the latter case tax is taken off annually reducing the compounded saving on which returns are generated. Short of moving to taxation on an accruals basis, there is no direct solution to this. In principle, one could approximate this through taxation that depends on holding length to calculate the average annual return, but this would be complex and disadvantage holders of assets whose growth rate increases over the holding period.

Related but distinct is the flexibility in the timing of realizations, which also allows lower rates to be paid by realizing when incomes are temporarily low. Here averaging is likely to provide a partial solution.

Finally, if there is a case for supporting investment, it should be done by altering the tax base, not adjusting the tax rate. This may be done by investment incentives distinct from CGT. If there is a desire to adjust CGT to recognise investments, this should be done by increasing the allowance given to investment. This has the benefit that it ‘follows the money’: it benefits individuals based on the amount of capital at risk, and allows nothing for individuals who have gains based only on labour income.

5 Transitional issues

There are a number of important issues of transition in moving to a reformed and improved system for taxing capital gains, touched on by both SHJ and Evans et al. I do not cover them comprehensively here, but highlight four key points: forestalling, political consensus, rebasing, and transitional reliefs.

First, one political difficulty is that if people know that a CGT rise is likely, they will ‘forestall’: bringing forward realizations to take advantage of the low rate while it remains. This may lead to inefficient disposals, attempts to sell and repurchase (subject to any anti-avoidance rules) to bring forward some

gains, and lower revenues immediately post-reform. From a political standpoint, the consequent reduction in post-reform revenues can be an important consideration when trying to demonstrate to voters the success of a reform measure within the electoral cycle. Auten and Clotfelter provide the classic study of this effect.⁶⁵ Advani and Summers show recent evidence of this from the 2008 reform to CGT in the UK.^{66,67}

Second, a corollary to the above is that, if people do not believe there is a political consensus on the appropriate CGT rate, they may well delay realization awaiting the next policy reform. The experience of both the UK and Canada is that there have been multiple reforms, so when the tax rate (after accounting for inclusion rates) is relatively high, it is likely to be worth delaying realization until the next reform if possible.⁶⁸ It is worth noting that forestalling behaviour also means that rate rises and cuts are not symmetric: the response to a coming tax rise (that is believed to be permanent) is to realize now any already accrued gains that would likely otherwise be realized sometime in the coming few years, while the response to a pre-announced cut is merely to delay realizations between now and the cut being implemented.

For equalization between taxes on capital gains and other forms of income to be successful, it therefore requires widespread discussion, debate, and consensus.⁶⁹ However, as above, this is likely to lead to a reduction in revenues immediately post-reform, as well as a spike in realizations pre-reform, as individuals bring forward realizations before any rate rise. Alternatively, if equalization is implemented by a relatively right-leaning party, it can likely be done without as much discussion, on the rationale that more left-leaning parties are unlikely to unwind a progressive reform.⁷⁰

The third crucial transitional issue is that of 'rebasings': effectively wiping out all gains before some date. The 1988 reform in the UK rebased gains to 1982, so that any accrued gain made before that date was removed from the tax base. Current reform proposals in the UK by the government's official advisors on tax reform have proposed further rebasing.⁷¹ Rebasing is inequitable, both vertically and horizontally. It is regressive (vertically inequitable), since we have seen gains are concentrated among the well-off. It is horizontally inequitable, since it benefits those who haven't yet realized but are otherwise similar to those who recently have. Combined with policy uncertainty, rebasing also exacerbates lock-in effects. It creates another reason to delay realizations: experience of past rebasings encourage the belief that rebasing may happen again.

Finally, transitional reliefs are often used to protect individuals or groups that are made worse off by a reform. However, they can easily expand in scale and scope, undermining the tax base. 'Retirement relief' in the UK provides a salutary lesson.

⁶⁵ Gerald E. Auten, and Charles T. Clotfelter, "Permanent versus transitory tax effects and the realization of capital gains" (1982) 97:4 *The Quarterly Journal of Economics*.

⁶⁶ Miller, Pope and Smith (2019) provide evidence for similar forestalling behaviour for dividend income, in response to changing income tax rates.

⁶⁷ Advani and Summers, 2020a, footnote 6 supra.

⁶⁸ Auerbach and Siegel (2000) provide evidence of such behaviour among those with relatively high incomes.

⁶⁹ Gemma Tetlow, Jill Rutter, Joe Marshall, and Thomas Pope, "How to be a tax-reforming chancellor" (2020) *Institute for Government Report*; Gemma Tetlow, Joe Marshall, Thomas Pope, Jill Rutter, and Sukhvinder Sodhi, "Overcoming barriers to tax reform" (2020) *Institute for Government Report*.

⁷⁰ This may not always be a good assumption. In the UK, the 1998 move away from equalised income tax and capital gains tax rates was made by Gordon Brown, who was Chancellor in a Labour government (Labour being the left-leaning of the two major UK political parties).

⁷¹ Office of Tax Simplification (OTS), "Capital Gains Tax review – first report: Simplifying by design" (2020), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/935073/Capital_Gains_Tax_stage_1_report_-_Nov_2020_-_web_copy.pdf [accessed on 27 September 2021].

When CGT was introduced in the UK, retirement relief – reduced rates on the sale of a business at retirement – was provided to counter political opposition.⁷² The concern was primarily for impact of CGT on small business owners, particularly those who had anticipated the sale of business assets as their primary source of retirement funding. While providing relief to this group may have been a laudable aim on the introduction of CGT, retirement relief as introduced was ultimately not limited to gains accrued prior to the introduction of CGT, but covered a fixed exemption from CGT for all business disposals. The political justification for this is reflected in the comments of John Diamond, Chief Secretary to the Treasury, during the final reading speech of the legislation – “It is right that the small man in particular should realise that the burden of the Capital Gains Tax does not rest upon him.”⁷³

The relief was subsequently expanded in value, the age threshold for qualification was lowered through a sequence of reforms from 65 initially to just 50 by 1996.⁷⁴ This example underscores the importance of ensuring that if any transitional reliefs are deemed necessary, their rationale is laid out clearly, and the scope of any relief is narrowly focused, to avoid covering behaviours that were not initially intended.

6 Concluding remarks

The Canadian system for capital gains taxation has some positive features in its design. Two in particular are the treatment of death and migration.

Canadian CGT treats death as a ‘deemed disposal’, so that death is treated as a realization and tax is due on these gains at the time. Australia instead allows the assets to transfer tax-free, with the recipient inheriting the base cost; this potentially allows indefinite deferral of dynastic gains. The UK and US are still worse, completely wiping out gains made in life (known as ‘forgiveness at death’ and the ‘step-up basis’ respectively): this strongly discourages realizations of long held assets late in life, as well as perpetuating inequality.

Canadian CGT also treats emigration as a deemed disposal, while offering rebasing on entry to Canada, so that the tax applies to gains accrued while in Canada. This has the advantage of neither allowing individuals to leave to avoid the tax after making large domestic gains, nor discouraging the arrival of individuals who expect to receive gains soon based on prior assets.

Where Canadian CGT has been argued to fall short is in the low inclusion rate, which leaves substantial portions of capital gains untaxed, and in the low rate for closely held companies. These are areas that are theoretically more nuanced, and where there is substantial variation in policy across countries. Empirical evidence on any positive economic effects has also historically been much less developed, but what evidence there is does not provide compelling argument for non-neutrality in taxing gains.

By contrast, one area where the evidence is clear is the high ‘paper’ responsiveness of individuals to tax rate differentials: this creates revenue leakage, but little economic benefit. This provides a compelling reason to tax gains according to the income tax schedule, albeit after averaging gains over some periods and removing the effects of inflation.

It is worth emphasising how radical a policy of equalization would be. Many countries, including Canada, have payroll taxes alongside income taxes, that effectively act as a higher income tax on labour income. Neutrality implies that capital gains rates are aligned with the effective tax rate on labour income, including these payroll taxes.

⁷² David Stopforth, “The Birth of Capital Gains Tax – the Official View” (2005) 6 *British Tax Review*.

⁷³ House of Commons Debate, 15 July 1965.

⁷⁴ Finance Act 1996, s176 (Amending the Taxation of Chargeable Gains Act).

Finally, while this policy forum is focused on capital gains, the taxation of gains can only be considered in the wider context of the capital tax system. Although there are some positive things to be said for elements of the capital gains tax, there are substantial problems elsewhere in the capital tax system. For example, the effective non-existence of inheritance or estate taxation through essentially flat-rate charges is clearly highly regressive. The positive effects of successful taxation of gains at death, on both horizontal and vertical equity, are therefore somewhat muted by the non-taxation of bequests. Reform of capital gains tax should therefore be seen as a first step in improving the taxation of capital more broadly.

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