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Benefactors Lecture

Tax Policy for a New Era: Promoting Economic Growth and Fairness

Kevin Milligan

Associate Professor, UBC Vancouver School of Economics,
Fellow-In-Residence, C.D. Howe Institute

Winner of the Doug Purvis Memorial Prize

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Foreword

For practitioners, commentators and citizens, the increasing complexity of Canada's tax system poses many challenges. Simply keeping up is a huge task. Economic activity is getting more complex and the world is getting more integrated. Amid the flow of legislative and administrative changes, finding the time and energy to step back for a comprehensive re-think is hard.

Yet such a re-think is worth the effort. Tax systems reflect not only the ongoing adaptations to new economic activities and actions abroad, they also have roots in economic and ethical assumptions and analysis that is decades old. As Professor Kevin Milligan discusses in the C.D. Howe Institute's 2014 Benefactors Lecture, Canada's personal and business income taxes are largely products of thinking in the 1960s. Both ideas about how taxes should work, and the circumstances in which governments seek to raise revenue, have changed greatly in the half-century since the Carter Commission offered prescriptions based on the ideal of a comprehensive income tax. Dr. Milligan documents those changes, and offers an outline for a new approach.

His re-think reflects new insights from economic analysis and evidence, as well as practical considerations. Since the 1960s, economists have looked hard at how people respond to taxes: concerns about efficiency, and the need to levy taxes that will not needlessly discourage work, saving and investment, loom much larger now than they did then. On the practical side, most Canadians now enjoy tax relief on either their saving or their return from saving, while gains in labour compensation have been concentrated among upper-income earners – developments that need to be considered in determining personal tax rates, the integration of corporate and personal taxes, and thresholds.

In Dr. Milligan's view, these changes make it advisable for Canada to modify the integrated approach to personal and corporate income taxes that has guided policy for so long. He urges instead a dual approach, with capital income taxed at a low, uniform rate, decoupled from much of the personal tax schedule. He draws on research and experience with dual income taxes in the Nordic countries to show how such a system can deal with such complexities as income in sole proprietorships and avoid over-taxing normal returns to investment. And he not only outlines an ambitious long-term goal, he describes a staged approach that can guide tax policy on the way.

Such an ambitious re-think inevitably raises philosophical and practical questions of its own. Many of Dr. Milligan's proposals will be controversial – ardent redistributionists will object to further tax relief on capital income, people seeing Canada as a developer and attracter of talent will have reservations about heavier taxation of high-end labour earnings, and changing the tax treatment of certain forms of compensation, such as stock options, raises awkward transitional and competitiveness issues. Our aim in supporting his work and publishing this lecture is to increase awareness that Canada's tax system still rests on analysis and assumptions that are much at odds with modern evidence and experience, and to show that major changes are not only desirable, but possible and need to be considered. We think Dr. Milligan has achieved those valuable goals.

In addition to acknowledging Dr. Milligan's work, we are glad to recognize the contributions of the advisory group that commented on earlier versions of the lecture. Thanks are due as well to the C.D. Howe Institute's Editor, James Fleming, copy editor Barry Norris and the Institute's Graphic Designer, Yang Zhao, who prepared it for publication.

The views expressed here are those of the author. They do not represent official positions of the C.D. Howe Institute nor CPA Canada, nor either organization's members or boards of directors. We are confident, however, that even readers who object to elements of Dr. Milligan's proposals will come away with new insights about the forces that have shaped Canada's tax system to date, and how it could evolve to serve Canadians better in the future.

William B.P. Robson,
President and Chief Executive Officer
C.D. Howe Institute

Kevin Dancey
President and Chief Executive Officer
CPA Canada

For nearly 50 years, the 1966 Royal Commission on Taxation has remained the touchstone of the Canadian tax system. The Commission, chaired by Kenneth Carter, gathered an impressive staff of tax experts to labour for four years to produce its landmark six-volume report.

At the heart of the Commission's report was the principle of fairness in taxation, which they gauged using a comprehensive measure of income formed by adding together income from all possible sources. The report was lauded at the time for its success in translating lofty principles into a practical blueprint for taxation.[1] Even though its recommendations were never implemented in full, the principles espoused by the Carter Commission still feature prominently in tax policy discussions both in Canada and abroad.

Two global forces – the increasing elasticity and concentration of income – now confront the legacy of the Carter Commission. The Commission's placement of fairness at the pinnacle of design priorities has been threatened by increasing awareness of the efficiency costs of taxation. One way these efficiency costs have surfaced in forms that weren't known at the time of the Carter Commission is through better understanding and appreciation of the

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For helpful comments and assistance at various stages of this project, the author thanks (without implicating) Richard Bird, Ashton Brown, Kevin Dancey, Jean-Yves Duclos, Gabe Hayos, Michael Horgan, Jonathan Rhys Kesselman, Alexandre Laurin, Jack Mintz, Nick Pantaleo, Finn Poschmann, Bill Robson, Daniel Schwanen and Lindsay Tedds. He also thanks members of the C.D. Howe Fiscal and Tax Competitiveness Council for hosting an early presentation of some of this material and for providing feedback. The views presented here are those of the author, who retains responsibility for any errors.

1 Musgrave (1968) wrote that an onlooker "cannot but bow to the architect and craftsmen who created this impressive work." Harberger (1968) praised the Carter Commission for providing "a landmark among public documents – of any nation – setting forth policy prescriptions in the tax field." Domestically, Brooks (2002) notes that discussion of the Carter Commission dominated the *Canadian Tax Journal* in the late 1960s and early 1970s, while Bird and Wilson (1999) remark that the American publication *National Tax Journal* devoted an entire issue to discussion of the Carter Commission.

elasticity of incomes – meaning the ability of taxpayers to respond to higher tax rates by adjusting their behaviour and lowering their reported income. At the same time, income has become much more concentrated at the very top of the income scale, generating some demands that those who have seen the greatest growth in income should pay higher taxes. The two forces are intertwined, since the elasticity of income puts exacting constraints on the ability of the current tax system to accommodate the demands for fairness rooted in the rise in income concentration.

The inertness of our personal income tax system to these challenges has serious consequences. Reforms that focus on consumption taxes or reduce corporate taxes often pay off in higher economic growth, but if the benefits of growth continue to be concentrated among those with the highest incomes, support for such growth-enhancing tax reforms, which also enhance Canada's international tax competitiveness, will erode. The same goes for environmental taxation: it matters who pays more under such schemes, and if the personal income tax cannot adjust, we will find it hard to build the support to adopt beneficial reforms. In short, the inflexibility of the personal income tax system holds back valuable reforms and risks restraining economic progress.

I propose a solution that would break free of the constraints of the Carter Commission's legacy and embrace a reformed tax system that could achieve both greater potential economic growth and enhanced tax fairness. These goals would be achieved if Canada were to separate the taxation of employment and capital income in the style pioneered by the Nordic countries in the 1990s. Under this kind of dual income tax system, employment income is taxed progressively, while capital income is taxed at a flat rate. The proposal includes a growth-enhancing reform to corporate income taxation, combined with increases in personal tax rates on the highest earners. Recognizing the aspirational nature of such a grand reform, I also lay out two preliminary tiers of reform that are pertinent, practical and opportune – and could be implemented immediately. These two tiers stand on their own merit, but they also build the foundation for a third, more ambitious, tier.

I begin this Benefactors Lecture by reviewing the legacy of the Carter Commission. I then lay out the evidence for the two global forces – rising income concentration and income elasticity – whose effects necessitate a new approach to taxation in Canada. I explore the implications of these two forces and build the case for reform, discussing challenges and opportunities.

To close the lecture, I discuss my proposed three-tiered reform that I believe would meet the challenges of the new tax era in which we find ourselves.

The Carter Commission and Its Critics

At the core of the Carter Commission's report was its embrace of the concept of "comprehensive income" taxation as the manifestation of the priority of tax fairness set out in the report's introductory chapters.[2] This comprehensive income view of taxation, long espoused by economists, prescribed the use of a broad measure of income as the fundamental base for taxation, eschewing other candidates such as expenditures, wealth or transactions.[3] Comprehensive income, it was argued, is the best measure of one's ability to pay, and therefore should be the basis of a fair system of taxation.

The basic notion of comprehensive income takes the gain in economic power over a certain time period as the measure of income. "Economic power" here means the power to consume. The Carter Commission's vision encompassed both current consumption and potential future consumption from any increase in the value of assets. Indeed, the application of the concept of comprehensive income to a practical and functional tax system was the Commission's prime novelty. Because the Commission saw economic power to consume as relating only to individuals, it conceived corporate taxation as a backstop for the personal system – in effect, corporate income tax was "undone" by integrating it with the personal income tax system.

The attractions of a comprehensive income base are twofold, as the Carter Commission report argued vigorously. First, such a base stakes out a central role for fairness: if the well-being purchased from a dollar of capital gains income is equal to the well-being purchased from a dollar of employment income, then perhaps those dollars should be treated equally. As the dictum

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2 The report listed several priorities, but then assigned the objective of equity the highest priority, arguing that "a social and political system cannot be strong and enduring when a people becomes convinced that its tax structure does not distribute the tax burden fairly among all citizens" (Canada 1966, 2: 17).

3 The development of the comprehensive income measure dates from von Schanz (1896), and was developed further by Haig (1921) and Simons (1938). Duff (2012) provides a thorough review of their concepts.

often given in relation to the Carter Commission has it, "a buck is a buck." Second, a strong efficiency case underlies the comprehensive income tax base: when different forms of income are taxed differently, there is a strong incentive to arrange one's income to be booked through the lighter-taxed form; treating all income the same way avoids this incentive.

To implement this vision required practical compromises. The Carter Commission's ideas wended their way through a controversial government White Paper in 1969 to legislation tabled in 1971 that came into force in 1972.[4] This legislative journey further watered down the notion of comprehensive income in several ways. For example, instead of allowing for corporate tax paid to be creditable against personal taxes owed by shareholders, the system of partial notional integration through the gross-up and credit system was implemented. As well, capital gains on principal residences were exempt, and some forms of income (strike pay as one example) were not included in the tax base. While there were shortcomings, Canada in 1972 did now have capital gains taxation, and several previously excluded income sources (for example, unemployment insurance benefits and some scholarship income) were now in the tax base.

With a version of comprehensive income having been implemented in Canada, a fresh wave of dissent soon arose among those in the tax field who advocated tax bases other than comprehensive income. This dissent took shape in detailed calls for reform published in the United States (United States 1977) and the United Kingdom (Meade 1978), which argued that consumption, rather than comprehensive income, was the ideal base for taxation, both because it was a better measure of lifetime ability to pay and because it avoided the problem, inherent in comprehensive income taxation, of biasing the tax system against savings and future consumption by the "double taxation" of savings (once when income is earned, and again when it generates income).

4 See Bird (1970) for a view of the policy development from the midst of that era. Bucovetsky and Bird (1972) provide a detailed accounting of the differences between the Commission report, the White Paper, and the final legislation.

In recent years, a new round of tax reports has emerged in the United States, the United Kingdom, Australia and New Zealand.[5] Boadway (forthcoming) argues that these reports suggest a different, "welfarist," basis for tax system design that sidesteps the income versus consumption battles of yesteryear. In the "welfarist" approach, which derives from optimal tax theory, the object is to raise a certain amount of government revenue, given some postulated behaviour of individuals and the constraints of production technology. The best tax system, according to this approach, does not rely on some assumed "ideal" tax base, but is a result of the interaction of individuals through the economy, with their behavioural choices and subject to the constraints they face.[6] If technology and preferences were such that heavily taxing income derived from selling apples produced great welfare gains, the optimal tax approach could capture these aspects while the ideal tax base approach would not. The UK Mirrlees Review (Mirrlees et al. 2011) adopted this welfarist-optimal tax approach as its foundation.

The welfarist approach directly embeds the efficiency costs of taxation – the losses to the economy of dissuading economic activity and altering people's choices of how much to work, consume, and save. In contrast to the welfarist approach, the Carter Commission paid little attention to the full scope of efficiency costs. The Commission's report expressed concern about the incentive effects of taxation, but these seemed grounded in rough guesses about psychology.[7] The Commission proposed to lower the marginal tax rate for the highest earners from 80 percent to 50 percent, which it hoped would

5 In the United States, there was the President's Advisory Panel on Federal Tax Reform (United States 2005); in the United Kingdom, Mirrlees et al. (2011); in Australia, the Henry Report (Australia 2010); and in New Zealand, Victoria University of Wellington Tax Working Group (2010).

6 See Banks and Diamond (2010, sections 6.2 and 6.84) for a pointed critique and firm rejection of the "ideal tax base" approach.

7 As the Commission report argued, "[w]e think there would be great merit in adopting a top marginal rate no greater than 50 per cent. With such a maximum marginal rate, taxpayers would be assured that at least half of all gains would be theirs after taxes. We think there is a psychological barrier to greater effort, saving and profitable investment when the state can take more than one half of the potential gain" (see Canada 1966, 3: 163).

lead to productivity increases derived from increased effort.[8] But without a full appreciation of efficiency costs that today's economists have at their disposal, the Commission was unable to incorporate these constraints on taxation properly into its balancing of the goals of efficiency and equity.[9]

The emerging modern optimal tax approach to tax design is not without critics.[10] There can be substantial difficulty in agreeing on the right structure for taxing individual behaviours and how to aggregate the well-being of individuals. These are necessary aspects of the optimal tax approach. In contrast, there is a certain virtue to the simplicity of the comprehensive income tax base approach. When confronted with a real-world tax policy question – such as "should a student's scholarship income be taxed?" – the comprehensive income tax base approach offers a quick framework from which to derive an answer. The optimal tax approach might require a depth of information (perhaps on the responsiveness of students to income, or the preferences of students) before arriving at an answer.

The New Era

Two critical elements that were of little concern at the time of the Carter Commission are shaping today's economic environment. Combined, these two elements present a substantial challenge for a tax system based on the Carter Commission's comprehensive income ideal. First, mirroring developments

8 "[W]e are confident that with lower marginal rates of tax on wages and salaries to encourage labour and managerial effort, with little change in the rate of capital formation and with a much improved allocation of capital, the future output of the goods and services Canadians want would be increased" (ibid., 1: 48).

9 For international tax issues, the Commission took very seriously the possibility of shifting income and tax revenue out of the domestic tax base. Musgrave (1968, 182) noted in his review of the Commission's work that the approach to international issues was "highly pragmatic," in contrast to the "purist" view it took to domestic taxation. One is left to wonder if the Carter Commission's "purism" on domestic taxation would have been different had it had access to the greater base of knowledge on the efficiency aspects of taxation available today.

10 Boadway (2014) offers several theoretical challenges confronting those who prefer the optimal tax approach as the fundament of tax design.

in many other countries, there is increasing concentration of income in the Canadian economy, which raises obvious equity concerns that have been extensively discussed in recent years. The second trend is growing awareness of the importance of the efficiency costs reflected in the elasticity of income in both the personal and corporate tax systems. In this section, I lay out the empirical foundation for each of the two claims. In the section following, I explore the implications of these trends and how they interact to undermine the case for Carter's comprehensive income base.

Concentration of Income

Both academic and public attention is focusing on increasing income concentration. Beginning with original work by Piketty and Saez (2003) in the United States, the growing concentration of income in the hands of higher earners has been documented around the world, with the trend particularly noticeable in the English-speaking countries, along with India and China (see Atkinson, Piketty, and Saez 2011; and Piketty 2014).[11] Canada has seen a similar trend over the past 30 years (see Fortin et al. 2012; Lemieux and Riddell forthcoming; Milligan 2013; Saez and Veall 2005; and Veall 2012). The two aspects of this trend that inform the tax policy environment are the strength of the concentration in the highest-income groups and the primacy of employment income in driving income concentration.

Figure 1 shows the growth of average income in different segments of the pre-tax reported income distribution of individual taxpayers from 1982 to 1996 and then from 1996 to 2011. This split reflects the two distinct periods in the data, with median income falling from the early '80s to the mid-'90s, and then rebounding upward since. The graph reveals that the growth rate is much higher in the upper segments of income distribution. In the earlier 1982-1996 time period, there was no income growth at all in the bottom 99 percent. In contrast, the top 0.01 percent – the top one in 10,000 Canadians – saw incomes growing by 62 percent. In the later 1996–2011 time period, income growth for median income earners rebounded to 16 percent, helping

11 See Piketty and Saez (2003) for the evidence from the United States.

Figure 1: Growth in Real Individual Before-Tax Income, 1982–2011

Note: The income measure is total income before capital gains, and the data are inflation-adjusted by the all-items Consumer Price Index.

Source: Statistics Canada, CANSIM database, series 204-0002, which is based on taxfiler data. The figure is inspired by a similar figure with similar data from Lemieux and Riddell (forthcoming).

recover the lost ground from the first time period. However, the top 1 percent still saw much higher growth rates than median earners, and the top 0.01 percent saw the highest income growth at 59 percent over this 15-year period.

Some different patterns have emerged since the financial crisis. Incomes in the top 1 percent fell by 13 percent from 2007 to 2011, with higher declines in the top 0.1 and 0.01 percent groups. In other countries, the top income groups display strong business cycle effects. For example, in the United States, the incomes of the top 1 percent also fell between 2007 and 2011 before recovering strongly in 2012. (Canadian data for 2012 are not yet available.) Even if there is no further growth in top incomes in Canada as the economy progresses, the level of income concentration we have attained since 2000 remains unprecedented in the postwar era.

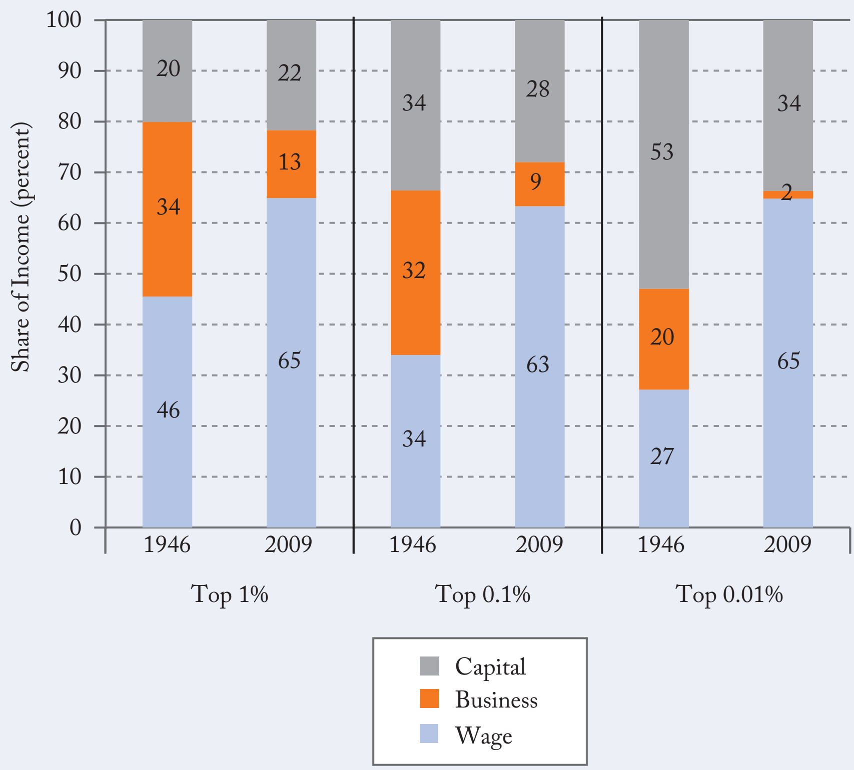
A striking and important feature of the growth of top incomes in Canada and other countries is the component of income leading the drive – namely, earnings from employment. As Figure 2 shows, in the early postwar era, Canadians in the top 1 percent of tax filers earned the majority of their income from business and capital income sources; in 2009, in contrast, those in the top 1 percent made most of their money from wages and other employment compensation.[12] Those in the top 0.01 percent received almost two-thirds of their income from employment in 2009, compared with only one-quarter of their income in 1946. The same pattern holds in countries ranging from the United States to France (see Piketty 2014, chap. 8).

Thomas Piketty attributes this rise in earned income to the advent of the "supermanager," whom he defines as individuals in the top stratum of executives of large firms. He cites evidence that between 60 and 70 percent of those in the top 0.1 percent of earners in the United States are supermanagers, and that these supermanagers account for around 70 percent of the growth in the income share of the top 0.1 percent of earners (Piketty 2014, 302–3; for evidence on the makeup of the top 0.1 percent, see Bakija, Cole, and Heim 2012). Canadian research reveals that senior and other managers are strongly represented in the top 1 percent of income earners (Fortin et al. 2012). While much of the discussion of Piketty's book has revolved around his predictions for the future path of wealth concentration, Piketty emphasizes that existing income concentration is an outcome of the labour market, not capital accumulation.

The determinants of managerial compensation are hotly debated. Some argue that the gains derive from increasing education, skill and talent; others are convinced that top managers are bargaining harder to seize gains that

12 Professionals may be able to shift some of their employment income into partnerships and other organizational forms. However, the decline of capital income compared to both business and employment sources is clear.

Figure 2: Sources of Income for Top Income Earners in 1946 and 2009



Source: Veall 2012.

would otherwise have gone to shareholders.[13] Either way, the basic fact that managerial compensation is a primary source of income concentration is uncontested, and ought to enter the tax policy discussion. The increasing

13 Kaplan and Rauh (2013) argue that globalization has led to larger scale for top firms, which has driven top executive compensation upward. On the other hand, Piketty, Saez, and Stantcheva (2014) argue that the rise in executive compensation reflects zero-sum bargaining, rather than marginal productivity gains.

income concentration among high earners also raises obvious equity concerns. The top federal income tax bracket in Canada in 2014 starts at $136,270, which is lower than the threshold for membership in the top 1 percent of income earners, meaning that the progressivity of taxation is not steep through the range of incomes that have been growing most strongly over the past 30 years – in short, individuals whose incomes have grown the most face marginal tax rates that are no higher than those whose incomes have grown only modestly. At the same time, some will argue that the 20.8 percent share of personal income tax paid by those in the top 1 percent of earners already properly reflects their 11.7 percent income share.[14]

Elasticity of Income

When taxes increase, individuals and firms might respond through changes in their actual consumption, labour, savings, residence or investment choices. They also might respond by increasing tax-avoidance activities that shift income across tax bases, to lower-tax jurisdictions, or through time to lower their tax burden. At the time of the Carter Commission, little was known about the responsiveness of taxpayers to the tax system they faced. In the past 20 years, however, economists have developed a deep body of knowledge incorporating the possibility of broad responses to taxation.[15] Here, I briefly review these findings for personal and corporate income, and then comment on the implications for capital income taxation.

The empirical literature on the responsiveness of personal income to taxes has grown substantially in the past decade (see the reviews in Meghir and Phillips 2010; and Saez, Slemrod, and Giertz 2012). Two points of consensus, in particular, have emerged. First, the responsiveness of high-income earners is much larger than that of low-income earners.[16] The most likely reason is

14 See Statistics Canada, CANSIM database, 204-0002, total income with capital gains, 2011.

15 This approach to taxation incorporating real and avoidance responses receives its fullest exposition in Slemrod and Gillitzer (2014).

16 For low earners, the decision to be in or out of the labour market is sensitive to taxes, but marginal decisions show very little sensitivity. Income tax rates themselves are of little importance relative to refundable tax credits and other work-related benefits for lower earners. See Brewer, Saez, and Shephard (2010) for a recent review.

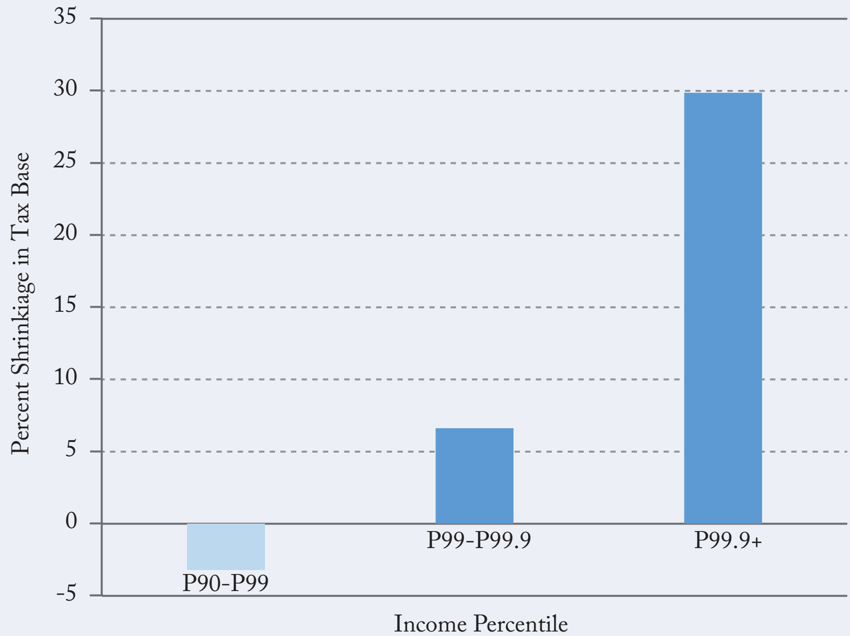
not because higher taxes decrease the work effort of high-income earners, but because these individuals find other ways to take their compensation or to shift income across jurisdictions, time or form to avoid some taxation. Second, although no solitary responsiveness estimate can be applied to all countries or all tax systems, the income elasticity of high-income earners is mostly estimated to be the range of 0.25 to 0.6.[17] At the lower end of this range, tax rates as high as 75 percent might still raise tax revenue at the margin, but at the higher end top tax rates of more than 50 percent might not raise much extra revenue.

Several studies have been undertaken of tax responsiveness in Canada, but I will focus on my recent work with Michael Smart – see, particularly, Milligan and Smart (forthcoming), from which the following estimates were obtained. Figure 3 presents an estimate of the responsiveness of taxable income for each of several fractiles of the Canadian income distribution, using tax filer data on the incomes of high-earning Canadians provided by Statistics Canada. The bars in the figure show how much the tax base would shrink if the marginal tax rate were increased by 10 percentage points.

The figure shows both points of consensus concerning the responsiveness of personal income to taxes: the responsiveness is high, and concentrated among high-income earners. For those in the top one-tenth of 1 percent of earners, the estimated response of the tax base to a 10 percentage-point increase in the tax rate is nearly 30 percent. In contrast, for those in the bottom nine-tenths of the top 1 percent (P99-P99.9), the shrinkage of the tax base is estimated to be only 6.6 percent. For those between the 90^{th} and 99^{th} percentile, the estimated effect is small and not statistically significant. These estimates are based on provincial tax rate changes, and so might embody, in part, a response by taxpayers to shift income out of one province and into another, lower-taxed province. In other words, we might expect the responsiveness to the federal tax system to be lower than is presented here, to the extent that high-earning

17 The estimated elasticity here is the percentage change in the tax base for a given percentage change in the net-of-tax rate (where the net-of-tax rate is 1 minus the tax rate); see Saez, Slemrod, and Giertz (2012) for more detail. The decision of the United Kingdom's Mirrlees Review (Mirrlees et al. 2011) not to recommend raising the top rate was based on an elasticity estimate of 0.46 by Brewer, Saez, and Shephard (2010).

Figure 3: Estimated Response of the Tax Base to a Ten Percentage Point Increase in the Marginal Tax Rate



Note: Estimates are based on the coefficients from a regression of log (before tax income) on the marginal tax rate using a dataset spanning all the provinces between 1988 and 2011. The dark bars indicate that the coefficient is statistically significant at the 5 percent level; the light bar indicates that the coefficient is not statistically significant.

Source: Regressions are based on data from Milligan and Smart (forthcoming).

taxpayers have some ability to shift income across provinces. Overall, as was the case in the United Kingdom's Mirrlees Review (Mirrlees et al. 2011), these estimates suggest some caution in expecting tax rates of more than 50 percent to raise much extra revenue.

Firms, too, are responsive to tax rates. Firms can avoid taxes by adjusting their real responses – investment, growth and hiring – or by shifting income out of the tax base through international or domestic tax-motivated transactions. Across countries, estimated elasticities in the range of 0.2 to

0.4 are common;[18] within-country responsiveness is much higher, reflecting the greater ease with which firms can shift income sub-nationally through attention to apportionment rules and within-firm transactions.[19] Empirically, the challenge presented by corporate tax shifting seems to be of a similar magnitude to that observed for the personal tax level. In studies of the design of income taxes, particular attention has always fallen on capital income, in part reflecting the higher physical mobility of capital relative to labour, as well as the greater ease with which physical location can be separated from ownership of the returns to capital and labour. With indications of a strong increase in the mobility of capital over the past 30 years, this challenge – which is acute for a small, open economy such as Canada – has grown.[20] Although there is little information on how capital and labour income differ in elasticity, the higher mobility of capital makes it quite likely that the responsiveness of capital income and labour income to taxation differ.

To summarize, we have much richer information on taxpayer responsiveness to taxation than was available at the time of the Carter Commission, and the evidence, including that from Canada, suggests fairly strong responsiveness, generated mostly by those close to the top of the income distribution. Whether this response is happening from changes in real behaviour (such as labour supply decisions) or through tax avoidance, the result is a loss in efficiency.[21]

Implications

The evidence suggests that the strong responsiveness of high-income earners

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18 See Dharmapala (2014) for a recent survey. Devereux, Li, and Loretz (2014) find that the responsiveness of medium-sized firms is smaller. In a recent commentary, Hines (2014) uses a semi-elasticity of 0.4 as his central case.

19 For Canadian evidence, see Mintz and Smart (2004), who estimate very high elasticities for interprovincial shifting.

20 See Hines (2007) for evidence on the increase in capital mobility and the implications for taxation. Zodrow (2010) investigates the importance of capital mobility for capital income taxation, and points out the particular salience for small, open economies.

21 Feldstein (1999) shows that any source of responsiveness is costly for efficiency, as the tax wedge between consumption and leisure is the important factor. Chetty (2009) points out that avoidance responses entail some transfer to providers of tax advice, rather than a complete loss of potential output to the economy.

to changes in tax rates puts an intractable constraint on tax rates in today's income tax system. At the same time, this group has seen the largest income gains over the past 30 years. This surge in incomes at the top has been, more or less, out of fiscal reach.

This circumstance brings into focus a central tension of the tax framework established by the Carter Commission. The comprehensive income tax base treats all forms of income the same, but that restriction means that the tax system cannot efficiently account for the differing responsiveness of income sources to taxation. In effect, the restriction to tax all sources of income the same way prevents the tax system from responding to the surge in top incomes. In the Mirrlees Review, this same tension was pivotal in the discussion of whether the top tax rate in the United Kingdom should be raised (see Mirrlees et al. 2011, sec. 4.3.2).

If the tax system were to shift away from the comprehensive income ideal of the Carter Commission, it would be possible to raise top tax rates on employment income without affecting the taxation of capital income. The system that emerges would look very much like the dual income tax system in place since the 1990s in the Nordic countries. The idea of a dual income tax comes out of the tradition of the "schedular" income tax, whereby different tax rate schedules are applied to different types of income. The Nordic countries pioneered a modern implementation of the schedular income tax using two different tax schedules for labour and capital income, with progressive rates on labour market earnings and a flat, common rate across all types of capital income.[22] Such a system allows for progressivity on high employment income – the source of growing income inequality – and accommodates the mobile reality of capital income taxation.

22 The implementation of a dual income tax in the Nordic countries is described in Sørenson (2005). Boadway (2005) makes a case for the dual income tax in smaller, growing Asian countries. Bird and Zolt (2010) review the literature on the dual income tax and discuss its application to developing economies. Sørenson (2007) presents the case for a dual income tax in Canada. Mintz (2006) also provides an outline for how a dual income tax might work in Canada and calls for further study.

Why Raise Top Tax Rates?

There are several arguments as to why top tax rates might be raised. However, since the matter circles around questions of equity and fairness, deeply felt attitudes make it a challenge to conjure up arguments that can garner unanimous approval. Let me begin with the arguments of narrowest appeal and then I will attempt to broaden the attraction of raising top rates with subsequent lines of reasoning, and discuss alternatives such as wealth and bequest taxation.

The starting place for arguments in favour of raising top tax rates is a concern for equity and fairness. If those at the top gain less in well-being from the use of a dollar than those at the bottom, redistribution from the top to the bottom could raise aggregate welfare. Some also argue that the income of top earners results in part from luck and the execution of bargaining power in negotiations with their employers. In this case, taxing those in high brackets up to the point where no more revenue can be raised might be optimal.[23]

These types of utilitarian calculations are controversial, of course, and stand in contrast to a world view that accords a bigger weight to the right of high earners to keep the fruits of their labours. High earners are on average well-educated and work long hours, so their claim to high compensation has merit.[24] Others find guidance in the argument that inequality itself hurts economic growth or efficiency. One prominent example of this kind of argument is Wilkinson and Pickett's *The Spirit Level: Why Greater Equality Makes Societies Stronger* (2009), which relates inequality to a host of social, health and economic outcomes in industrial countries. This kind of study faces a difficult empirical task, however, as countries that tend to have low inequality also tend to feature other factors that might enhance growth, such as high education levels, high literacy and social cohesion. Such factors, along with low inequality and higher growth, present a wonderful confluence for those

23 See Diamond and Saez (2011) for arguments in favour of higher rates at the top; and Feldstein (2012) for the arguments against.

24 See Fortin et al. (2012) for the characteristics of the top 1 percent earners in Canada. Mankiw (2013) lays out an argument that high earners are being properly rewarded for their skills and efforts.

countries that enjoy them, but it is difficult empirically to pull apart which of these elements is causing the observed outcomes.

For those not swayed by concerns for fairness or by cross-country studies of the consequences of inequality, there remains a strong argument for maintaining Canada's capacity to tax progressively. The argument is this: many efficiency and growth-oriented tax reforms are delivered to the economic table with a side-dish of redistribution to those who are already doing well in society. Whether it is reforming corporate taxation or making changes to sales taxes to broaden their base, many taxpayers find it hard to trace the benefits of any resulting increase in economic growth into their own wallets. This problem is exacerbated by long-run patterns of income concentration described earlier: if middle-income earners do not feel they have as strong a stake in economic growth, why should they support tax policies in the name of growth from which they might not benefit as much as those at the top?

This argument for higher taxes on high-income earners comes through the channel of political support for reforms that build a sense that all are contributing to public revenue appropriately. Alternatives to taxing higher-income earners, such as wealth or bequest taxation, could do the same. Thomas Piketty's most noted recommendation is for a global, progressive wealth tax to guard against the concentration of wealth, although even he admits that it is "utopian" given the complex international coordination that would be required.[25] Piketty's central argument is that the taxation of accumulated wealth could tame capital's tendency toward the concentration of wealth. But by taxing more highly the fastest-growing source of income (the employment income of the highest earners), the tax system could address this concern in part by pinching down on how much capital accumulates at the top while it is being earned, rather than by taxing wealth after it has already been accumulated.

That said, the revenue that would come from taxing high-income earners at a reasonably higher rate would not make a substantial difference to public

25 See Piketty (2014) for his discussion of a global wealth tax. The challenges of national wealth taxation are addressed in Boadway, Chamberlain, and Emmerson (2011). Canada's history and experience with wealth and estate taxation is summarized in Smith (1993).

finances. To take one example, some have advocated adding a top bracket for income above $250,000 with a tax rate of 35 percent, or 6 percentage points above today's top rate of 29 percent.[26] Assuming no change in the income reported by top earners, such a tax in 2012 would have raised $2.9 billion – a modest addition in the context of the $276 billion of spending in the 2014 federal budget. Even then, using a reasonable range of responsiveness from the base of evidence discussed earlier, between one-third and the entirety of this revenue gain would be wiped out by tax avoidance.

A further challenge to raising rates on high-income earners is their potential simply to leave Canada for a lower-tax jurisdiction. Anecdotes about celebrities fleeing high taxes make sure newspaper headlines, but systematic evidence raises doubts about the extent of fiscally motivated mobility among high earners. There are exceptions – those who are retired or who have easily internationally portable skills like sports stars.[27] Many high earners might be invested in social and professional networks and have Canada-specific knowledge with respect to legal or accounting rules that affect their ability to retain their high incomes outside Canada. But if they have skills that are valued abroad as highly as they are in Canada, mobile highly paid workers would need to be compensated by higher pre-tax wages to offset higher taxes on their earnings, thus shifting at least some of the incidence of higher taxes to their employer and then onward to the shareholders or immobile employees of the firm.

Why Reform Capital Income Taxation?

Views on the appropriate taxation of capital income have continued to develop since the time of the Carter Commission. While theory from the 1970s and 1980s could generate a case for zero capital income taxation in certain

26 This proposal was made by Brian Topp during the 2012 New Democratic Party leadership race. The numbers underlying the revenue estimates presented here are analyzed in detail in Fortin et al. (2012).

27 See Slemrod (2010) for a full discussion of residential mobility. Bakija and Slemrod (2004) and Young and Varner (2011) find only small responses to higher taxes among high earners. On the other hand, Kleven, Landais, and Saez (2013) find highly tax-responsive mobility among soccer players in Europe.

circumstances, more recent research builds a solid foundation for having some taxation of capital income, if not necessarily at the same rates as for labour income (see Banks and Diamond 2011; Boadway 2012; and Mirrlees et al. 2011, sec. 13.3). But capital income taxation matters beyond how it affects the welfare of individuals who receive it.

The taxation of capital income also matters because it is an important determinant of business investment decisions, to the extent that the marginal source of funds for businesses are taxable Canadian investors. The source of marginal investment is a disputed question, with some arguing that international capital mobility renders Canadian capital income taxation irrelevant for corporate investment, while others maintain Canada's capital income tax rates matter a great deal.[28] My reading of the evidence suggests a resolution to this dispute can be found by viewing firms as heterogeneous.[29] Some firms are small startups, reliant on local equity injections or internally generated funds for investment. The capital gains tax rate has important consequences for these new firms. Other firms at a later stage of development may be able to float locally traded equity. For them, potential investors care about the dividend tax rate they will face on future firm disbursements. Finally, larger, more established firms may have equity traded internationally and access to bond markets as well. The investment decisions of these blue chips may show less sensitivity to Canadian tax rates. To maintain and improve an environment in which small corporations can grow into big ones, Canada must get capital income taxation right.

The first step in getting capital income taxation right is to understand how much it is taxed now. Kesselman and Spiro (2014) argue that few Canadians actually face taxation on their marginal investment dollar. From Registered Retirement Savings Plans (RRSPs) to tax-free wealth accumulation in their primary residence, the opportunities for Canadians to avoid taxation of

28 Boadway and Tremblay (2014) explain the case for the irrelevance of Canadian capital income tax rates for corporate decisions. Technical Committee on Business Taxation (1997, ch. 7) describes evidence in favour of dividend taxation mattering in Canada.

29 Auerbach and Hassett (2003) provide strong evidence of heterogeneous response of dividend payments to cash flow across different types of firms. Two recent papers from Europe also find strong evidence for heterogeneous response, with dividend taxes mattering more for younger, growing firms (Egger, Erhardt, and Keuschnigg 2014; Alstadsaeter and Jacob 2014).

capital income abound. Added to that, the more recently introduced Tax-Free Savings Account (TFSA) provides almost all Canadian families the opportunity to save without facing capital income taxation as the system reaches maturity.[30] There are constraints on the use of these vehicles, though. Laurin and Poschmann (2010) show that many taxpayers face higher effective rates in retirement than when working, making RRSPs an expensive choice. Furthermore, liquidity and investment-choice limitations may stop some from putting taxable assets into a TFSA.

To provide some empirical evidence on the patterns of capital income, Table 1 presents the distribution of capital income across respondents in Statistics Canada's Survey of Labour and Income Dynamics. The results are reported in the first column for all respondents. The middle column restricts the sample to those ages 55 and older to see if older tax filers have a different pattern of capital income realization. Finally, the third column shows those with total income under $30,000.

The results indicate that 28.9 percent of the population has some positive amount of capital income. For those ages 55 and older, the proportion is noticeably higher, at 46.1 percent. Even among those with less than $30,000 of income, a non-trivial 22.1 percent has capital income. The distribution of capital income, however, shows that many of these individuals have capital income of only a few hundred dollars – perhaps interest from a savings account or some small taxable distributions from a mutual fund. Only in the top quartile of the distribution does capital income begin to reach thousands of dollars. Thus, with only a bit more than one-quarter of individuals having any capital income and three-quarters of those having relatively small amounts, the taxation of capital income in 2010 had an important effect on only a small proportion of taxpayers.

The pattern of capital income taxation presents a further challenge for the Carter Commission framework. The basis of the Commission's comprehensive income ideal is to view corporations as a veil, with income taxed in the hands

30 See Kesselman and Spiro (2014) and Boadway (2014) for arguments on opportunities to save in tax-free forms. Milligan (2012) provides simulation evidence that applies greater and greater Tax Free Savings Account contribution room to wealth data from 2005, and finds that a "mature" system with $200,000 of room per family would leave only 3.3 percent of families holding taxable assets and $41.6 billion additional dollars of taxable income sheltered.

Table 1: Distribution of Capital Income, Canada, 2010

	Whole Population	Age 55+	Total Income < 30,000
	(Dollars, except where indicated)		
Proportion with any capital income (percent)	28.9	46.1	22.1
10th percentile	25	25	25
25th percentile	150	275	150
Median	725	1,200	600
75th percentile	3,900	5,000	2,600
90th percentile	14,075	15,500	7,500

Notes: The measure of capital income includes taxable capital gains added to investment income (which includes the actual amount of dividends, interest and other investment income, such as net partnership income and net rental income).

Because Statistics Canada's Survey of Labour and Income Dynamics uses information from tax forms, capital income reflects only what is reported on the tax form. T5 slips need to be issued only for interest over $50 per account, so there might be unreported small amounts of interest from chequing and savings accounts.

Sources: Statistics Canada, 2010 Survey of Labour and Income Dynamics, Public Use Microdata File; and author's calculations.

of a firm's owners. In that framework, corporate income taxation acts as a withholding device before determining ultimate tax liability at the individual level by "undoing" corporate taxation with the system of dividend tax integration. As more and more capital income at the personal level becomes free from taxation, however, the justification for this view of corporate taxation is being eroded. Corporate taxation is no longer acting as an intermediate step before the application of personal tax rates, but has evolved into a system where a large proportion of taxpayers will not pay personal income tax on corporate distributions. This means that those corporate distributions will only face taxation at the corporate level. The tax system should embrace this reality by justifying and designing corporate taxation based on its own merits, rather than as structured as a withholding device for personal taxes that are increasingly not applicable.

The Challenge of Relabelling Labour Income as Capital Income

The greatest challenge in separating the taxation of labour and capital income is the potential re-labelling of labour remuneration as capital income. This concern was precisely the reason the Mirrlees Review, for example, decided against recommending a dual income tax approach (see Mirrlees et al. 2011, 410). Similarly, in the Nordic countries, which have implemented a separate tax rate for capital income, the cases of closely held corporations and the self-employed have presented pernicious problems for tax authorities.[31]

Several potential remedies to this problem have been discussed. Feldstein (2012, 789) suggests simply treating all income from small business as labour income, thus avoiding the problem (at least for small businesses). Given that small businesses in Canada currently enjoy lower tax rates than do large businesses, such a radical solution might not find much support among small business owners. Another remedy is the Norwegian approach of imputing a "normal" rate of return to invested capital and taxing the excess, although this solution faces challenges in defining invested capital and in setting the right benchmark for the "normal" rate of return.[32] Finally, Iceland handles this challenge in the opposite way by imputing minimum wages and assigning the residual as a return to capital. There is substantial international experience on which Canada could draw.

These challenges should not be minimized, but they do need to be put in context. Canada's tax system is under stress because of changes in the economic environment outlined in the last section. A dual income tax might introduce concerns about shifting labour income to capital income, but such concerns should be weighed against the problems a dual income tax might solve. In the end, which set of problems is the better set to have?

31 Sørensen (2005) describes efforts in the Nordic countries to remedy the problem of the taxation of the self-employed and closely held corporations. Pirttilä and Selin (2011) offer evidence that, in Finland, the self-employed shifted income to the capital income tax base when the dual income tax was implemented.

32 Gordon (2011) criticizes the Norwegian approach, suggesting the benchmark rate of return is too high. Imputing a return to capital is similar in some respects to the Allowance for Corporate Equity system discussed later in the lecture. Iceland's approach is discussed in Matheson and Kollbeins (2012).

An Agenda for Reform

In this Benefactors Lecture, I have argued that the increasing income concentration and elasticity of income both drive calls for more progressive taxation and constrain the broad acceptability of growth-promoting tax reforms that would benefit all. In this section I lay out three tiers of reform for Canadian income taxes: cleaning the tax base, simplifying capital income taxation, and undertaking a major corporate tax reform as part of the adoption of a dual income tax system. The first two tiers stand on their own merits and could in principle be implemented as early as the 2015 federal budget. They would also lay the foundations for the third, more aspirational tier.

The goals of this reform package are twofold. First, it aims to increase the fairness of the tax system by revising the taxation of those at the top of the income distribution who have done very well over the past generation. This may be important to many Canadians in itself, but it also helps build support for and make possible the second goal of the reform: re-optimizing the tax system to boost investment and growth. By simplifying and consolidating the taxation of capital income at the personal level, the incentives to invest in growing firms are strengthened. With a revamped corporate tax system, all firms would benefit from revitalized investment opportunities to grow the economy.

Tier I: Clean the Base

The first tier of tax reform should focus on cleaning the tax base. Cleaning and tightening the tax base is standard advice that economists proffer, but increasing income concentration and capital mobility are intensifying the need to follow this advice. If income growth is concentrated at the top, among those who have access to the best tax advice, their greater ability to avoid taxes will undermine support for the tax system.[33] Moreover, if the eventual goal is the implementation of a dual income tax, it is imperative that employment income be properly defined and defended from being reported as capital income. I propose that the personal income tax base be cleaned in

33 Luttmer and Singhal (2014) review the evidence on what they call "tax morale," which encapsulates the culture of compliance and social norms that motivate tax behaviour.

two ways: by tightening the taxation of stock options received as employment compensation; and by removing unproductive tax expenditures.

Stock options make up a sizable portion of the compensation of executives, yet options continue to receive special tax treatment. No tax liability on stock options issued as compensation is triggered until the option is exercised and the underlying stock is purchased at the option strike price. Even then, taxation may be deferred until the stock itself is sold (for Canadian Controlled Private Corporations), and a 50 percent deduction is available in some circumstances, meaning that only half of the value of the stock compensation is captured by the tax system.[34] The clear alternative is to consider stock options as labour compensation and to tax them at full rates as soon as practical. Employers would be able to deduct this same value as a labour compensation cost.[35] This measure would have a large impact on executives who are at the heart of the trend toward income concentration. Moreover, evidence from the United States finds that executives who receive stock options are much more responsive to tax rates, suggesting that stock options are an important way in which they avoid full taxation of their earnings.[36]

Tax expenditures are defined as tax measures that reduce tax revenue compared to some benchmark tax system; for example, if the existing Children's Fitness Tax Credit were eliminated, federal tax revenue, all else being the same, would be higher by about $115 million. Many commentators argue that curbing the use of tax expenditures might increase the progressivity or fairness of the tax system.[37] Of course, every tax expenditure has its

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34 The tax expenditure associated with this deduction is estimated to be $720 million for 2013. However, if the full compensation became deductible by employers the net revenue gain would likely be negligible.

35 Sandler (2001) argues that, in theory, stock options should be included at the earlier of the vesting date or the granting date. However, practical valuation problems – such as pricing options for startups – likely make it necessary to defer taxation until the option is exercised. At the point of exercise, however, the taxable amount should be the market value of the shares less the strike price. Compton et al. (2012) provide empirical evidence of the importance of option taxation in the makeup of compensation packages.

36 See Goolsbee (2000) for evidence on stock options, taxation and executive compensation.

37 See Sheikh (2014) for a comprehensive analysis of tax expenditures in Canada. Ragan (2014) suggests that effort should focus on the elimination of tax expenditures.

defenders, which makes the political aspects more complicated, but with a clear commitment to recycle any gained revenue back to taxpayers, tax expenditure reform might have a better chance of success.

In the United States, the idea of closing down certain tax expenditures has been a dominant theme in tax reform discussions.[38] Items such as the mortgage interest deduction and the deduction for state and local taxes amount to tens of billions of dollars and benefit primarily high-income households. It is not clear whether there are instances of similar "low hanging fruit" in Canada with similar magnitudes or progressivity impacts.[39] Still, even the relatively small tax measures that might be removed could improve the Canadian tax system because of how they are used and by whom. As noted, high-income earners have access to better tax advice and are often more aware of ways to navigate the complexities of the tax system. As one example, awareness of the Children's Fitness Tax Credit is much higher among households with $100,000 or more income than among middle-income households (Fisher et al. 2013).

In this vein, the host of "boutique" tax credits introduced since 2006 – including the aforementioned Children's Fitness Tax Credit, the Public Transit Tax Credit and the Volunteer Firefighters' Amount – deserve serious scrutiny. It goes without saying that fitness, transit and firefighting are admirable things, but loading the tax system with such measures enhances neither efficiency nor fairness. If these and other things are worthy of support, policymakers could find a way to do so outside the tax system. In addition, cleaning up efforts could be directed at the Age Amount and the Pension Income Amount. As non-refundable credits, they do not benefit seniors with the lowest incomes, but only those with taxable returns. Any benefit from such credits could be replicated and improved by switching their value to the Guaranteed Income Supplement and Old Age Security. Finally, the bevy of student credits could be repackaged out of the tax system and into an up-front grant, as Essaji and Neill (2012) suggest.

38 See Burman, Geissler, and Toder (2008) for analysis of the size and distribution of major tax expenditures in the United States.

39 Murphy, Veall, and Wolfson (forthcoming) provide empirical evidence that eliminating smaller tax credits would not have a large impact on progressivity.

The goal of these actions should be to make it harder to avoid taxation. Any extra revenue that results could be recycled back to taxpayers through other reforms or directly through expenditure-side measures. More importantly, these reforms could lower the responsiveness of taxable income to tax rates, raise efficiency and build support for broader pro-growth tax reform.[40]

Tier II: Simplify Capital Income Taxation

Simplifying the taxation of capital income improves both the efficiency of tax administration and the transparency of the system. It would also prepare the ground for the introduction of a dual income tax system. I propose to do this by moving both dividend and capital gains taxation to simple flat rates.

Under Canada's tax system, corporate taxation is notionally, but only partially, integrated with the personal income tax through the dividend tax credit system.[41] The motivation for this system is to ensure that corporate income is taxed in the hands of the shareholder at rates that reflect the shareholder's ability to pay. The Carter Commission argued that "equity requires that progressive rates of tax be applied to a comprehensive income base that includes income from corporations" (Canada 1966, 4: 45). As most Canadians don't have taxable capital income, however, and as the TFSA leads capital income taxation to become even more concentrated among those with high incomes, it is becoming increasingly difficult to justify the Carter Commission's machinery of the notional dividend tax credit system.

According to Australia's Henry Tax Review, there is a global trend away from integration, with countries such as Germany and the United Kingdom abandoning it in favour of simpler approaches.[42] To simplify and improve the

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40 See Kopczuk (2005) for estimates of how tax base changes affect the responsiveness of taxable income to tax rates.

41 Dividends are taxed by "grossing" them up by a certain percentage to "undo" the effect of corporate income taxation, then offering a credit that notionally and partially accounts for corporate tax paid. The system is notional because the dividend tax credit does not depend on actual tax paid by the corporation. It is partial because the system does not fully reflect the taxes paid by corporations.

42 See Australia (2010); the EU countries moved away from imputation due to a recent EU court case, not by choice. The Henry Tax Review nevertheless recommended that Australia retain integration through their 'franking' system of crediting corporate taxes against personal taxes.

transparency of Canada's tax system, we should move to a simple, flat tax rate on dividend income. That rate should be close to the current effective rate on dividends (which is 19.29 percent); thus, the combined corporate tax and personal dividend tax rate would be in harmony with the regular income tax rate to avoid creating tax arbitrage opportunities.

For capital gains, the Technical Committee on Business Taxation argued in 1997 that the inclusion rate approach to capital gains taxation was justified because after-tax retained earnings can translate into higher share prices and thus give equity holders a capital gain. In this way, the taxation of capital gains should also reflect an integrated approach, since corporate tax has already been paid. In addition, the standard argument that lack of inflation-indexing leads to over-taxation of capital income can also justify the existing capital gains exclusion.[43] These arguments make sense, but, as I discussed earlier, the importance of holding to the partial inclusion approach diminishes as capital income taxes become concentrated in the highest tax brackets with the sheltering of assets in TFSAs.

For these reasons, Canada should replace the 50 percent capital gains inclusion with a near-equivalent flat rate tax on capital gains. For reasons of simplicity, and to set the stage most naturally for the introduction of a dual income tax system, the flat tax rate should be equal for both dividend income and capital gains income. Currently, the federal rate on top-bracket eligible dividend income is 19.29 percent and the rate on top-bracket capital gains is 14.5 percent. A rate in the range of 15 to 19 percent would simplify the system without sharply disturbing the current state of balance between corporate and personal income taxation. Again, it is important to note that, for high-income earners, this would merely simplify the status quo – it would not substantially alter the rate they already pay on dividend or capital gains income.

Admittedly, there are several objections to the flat rate taxation of income from dividends and capital gains. One is that current low-bracket tax filers would face a large increase in their tax rates on dividends and capital gains. As noted, however, the proportion of Canadians who receive any capital income at all is fairly small: only 22 percent of those with income under $30,000

43 See, for example, Zodrow (1995) and Technical Committee on Business Taxation (1997). Both argue that lack of inflation indexing can justify preferential rates.

reported capital income in 2010. Moreover, for most of those who do receive such income, the amount is small: in 2010, the 75th percentile of the amount of capital income was just $2,600. Thus, if the tax rate on capital income went up by 10 percentage points, only about 5 percent of tax filers would see an increase in taxes of more than $260.[44] As well, with individuals now having access to $20,500 more in TFSA contribution room than they had in 2010, the amount of $2,600 for the 75th percentile of capital income likely would fall further.

Another objection to taxing income from dividends and capital gains at a flat rate relates to whether such income should be taxed at a lower rate at all. Boadway and Tremblay (2014) argue that dividend tax credits are not needed and that capital gains should be included fully. However, given the increasing concentration of taxable capital income in the hands of higher earners who are more likely to have access to sophisticated tax advice, it is not bold to suggest that the responsiveness of these taxpayers to full taxation of dividends and capital gains might lead to a large tax base response. Keeping capital income tax rates close to their current level could avoid such capital movements and help repatriate assets that would otherwise find their way out of the domestic tax base. It also ensures that those firms that need domestic Canadian taxable investors for financing their operations can continue to access those funds without the tax penalty that would be imposed by full taxation of capital gains and dividends.

A third concern with the flat taxation of capital gains and dividend income is how to handle provincial taxation of capital income. Clearly, the introduction of a flat rate would disrupt the existing system and likely would require new agreements with the provinces. To get the most gain from simplification, it would make sense to attempt to get the provinces to choose a single flat tax rate for dividend and capital gains, to mirror the federal approach. The tax rate could remain different across provinces, but there might be gains from having a common rate for all provinces.[45]

44 Since only 22 percent had any capital income, the 75th percentile reflects a level above which only about 5 percent (0.22 × 0.25) of tax filers would fall.

45 The idea of using one flat rate in a dual income tax system for subnational taxation comes from Boadway (2005). Mintz (2006) also suggests imposing a common rate for a flat capital income tax in his sketch of a dual income tax.

Finally, the issue of "eligible" versus "non-eligible" dividends would have to be considered because of the small business tax rate that applies both federally and provincially. Because small businesses are taxed at a lower rate at the corporate level, the current dividend tax credit is less generous, which makes the effective tax on dividends from these companies higher. Although it might be preferable to have one single flat tax rate for all dividends, it would be possible to continue to have a different rate for small business dividends, similar to the existing differences between eligible and non-eligible dividend tax rates. However, removing the small business deduction altogether would bring even more simplicity to the proposal, as only one dividend tax rate would be needed.

In short, moving to a flat tax rate on capital gains and dividend income would not disrupt the existing balance across types of capital income, but it would simplify the way capital income is taxed in Canada, and it would prepare the way for the third proposed reform: a dual income tax system.

Tier III: Transform to a Dual Income Tax

The introduction of a Canadian dual income tax, or CANDIT, would have three components that would transform the Canadian tax system. The first is to move to a flat tax rate on all forms of capital income, including interest and other investment income. The second is to transform the corporate taxation system to one that focuses on taxing corporate rents rather than backstopping personal income taxation. The third component is to introduce new high tax brackets on labour earnings. These three components of a CANDIT would work together; like a three-legged stool, all three would affect the proper balance. The proposed system would be similar to those already in place in the Nordic countries, but would differ by switching the focus of corporate taxation.[46]

The first component of a CANDIT is to ensure that all forms of capital income are taxed equally. Since the Tier 2 reform already moves dividends and capital gains to face a constant flat rate, what is now required is to move

46 The proposed CANDIT most closely resembles that suggested by Keuschnigg and Dietz (2007) for Switzerland.

the taxation of interest and other investment income to the same flat rate. Importantly, a great proportion of tax filers would still face a zero tax rate on interest-bearing assets if they held their assets in a TFSA. In this way, there would actually be two capital income tax rates, zero for most Canadians and the flat positive rate for those with wealth held outside TFSAs.[47] For those who receive taxable interest income, this reform would lead to a substantial lowering of the tax rate on interest – unlike the case for dividends and capital gains, which are already taxed at lower effective rates in the existing system. Interest and other investment income accounted for about $14.5 billion of the $91 billion of capital income in Canada in 2011, so the revenue cost of this change would be less than $2 billion.[48]

The second component of a CANDIT is to shift the base for corporate taxation away from income and toward rent. Such a major reform would require much planning and attention to detail that I cannot provide in this lecture, but let me sketch the outline. The idea of a corporate rent tax is to allow firms to pay back all inputs – both the providers of labour and the providers of capital – before taxation is assessed. This transforms the tax base to include only profits over and above the normal return on capital; this is 'supernormal' profits, or rents. The attraction of a tax on rents is that it would not distort investment decisions since the normal return on an investment would not be taxed. As well, to the extent that rents are generated by location or immobile factors, a rent tax would not disturb decisions on the location of investment. As Boadway (forthcoming) argues, such a change would involve a major shift in the conceptual framework for corporate taxation away from thinking of the corporate tax as a first cut at taxing shareholder income and toward taxing firms as their own entities. Given the erosion of the withholding function of the corporate tax discussed earlier, this transformation makes sense.

47 The CANDIT structure therefore most resembles the optimal progressive capital income tax structure developed in Saez (2013).

48 Total interest and other investment income in 2011 was $14.4 billion. For top-bracket earners, a drop in the rate from 29 percent to 15 percent would result in a savings of 14 percent. Applying 14 percent to $14.4 billion gives $2.016 billion. However, not all the $14.4 billion is currently taxed at the top bracket.

There are different ways to enact a rent tax on firms (see Auerbach, Devereux, and Simpson 2010). One way is through a "cash flow" tax system that expenses all investments immediately, but allows no deduction for payments to either bond or equity finance. Another way is to introduce an Allowance for Corporate Equity system, which would permit a "standard" return on invested capital to be expensed.[49] These two methods have different properties, but in some circumstances would produce identical outcomes. For the purposes of this CANDIT proposal, however, the key element is the symmetrical treatment of interest payments and dividend payments coming out of the firm, in contrast to the bias in the current system toward debt finance. (In any of the proposed models, existing preferences for small businesses could be kept, although it would be simpler and more efficient to remove these small business preferences.)

The symmetrical treatment of debt and equity finance in a tax on corporate rents is important for two reasons. First, for the corporation, the existing bias in favour of debt finance pushes firms to higher leverage, while, at the personal level, a CANDIT would treat interest payments and dividends symmetrically. So, to maintain balance, they should be taxed symmetrically at the corporate level as well. In an Allowance for Corporate Equity system, symmetry would be maintained because both interest payments and dividends paid out of the "normal" return to equity would be deductible, and therefore would face taxation only at the personal level.

The other motivation for reforming corporate taxes in this way is to improve the climate for investment. Both the Allowance for Corporate Equity and the cash flow tax systems would relieve the normal returns to investment from taxation. Since corporate investment provides the cornerstone for future

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49 See, for example, the discussion of corporate rent taxes in Boadway and Tremblay (2014). They make the case for an Allowance for Corporate Equity over other options, while acknowledging the difficulties that would arise in achieving the necessary full refundability of losses for wound-up firms. Gordon (2011) also reviews the different forms of rent taxation, arguing in favour of the cash flow approach. Griffiths, Hines, and Sørensen (2010) describe the Allowance for Corporate Equity form in detail, advocating its implementation for the UK along with a dual income tax. See also Laurin and Robson (2012), pp. 18-19.

economic opportunities and income growth, diminishing the tax load on corporate investment through this reform should spur economic growth.[50]

The third component of a CANDIT is higher tax rates on some employment income. As mentioned earlier, earnings growth at the top of the income distribution is driving the trend toward income concentration. Diamond and Saez (2011) argue that the right approach to taxation in the face of this increase in income concentration is to introduce finer tax brackets for high-income earners to tax progressively more of the income where it is growing. For example, on top of the current top federal tax bracket of 29 percent for income over $136,270, a new hypothetical federal bracket starting at $250,000 of employment income might be taxed at 32 percent and another bracket for employment income over $400,000 could be taxed at 35 percent. This component of CANDIT could increase support for the changes to corporate and capital income taxation as part of the reform package.

Concerns about a Canadian Dual Income Tax

Many aspects of CANDIT would require careful study, consideration and preparation. Allow me to address some of the concerns that might be raised about the proposal.

Wouldn't lower tax rates on capital income be unfair?

The move to tax dividend and capital gains income at a flat rate would require little change to the status quo. Indeed, these tax rates would not necessarily be lower at all. Taxing interest and other income more lightly would be a change from the status quo, but the revenue cost would be less than $2 billion. It is also worth emphasizing again that there actually would be two rates: zero for those with assets in a TFSA or other tax-exempt asset location, and a positive flat rate for those with assets that do not fit in a TFSA or other tax-exempt location. Saez (2013) argues that a progressive two-rate structure (zero and positive) can optimally balance the desire to minimize distortions

50 See Djankov et al. (2010) for recent evidence on corporate taxes and investment; Boadway and Tremblay (2014) also make the case. For the Allowance for Corporate Equity, see evidence from Brazil in Klemm (2006).

to intertemporal savings decisions with the desire to slow the excessive accumulation of capital for those at the very top.

Going hand-in-hand with these changes to capital income are two features of the reform that should buttress confidence and fairness. First, cleaning the tax base of some tax preferences and implementing full taxation of options received as remuneration should ensure that high earners have fewer avenues for avoiding full taxation of their earnings. Second, a more progressive tax structure on earned income should help build support for the changes to capital income taxation by capturing more tax from high earners as they earn it, rather than later in their life as capital income.

How would provinces tax income under a CANDIT?

To produce a functioning system that maintains the federal-provincial structure of today's tax collection agreements, a CANDIT would require provinces to agree to separate their labour and capital tax bases and to apply a single rate to the capital tax base. Provinces could retain the ability to have a progressive tax on employment earnings if they wished. The federal government might seek a common "provincial" rate for capital income tax or allow provinces to set their own.

Why not exempt the return to savings entirely?

The United Kingdom's Mirrlees Review (Mirrlees et al. 2011) argued strongly for some level of capital income taxation, but if its arguments are not persuasive, then a CANDIT could be conceived as a starting place. If a CANDIT were in place and functioning well, it would then be easy simply to shift the capital income tax rate downward if that were desirable.

How would we prevent small businesses or professional services from avoiding full taxation of their labour market earnings?

A CANDIT could adopt the innovations taking place on this front in the Nordic countries, by imputing returns to invested capital for the self-employed and taxing the rest of their income as labour market earnings. For those who use a corporate form to receive professional income, recall that their earnings would be taxed at the corporate level and then again as dividends (or capital gains) at the individual level.[51]

Could executives avoid taxation of their earnings by arranging their remuneration as capital income?

Considering the importance of the role of executive compensation in the increase in income concentration, it would be crucial to control executives' ability to avoid the taxation of labour compensation. This might begin with the taxation of stock options discussed earlier, but tightening the earned income tax base would be crucial to making a CANDIT work.

What would happen to RRSPs and RPPs?

There would be no need to change RRSPs and Registered Pension Plans (RPPs) much. Both could continue to act as vehicles for tax deferral. Contributions could be deductible against the earnings tax base, and withdrawals taxed as deferred earned income on the progressive earned income schedule.

Wouldn't tax rates on earned income be too high?

Tax rates for very high earners would indeed go above 50 percent when combined with provincial taxes. However, Canada's current experience with similarly high tax rates comes with today's relatively low income thresholds for the high bracket, while the new thresholds under a CANDIT would be much higher. In other words, higher marginal tax rates for this group need

51 Keuschnigg and Dietz (2007) point out that the combination of a dual income tax and a corporate Allowance for Corporate Equity tax system would restrain such tax avoidance, so long as there was a certain balance among tax rates. The invested capital in small businesses is small, so if labour market earnings were booked through the corporation, they would exceed the deductible amount for the "normal" return on equity and therefore be taxed at the corporate rate. If the tax rate on high-earning labour were kept near the combined tax rate on corporate rent and capital income, there would not be an incentive to avoid taxes by receiving income through such a corporation.

not imply correspondingly higher average tax rates – and if cleaning up the tax system allows some reduction in lower rates and raising the thresholds at which they apply, average tax rates could even fall. Our current experience is also with an income tax base that includes capital income. It is unknown how elastic income from employment would be at these new high brackets, but one should be cautious about applying elasticities estimated on a base that includes both capital and employment income to a new base that focused just on earned income.

Conclusions

Canada and the global economy have changed in the 50 years since the Carter Commission issued its report and clarion call for the implementation of comprehensive income taxation. Even though the Commission's recommendations were never fully implemented, the comprehensive income concept remains at the core of much tax analysis in Canada.

In this paper, I argue that two fundamental changes have moved us into a new era for tax policy. Rising income concentration – driven by earned income – presents a sharp change from the more balanced patterns of income growth in the first decades after World War II. In addition, the increasing mobility of capital and the responsiveness of behaviour to tax rates – especially among high earners – are raising the efficiency cost of taxation. The essential constraint imposed by the comprehensive income ideal is to tax all income equally, yet the mobility of the income of high earners means that the current tax system is unable to adapt to the new era of high income concentration. This, in turn, makes it more difficult to build support for the kind of efficiency-enhancing reform Canada needs to promote investment and growth. To break free of these constraints, we must leave the comprehensive income tax base behind.

The solution, I have argued, is to separate the taxation of labour earnings and capital income through the introduction of a Canadian dual income tax, or CANDIT. Using a three-step approach, Canada could build toward the full implementation of a CANDIT, starting with achievable measures to improve the efficiency and fairness of the tax system.

Enacting these reforms would bring two large benefits to the Canadian economy and society. First, it would restore the ability of the tax system to respond to increasing income concentration by taxing more those whose incomes have grown the most. This, in turn, would open the door to beneficial reforms of consumption taxes, environmental taxes and corporate taxes that might otherwise remain closed because of concerns about who benefits most from economic growth. Second, by taxing the income from capital more effectively, we can ensure we have the best possible environment for growth, which will help to build the economy of the future. With these reforms in place, the Canadian tax system would be ready to face the new era.

References

Atkinson, Anthony B., Thomas Piketty, and Emmanuel Saez. 2011. "Top Incomes in the Long Run of History." *Journal of Economic Literature* 49 (1): 3–71.

Alstadsæter, Annette, and Martin Jacob. 2014. "Do Dividend Taxes Affect Corporate Investment?" CESIFO Working Paper No. 4931. August. Accessed at: http://www.cesifo-group.de/ifoHome/publications/working-papers/CESifoWP/CESifoWPdetails?wp_id=19116844

Auerbach, Alan J., Michael P. Devereux, and Helen Simpson. 2010. "Taxing Corporate Income." In Mirrlees, James, Timothy Besley, Richard Blundell, Stephen Bond, Robert Chote, Malcolm Gammie, Paul Johnson, Gareth Myles, and James Poterba (eds.) *Dimensions of Tax Design*. Oxford: Oxford University Press, pp. 548-648.

Auerbach, Alan J. and Kevin A. Hassett. 2003. "On the marginal source of investment funds," *Journal of Public Economics*, 87(1) 205-232.

Australia. 2010. Treasury. "Australia's Future Tax System: Report to the Treasurer." Canberra. Available online at http://www.taxreview.treasury.gov.au.

Bakija, Jon, Adam Cole, and Bradley T. Heim. 2012. "Jobs and Income Growth of Top Earners and the Causes of Changing Income Inequality: Evidence from US Tax Return Data." Manuscript.

Bakija, Jon, and Joel Slemrod. 2004. "Do the Rich Flee from High State Taxes? Evidence from Federal Estate Tax Returns." NBER Working Paper 10645. Cambridge, MA: National Bureau of Economic Research.

Banks, James, and Peter Diamond. 2010. "The Base for Direct Taxation." In Mirrlees, James, Timothy Besley, Richard Blundell, Stephen Bond, Robert Chote, Malcolm Gammie, Paul Johnson, Gareth Myles, and James Poterba. (eds.) *Dimensions of Tax Design*. Oxford: Oxford University Press, pp. 548-648.

Bird, Richard M. 1970. "The Tax Kaleidoscope: Perspectives on Tax Reform in Canada." *Canadian Tax Journal* 18 (5): 444–73.

Bird, Richard M., and Thomas A. Wilson. 1999. "The Legacy of the Carter Commission." In R. Bird, M. Trebilcock and T. Wilson (eds.), *Rationality in Public Policy: Essays in Honour of Douglas G. Hartle*. Toronto: Canadian Tax Foundation.

Bird, Richard M., and Eric M. Zolt. 2010. "Dual Income Taxation and Developing Countries." *Columbia Journal of Tax Law* l: 174–217.

Boadway, Robin. 2005. "Income Tax Reform for a Globalized World: The Case for a Dual Income Tax." *Journal of Asian Economics* 16 (6): 910–27.

———. 2012. *From Optimal Tax Theory to Tax Policy: Retrospective and Prospective Views*. Cambridge, MA: MIT Press.

———. Forthcoming. "Piecemeal Tax Reform Ideas for Canada: Lessons from Principles and Practice." *Canadian Tax Journal* 62 (4).

Boadway, Robin, Emma Chamberlain, and Carl Emmerson. 2010. "Taxation of Wealth and Transfers." In Mirrlees, James, Timothy Besley, Richard Blundell, Stephen Bond, Robert Chote, Malcolm Gammie, Paul Johnson, Gareth Myles, and James Poterba (eds.) *Dimensions of Tax Design*. Oxford: Oxford University Press, pp. 548-648.

Boadway, Robin, and Jean-François Tremblay. 2014. "Corporate Tax Reform: Issues and Prospects for Canada." Mowat Research 88. Toronto: University of Toronto, School of Public Policy & Governance, Mowat Centre.

Brewer, Mike, Emmanuel Saez, and Andrew Shephard. 2010. "Means-testing and Tax Rates on Earnings." In Mirrlees, James, Timothy Besley, Richard Blundell, Stephen Bond, Robert Chote, Malcolm Gammie, Paul Johnson, Gareth Myles, and James Poterba (eds.) *Dimensions of Tax Design*. Oxford: Oxford University Press, pp. 90-173.

Brooks, Neil. 2002. "Canadian Tax Journal: The Second Decade, 1963–1972." *Canadian Tax Journal* 50 (2): 630–48.

Bucovetsky, Meyer, and Richard M. Bird. 1972. "Tax Reform in Canada: A Progress Report." *National Tax Journal* 25(1). 15-42.

Burman, Leonard E., Christopher Geissler, and Eric J. Toder. 2008. "How Big Are Total Individual Income Tax Expenditures, and Who Benefits from Them?" *American Economic Association Papers and Proceedings* 98 (2): 79–83.

Canada. 1966. Royal Commission on Taxation. *Report of the Royal Commission on Taxation*. 6 vols. Ottawa: Queen's Printer.

Chetty, Raj. 2009. "Is the Taxable Income Elasticity Sufficient to Calculate Deadweight Loss? The Implications of Evasion and Avoidance." *American Economic Journal: Economic Policy*. 1(2): 31-52.

Compton, Ryan A., Christopher C. Nicholls, Daniel Sandler, and Lindsay M. Tedds. 2012. "Quantifying the Personal Income Tax Benefits of Backdating: A Canada-US Comparison." *Columbia Journal of Tax Law* 3: 144–75.

Devereux, Michael, Li Liu, and Simon Loretz. 2014. "The Elasticity of Corporate Taxable Income: New Evidence from UK Tax Records." *American Economic Journal: Economic Policy* 6 (2): 19–53.

Dharmapala, Dhammika. 2014. "What Do We Know about Base Erosion and Profit Shifting? A Review of the Empirical Literature." CESifo Working Paper 4612. Munich: CESifo Group.

Diamond, Peter, and Emmanuel Saez. 2011. "The Case for a Progressive Tax: From Basic Research to Policy Recommendations." *Journal of Economic Perspectives* 25 (4): 165–90.

Djankov, Simeon, Tim Ganser, Caralee McLiesh, Rita Ramalho, and Andrei Shleifer. 2010. "The Effect of Corporate Taxes on Investment and Entrepreneurship." *American Economic Journal: Macroeconomics* 2 (3): 31–64.

Duff, David G. 2012. "Rethinking the Concept of Income in Tax Law and Policy." University of British Columbia, unpublished.

Egger, Peter, Katharina Erhardt and Christian Keuschnigg. "Heterogeneous Tax Sensitivity of Firm-level Investments." Institut für Höhere Studien Working Paper No. 306. September 2014. Accessed at: https://www.ihs.ac.at/publications/eco/es-306.pdf

Essaji Azim, and Christine Neill. 2012. "Delivering Government Grants to Students through the RESP System—Distributional Implications." *Canadian Tax Journal* 60 (3): 635–49.

Feldstein, Martin. 1999. "Tax Avoidance and the Deadweight Loss of the Income Tax." *Review of Economics and Statistics* 81(4): 674–80.

Feldstein, Martin. 2012. "The Mirrlees Review." *Journal of Economic Literature* 50 (3): 781–90.

Fisher, Koren L., et al. 2013. "Awareness and Use of Canada's Children's Fitness Tax Credit." *Canadian Tax Journal* 61 (3): 599–632.

Fortin, Nicole, David Green, Thomas Lemieux, Kevin Milligan, and Craig Riddell. 2012. "Canadian Inequality: Recent Developments and Policy Options." *Canadian Public Policy* 38 (2): 121–45.

Goolsbee, Austan. 2000. "What Happens When You Tax the Rich? Evidence from Executive Compensation." *Journal of Political Economy* 108 (2): 352–78.

Gordon, Roger. 2011. "Commentary on 'Tax by Design': The Mirrlees Review." *Fiscal Studies* 32 (3): 395–414.

Griffiths, Rachel, James Hines, and Peter Birch Sørensen. 2010. In Mirrlees, James, Timothy Besley, Richard Blundell, Stephen Bond, Robert Chote, Malcolm Gammie, Paul Johnson, Gareth Myles, and James Poterba (eds.) *Dimensions of Tax Design*. Oxford: Oxford University Press, pp. 914-996.

Haig, Robert M. 1921. "The Concept of Income – Economic and Legal Aspects." In Robert M. Haig (ed.) In *The Federal Income Tax*. New York: Columbia University Press.

Harberger, Arnold C. 1968. "A Landmark in the Annals of Taxation." *Canadian Journal of Economics* 1 (1): 183–94.

Hines, James R., Jr. 2007. "Corporate Taxation and International Competition." In Alan J. Auerbach, James R. Hines Jr. and Joel Slemrod (eds.) *Taxation Corporate Income in the 21st Century.* Cambridge: Cambridge University Press.

———. 2014. "Policy Forum: How Serious Is the Problem of Base Erosion and Profit Shifting?" *Canadian Tax Journal* 62 (2): 443–54.

Kaplan, Steven N., and Joshua Rauh. 2013. "It's the Market: The Broad-Based Rise in the Return to Top Talent." *Journal of Economic Perspectives* 27 (3): 35–56.

Kesselman, Jonathan Rhys, and Peter S. Spiro. 2014. "Challenges in Shifting Canadian Taxation Toward Consumption," *Canadian Tax Journal* 62 (1): 1–42.

Keuschnigg, Christian, and Martin D. Dietz. 2007. "A Growth Oriented Dual Income Tax." *International Tax and Public Finance* 14: 191–221.

Klemm, Alexander. 2006. "Allowances for Corporate Equity in Practice." IMF Working Paper 06-259. Washington, DC: International Monetary Fund.

Kleven, Henrik Jacobsen, Camille Landais, and Emmanuel Saez. 2013. "Taxation and International Migration of Superstars: Evidence from the European Football Market." *American Economic Review* 103 (5): 1892–924.

Kopczuk, Wojciech. 2005. "Tax Bases, Tax Rates and the Elasticity of Reported Income." *Journal of Public Economics* 89 (11-12): 2093–119.

Laurin, Alexandre, and Finn Poschmann. 2010. "Saver's Choice: Comparing the Marginal Effective Tax Burdens on RRSPs and TFSAs." E-Brief. Toronto: C.D. Howe Institute.

Laurin, Alexander, and William B.P. Robson. 2012. *Achieving Balance, Spurring Growth: A Shadow Federal Budget for 2012*. Commentary 344. Toronto: C.D. Howe Institute. Toronto.

Lemieux, Thomas, and W. Craig Riddell. Forthcoming. "Top Incomes in Canada: Evidence from the Census." In Green, David, Craig Riddell and France St.Hilaire (eds.) *Inequality in Canada: Driving Forces, Outcomes, and Policy*. Montreal: Institute for Research on Public Policy.

Luttmer, Erzo F. P., and Monica Singhal. 2014. "Tax Morale." *Journal of Economic Perspectives*, 28(4): 149-68.

Mankiw, N Gregory. 2013. "Defending the One Percent." *Journal of Economic Perspectives*, 27(3): 21-34.

Matheson, Thornton, and Pall Kollbeins. 2012. "Allocating Business Income Between Capital and Labor under a Dual Income Tax: The Case of Iceland. IMF Working Paper No. 12/263.

Meade, James. 1978. *The Structure and Reform of Direct Taxation*. London: Allen and Unwin.

Meghir, Costas, and David Phillips. 2010. "Labour Supply and Taxes." In Mirrlees, James, Timothy Besley, Richard Blundell, Stephen Bond, Robert Chote, Malcolm Gammie, Paul Johnson, Gareth Myles, and James Poterba (eds.) *Dimensions of Tax Design*. Oxford: Oxford University Press, pp. 90-173.

Milligan, Kevin. 2012. "The Tax-Free Savings Account: Introduction and Simulations of Potential Revenue Costs." *Canadian Tax Journal* 60 (2): 355–60.

———. 2013. "Income Inequality and Income Taxation in Canada: Trends in the Census 1980–2005." *University of Calgary School of Public Policy Research Papers* 6 (24): 1–29.

Milligan, Kevin, and Michael Smart. Forthcoming. "Taxation and Top Incomes in Canada." *Canadian Journal of Economics*.

Mintz, Jack M. 2006. ***The 2006 Tax Competitiveness Report: Proposals for Pro-Growth Tax Reform***. Commentary 239. Toronto; C.D. Howe Institute.

Mintz, Jack, and Michael Smart. 2004. "Income Shifting, Investment, and Tax Competition: Theory and Evidence from Provincial Taxation in Canada." *Journal of Public Economics* 88 (6): 1149–68.

Mirrlees, James, et al. 2011. *Tax by Design*. Oxford: Oxford University Press.

Murphy, Brian, Mike Veall, and Michael Wolfson. Forthcoming. "Top-End Progressivity and Federal Tax Preferences in Canada: Estimates from Personal Income Tax Data." In *Inequality in Canada: Driving Forces, Outcomes, and Policy*, edited by David Green, Craig Riddell, and France St-Hilaire. Montreal: Institute for Research on Public Policy.

Musgrave, Richard. 1968. “The Carter Commission Report.” *Canadian Journal of Economics* 1 (1): 159–82.

Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Cambridge, MA: Harvard University Press.

Piketty, Thomas, and Emmanuel Saez. 2003. “Income Inequality in the United States, 1913–1998.” *Quarterly Journal of Economics* 118 (1): 1–39.

Piketty, Thomas, Emmanuel Saez, and Stefanie Stantcheva. 2014. “Optimal Taxation of Top Labor Incomes: A Tale of Three Elasticities.” *American Economic Journal: Economic Policy* 6 (1): 230–71.

Pirttilä, Jukka, and Håken Selin. 2011. “Income Shifting with a Dual Income Tax System: Evidence from the Finnish Tax Reform of 1993.” *Scandinavian Journal of Economics* 113 (1): 120–44.

Ragan, Christopher. 2014. “Budget 2014: Economy Lab’s wish list.” *Globe and Mail Online*, February 11.

Saez, Emmanuel. 2013. “Optimal Progressive Capital Income Taxes in the Infinite Horizon Model.” *Journal of Public Economics* 97: 61–74.

Saez, Emmanuel, Joel Slemrod, and Seth H. Giertz. 2012. “The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review.” *Journal of Economic Literature* 50 (1): 3–50.

Saez, Emmanuel, and Michael R. Veall. 2005. “The Evolution of High Incomes in Northern America: Lessons from Canadian Evidence.” *American Economic Review* 95 (3): 831–49.

Sandler, Daniel. 2001. “The Tax Treatment of Employee Stock Options: Generous to a Fault.” *Canadian Tax Journal* 49 (2): 259-319.

Sheikh, Munir A. 2014. “Estimating the True Size of Government: Adjusting for Tax Expenditures.” Ottawa: Macdonald-Laurier Institute.

Simons, Henry C. 1938. *Personal Income Taxation*. Chicago: University of Chicago Press.

Slemrod, Joel. 2010. “Location, (Real) Location, (Tax) Location: An Essay on Mobility’s Place in Optimal Taxation.” *National Tax Journal* 63 (4, part 2): 843–64.

Slemrod, Joel, and Christian Gillitzer. 2014. Tax Systems. Cambridge, MA: MIT Press.

Smith, Roger S. 1993. *Personal Wealth Taxation: Canadian Tax Policy in a Historical and an International Setting*. Toronto: Canadian Tax Foundation.

Sørensen, Peter Birch. 2005. “Dual Income Taxation: Why and How?” CESifo Working Paper 1551. Munich: CESifo Group.

———. 2007. “The Nordic Dual Income Tax: Principles, Practices, and Relevance for Canada.” *Canadian Tax Journal* 55 (3): 557–602.

Technical Committee on Business Taxation. 1997. *Report of the Technical Committee on Business Taxation*. Ottawa: Government of Canada.

United States. 1977. Department of the Treasury. *Blueprints for Tax Reform*. Washington, DC.

———. 2005. *Simple, Fair, and Pro-Growth: Proposals to Fix America’s Tax System — Report of the President’s Advisory Panel on Federal Tax Reform*. Washington, DC: Department of the Treasury.

Veall, Michael R. 2012. “Top Income Shares in Canada: Recent Trends and Why They Might Matter,” *Canadian Journal of Economics* 45 (4): 1247-1272.

Victoria University of Wellington Tax Working Group. 2010. “A Tax System for New Zealand’s Future.” Wellington, NZ: Victoria University of Wellington, Centre for Accounting, Governance, and Taxation Research.

von Schanz, Georg. 1896. “Der Einkommensbegriff und die Einkommensteuergesetze.” *Finanzarchiv* 13 (1): 1–87.

Wilkinson, Richard, and Kate Pickett. 2009. *The Spirit Level: Why Greater Equality Makes Societies Stronger*. London: Bloomsbury Press.

Young, Cristobal, and Charles Varner. 2011. “Millionaire Migration and State Taxation of Top Incomes: Evidence from a Natural Experiment.” *National Tax Journal* 64 (2, part 1): 255–84.

Zodrow, George R. 1995. “Economic Issues in the Taxation of Capital Gains.” *Canadian Public Policy* 21 (supplement). S27-S57.

Zodrow, George R. 2010. “Capital Mobility and Capital Tax Competition.” *National Tax Journal* 63 (4, part 2): 865–902.

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