
Challenges in Shifting Canadian Taxation Toward Consumption

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PRÉCIS

Les analystes de la politique fiscale canadienne sont très en faveur de privilégier la taxe sur les produits et services/taxe de vente harmonisée — une taxe à la consommation — plutôt que l'impôt sur le revenu des particuliers comme source de revenus, ou encore d'augmenter la proportion de la taxe à la consommation dans l'assiette de l'impôt des particuliers. Cette étude va à l'encontre des recommandations en matière de politique fiscale du « consensus d'experts » et évalue de façon critique les preuves théoriques et empiriques relatives au comportement dans les domaines de l'effort de travail, de l'épargne, de l'investissement, de la croissance économique, de l'efficacité et de l'observation fiscale. L'étude examine plus à fond l'échec de l'opinion consensuelle à expliquer de manière adéquate les effets régressifs des modifications prescrites à la politique fiscale.

La plupart des analyses des experts faisant consensus s'appuient largement sur des preuves étrangères tout en ignorant le fait que l'impôt direct des particuliers au Canada est déjà fortement orienté vers une assiette de taxation de la consommation. Les revenus du capital qui demeurent assujettis à l'impôt des particuliers se concentrent dans les groupes aux revenus les plus élevés, ce qui est bien loin d'un traitement fiscal axé sur la consommation. D'ailleurs, l'opinion consensuelle des experts néglige souvent l'ouverture de l'économie canadienne et le recours massif des sociétés au financement interne — deux facteurs qui amoindrissent l'incidence des encouragements à l'épargne personnelle sur l'investissement des entreprises canadiennes. L'examen minutieux des deux études empiriques canadiennes les plus citées par ces analystes indique un détournement des inférences relatives à la politique fiscale pour parvenir à leur conclusion.

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Nous concluons que les réformes proposées sont déficientes quant à leurs affirmations de gains économiques importants au moyen d'incitatifs, d'efficacité et de croissance. La plupart des gains économiques invoqués sont exagérés, discutables ou inexistants. Un examen attentif des preuves théoriques et empiriques indique que les principales hypothèses sont faibles ou vulnérables. La plupart des gains économiques putatifs qui découleraient d'une transition vers un régime fiscal davantage axé sur la consommation diminuent ou disparaissent quand la réforme est contrainte de n'avoir aucune incidence sur la répartition. Ainsi, c'est la transition vers un régime fiscal plus régressif implicite dans de telles réformes plutôt que vers une assiette de taxation de la consommation en soi qui génère de tels gains potentiels. Les deux types de réformes nuiraient à la répartition du fardeau fiscal à moins qu'elles soient accompagnées d'une augmentation du barème des taux d'impôt des particuliers. Cette étude examine les conditions requises pour faire en sorte que les réformes proposées n'aient aucune incidence sur la répartition ainsi que sur le revenu.

ABSTRACT

Tax policy analysts in Canada have widely promoted shifting revenues away from the personal income tax and toward the consumption-based goods and services tax/harmonized sales tax, or shifting the personal tax base further toward consumption. This study challenges the "consensus expert" policy recommendations by critically assessing the theoretical and empirical evidence relating to behaviour in the areas of work effort, saving, investment, economic growth, efficiency, and tax compliance. The study further examines the failure of the consensus view to account adequately for the regressive impacts of the prescribed policy changes.

Most of the consensus expert analyses rely heavily on foreign evidence while ignoring the fact that the Canadian direct personal tax is already highly oriented toward a consumption base. Capital incomes that remain subject to the personal tax are concentrated in the highest income groups, and these constitute the largest departure from consumption-tax treatment. Moreover, the consensus expert view often neglects the openness of the Canadian economy and heavy corporate reliance on internal finance—both factors that mute the impact on domestic business investment of any stimulus to personal savings. Scrutiny of the two Canadian empirical studies most cited by these analysts reveals an overstretch from the policy inferences that can properly be drawn.

We conclude that the proposed reforms are deficient in their claims of large economic gains via incentives, efficiency, and growth. Most of the asserted economic gains are overstated, controvertible, or non-existent. Careful review of the theoretical and empirical evidence reveals a lack of robustness or vulnerability to key assumptions. Most of the putative economic gains from shifting the tax system further toward consumption diminish or vanish when the reform is constrained to be distribution-neutral. Thus, it is the move toward a more regressive tax system implicit in such reforms rather than moves toward a consumption base per se that generates any such potential gains. Both types of reform would adversely affect the distribution of the tax burden unless accompanied by a steepening of the personal tax rate schedule. This study examines the requisite conditions for making the proposed reforms distribution-neutral as well as revenue-neutral.

KEYWORDS: TAX MIX ■ CONSUMPTION TAXES ■ INCOME TAXES ■ TAX REFORM ■ SAVINGS ■ INCENTIVES

CONTENTS

Introduction	3
Conventional Expert Wisdom	4
Shifting the Tax Mix	4
Reforming the PIT Base	7
Alternative Perspectives	8
Distributional Issues	10
The Personal Income Tax Base	11
Tax-Deferral Method	12
Tax-Prepayment Method	13
Reduced-Tax Method	15
Effective Tax on Capital Income	15
Critical Review of the Economic Evidence	17
Work Incentive Effects	18
Effects on Personal Savings	20
Effects on Business Investment	21
Economic Efficiency and Growth Effects	23
Income Smoothing and Lifetime Equity	27
Avoidance and Evasion Effects	28
Distributional Effects of Proposals	29
Measurement of Distributional Impacts	30
Distributional Effects: Tax Mix Shift	31
Distributional Effects: PIT Base Reform	33
Lifetime Wealth Transfer Taxes	37
Conclusion and Discussion	39

Most economists argue that consumption taxes are generally more advantageous than income taxes.

Robert D. Brown and Jack Mintz, “The Big Picture,” in Heather Kerr, Ken McKenzie, and Jack Mintz, eds., *Tax Policy in Canada* (Toronto: Canadian Tax Foundation, 2012), 1:1-34, at 1:33

INTRODUCTION

Among Canadian tax policy experts in academic, think tank, and business arenas, a near-consensus supports a shift in the revenue mix away from personal income tax and toward greater reliance on indirect consumption taxes like the goods and services tax (GST) and the harmonized sales tax (HST). For example, the experts expressed near-unanimous opposition to the GST rate cuts in 2006 and 2008, with the typical comment being that a cut in personal income taxes (PIT) would have been far preferable. Similarly, expert opinion has widely supported reforms to the PIT—such as expanded access to registered retirement savings plans (RRSPs), registered pension plans (RPPs), and tax-free savings accounts (TFSA)—that would make its base more consumption-oriented. This “consensus expert view” has relied on diverse arguments and evidence to support the benefits of the proposed tax reforms in terms of enhanced

incentives, efficiency, and economic growth. However, these analyses have often failed to examine the evidence from a sufficiently critical stance or, in citing international evidence, to consider how Canadian tax provisions differ. Moreover, these analyses have typically neglected or downplayed the adverse distributional impacts that could result from such reforms.

In this study, we begin by reviewing the claims of Canadian tax experts with respect to the mooted tax reforms and find that almost all have focused on efficiency issues to the neglect of vertical equity. We discuss how the personal income tax in Canada already embodies a tax base much closer to consumption than income for the great majority of taxpayers other than those at the highest income and wealth levels. We then critically assess the evidence on key economic claims made by the advocates of reform and find that most of those claims are either overstated, controvertible, or without solid foundation. Finally, we evaluate concrete proposals that would make the Canadian tax system more consumption-oriented—either by shifts from personal tax toward indirect taxes or by changes to the base of the personal tax system. In that exercise, we examine the requirements for policy reforms that would maintain distributional neutrality as well as revenue neutrality.

CONVENTIONAL EXPERT WISDOM

Shifting the Tax Mix

The federal government's two cuts to the GST rate in 2006 and 2008 have been criticized by a near-unanimity of Canadian economists in both academe and think tanks. CBC News issued a report with the heading "Economists Dump on Harper's GST-Lowering Plan"¹ and quoted academic economist Jim Davies's description of the move as "stupid, stupid, stupid, stupid"—a refrain echoed by other analysts and media commentators. The report also quoted this comment by Bill Robson of the C.D. Howe Institute:

From an economic point of view, it wouldn't be my first choice. If you want tax cuts that are going to promote work, going to promote saving, help us invest more and raise living standards in the future, the GST is not the tax you would go after.²

The *Globe and Mail* later reported that

[a]ll 20 [surveyed] economists said other tax cuts would be better for the country than trimming another percentage point from the goods and services tax. . . . It's a remarkable show of unanimity on public policy.³

1 CBC News, "Economists Dump on Harper's GST-Lowering Plan," December 1, 2005 (www.cbc.ca/news/canada/economists-dump-on-harper-s-gst-lowering-plan-1.549253).

2 Ibid.

3 Tavia Grant, "Tories Rebuked on GST: A Poll of Top Economists Finds Unanimous Opposition to the Government's Plan To Reduce the Goods and Services Tax," *Globe and Mail*, October 25,

Economist Don Drummond, then with Toronto-Dominion Bank, stated:

The GST rate cuts don't move that agenda [to make Canada's workers and companies competitive] forward at all.⁴

Shifting the tax mix toward greater reliance on the GST/HST and reduced use of other taxes—particularly the PIT and corporate income tax—has been a perennial theme of Canadian policy analysts since long before the GST rate cuts and continuing to this day.⁵ Two economists writing for the C.D. Howe Institute in 1999, Jean-Yves Duclos and Julie Gingras, argued for cutting PIT rates while maintaining indirect consumption tax rates, a reform that would unavoidably reduce overall tax progressivity.⁶ They asserted:

Because income taxes are assessed on the returns from savings as well as on wages, the Canadian economy also experiences less capital investment and lower productivity and income growth than it could.⁷

Similar arguments appear in most of the later studies advocating a tax-mix shift. Jack Mintz endorsed “a sharp increase in sales tax revenues (sales and excise) to reduce income taxes” combined with “a major expansion of RRSP and pension limits to allow for greater accumulation of wealth.”⁸ The advocacy of a tax-mix shift based on the presumed greater economic efficiency of consumption taxes has been echoed in studies published by think tanks such as the Institute for Competitiveness & Prosperity,⁹

2007. Opposition Liberal leader Stéphane Dion asserted in a speech in October 2007 that “there is scarcely an economist on the planet who believes that taking another point off the GST is better than cutting income taxes” (cited in Patrick Grady, “The GST Cut Is Not So Stupid,” *Global Economics Commentaries*, February 1, 2008, http://global-economics.ca/GST_cuts.2.2008.htm).

4 Grant, *supra* note 3.

5 As we note below, the economic evidence does support a shift away from corporate income taxes and toward the GST/HST in terms of efficiency and growth, but our focus in this study is on proposals to shift away from PIT.

6 Jean-Yves Duclos and Julie Gingras, *Mixing It Up: Directions for Federal Tax Reform*, C.D. Howe Institute Commentary no. 126 (Toronto: C.D. Howe Institute, June 1999).

7 *Ibid.*, at 2.

8 Jack M. Mintz, “Taxation with the Least Pain—A New Tax Structure for Canada,” in Herbert G. Grubel, ed., *Tax Reform in Canada: Our Path to Greater Prosperity* (Vancouver: Fraser Institute, 2003), 41-51, at 49-50. This recommendation echoed his earlier statement in Jack Mintz, “Taxing Future Consumption,” in Patrick Grady and Andrew Sharpe, eds., *The State of Economics in Canada: Festschrift in Honour of David Slater* (Montreal and Kingston, ON: McGill-Queen's University Press, 2001), 79-93, at 90. While Mintz noted that “[personal] expenditure taxes can be made progressive if desired” (“Taxation with the Least Pain,” *supra*, at 47), his study did not cite the increased upper-bracket marginal tax rates that would be needed for distributional neutrality.

9 Institute for Competitiveness & Prosperity, *Taxing Smarter for Prosperity*, Working Paper 7 (Toronto: Institute for Competitiveness & Prosperity, March 2005).

the Fraser Institute,¹⁰ and the Conference Board of Canada,¹¹ as well as by academics writing for the University of Calgary's School of Public Policy.¹² The latest call for a shift in the federal tax mix toward the GST appears in a study published in March 2013 by the C.D. Howe Institute.¹³

Shifting the tax mix toward indirect consumption tax has also been advocated for the Canadian provinces, with a particular focus on the introduction of a provincial sales tax in Alberta.¹⁴ Kenneth McKenzie examined the replacement of Alberta's single-rate income tax with a new provincial sales tax.¹⁵ While estimating significant economic gains, he reported that even with a non-progressive PIT (other than the basic exemption), the change would be regressive. Bev Dahlby's analysis supported a shift of revenue from provincial corporate income taxes toward either the PIT or sales tax, with emphasis on the introduction of an Alberta sales tax.¹⁶ His analysis indicated substantial economic gains from shifting taxes toward consumption (through either the tax mix or direct tax reform) and noted the reduced progressivity that would result. Economic debate over whether Alberta should introduce a sales tax to reduce its provincial PIT continues to the present time, with advocates such as Dahlby,¹⁷ Mintz,¹⁸ Philip Bazel and Mintz,¹⁹ and Colin Busby and Alexandre Laurin,²⁰ and critics such as Kesselman.²¹

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- 10 Bev Dahlby, "Restructuring the Canadian Tax System by Changing the Mix of Direct and Indirect Taxes," in *Tax Reform in Canada*, supra note 8, 77-108; and Jason Clemens, Niels Veldhuis, and Milagros Palacios, *Tax Efficiency: Not All Taxes Are Created Equal*, Studies in Economic Prosperity no. 4 (Vancouver: Fraser Institute, January 2007).
- 11 Glen Hodgson, "Reinventing the Canadian Tax System: The Case for Comprehensive Tax Reform," *Executive Action* [Conference Board of Canada], March 2012, 1-10.
- 12 Sijbren Cnossen, "Taxing Consumption or Income: Du Pareil au Même?" (2012) 5:13 *SPP Research Papers* [University of Calgary School of Public Policy] 1-22; and Bev Dahlby, "Reforming the Tax Mix in Canada" (2012) 5:14 *SPP Research Papers* 1-32.
- 13 Alexandre Laurin and William B.P. Robson, *Prudence and Opportunity: A Shadow Federal Budget for 2013*, C.D. Howe Institute Commentary no. 375 (Toronto: C.D. Howe Institute, March 2013).
- 14 Several US states have also been shifting their revenue mix further toward sales taxes, some even aiming to abolish their PIT, on the basis of economic arguments similar to those assessed in this article: Richard W. Stevenson, "Governors Push Bigger Reliance on Sales Taxes," *New York Times*, January 24, 2013.
- 15 Kenneth J. McKenzie, *Replacing the Alberta Personal Income Tax with a Sales Tax: Not Heresy but Good Economic Sense* (Calgary: Canada West Foundation, October 2000).
- 16 Dahlby, supra note 10.
- 17 Dahlby, supra note 12.
- 18 Jack M. Mintz, "When Progressive Taxes Aren't," *National Post*, April 24, 2013.
- 19 Philip Bazel and Jack M. Mintz, "Enhancing the Alberta Tax Advantage with a Harmonized Sales Tax" (2013) 6:29 *SPP Research Papers* 1-36.
- 20 Colin Busby and Alexandre Laurin, *The 8 Percent Solution: A Sensible Tax Compromise for Albertans*, C.D. Howe Institute E-brief 159 (Toronto: C.D. Howe Institute, July 2013). The top 1 percent (Footnotes 20 and 21 are continued on the next page.)

Reforming the PIT Base

Shifting the base of the PIT further toward consumption has been a similarly popular theme for tax policy analysts in Canada. These proposals almost invariably have not been couched as revenue-neutral reforms, and they typically have ignored or dismissed the distributional impacts.²² One example is Herbert Grubel's proposal to cut the tax on capital gains to zero; Grubel dismisses the notion that this would reduce vertical equity, arguing that the apparent high concentration of capital gains among the top income groups is "quite misleading because the income used to classify families includes capital gains and these gains often are a rare event."²³ Another example is recurrent proposals to raise RRSP and RPP contribution limits based on the argument that the highest earners should be able to save for retirement with the same consumption tax treatment as others.²⁴ These proposals rarely suggest that the upper-bracket tax rates should also be increased, thus implying reduced effective tax progressivity. The adverse distributional impact of raising the TFSA contribution

and 2 percent of earners would be the biggest winners from the proposal by Busby and Laurin, but this result is not evident in the study because it presents distributional impacts only by income quintiles. In contrast, the proposal by Bazel and Mintz, *supra* note 19, avoids adverse distributional impacts by cutting the tax rate on lower to middle income brackets (from Alberta's current 10 percent rate to zero) by much more than the cut for the highest income earners (by just 1 percentage point); this illustrates well an analytical point that we make later in our article.

- 21 Rhys Kesselman, "Alberta's Tax Structure Advantage," *National Post*, April 23, 2013.
- 22 In addressing the adverse distributional impacts of shifting taxation toward consumption, Dahlby, *supra* note 10, at 102, remarked, "Redistributive policy objectives should be pursued through government expenditures rather than taxes because redistributive expenditures are more cost effective than highly progressive taxes." Cnossen, *supra* note 12, at 18, approvingly cites Dahlby on this point while claiming elsewhere that his analysis assumes distributional neutrality.
- 23 Herbert G. Grubel, "Why There Should Be No Capital Gains Tax," in *Tax Reform in Canada*, *supra* note 8, 139-62, at 149. Curiously, Grubel seeks to support his contention by citing figures on the amounts of capital gains income reported by families with less than \$50,000 of non-capital-gains income in a single year (1992). A more telling measure would be the concentration of capital gains income within total incomes over an extended period.
- 24 A few examples of Canadian analysts advancing such proposals are Pierre Fortin, "Less Taxes and Better Taxes: Principles for Tax Cuts and Tax Reform" (2000) 48:1 *Canadian Tax Journal* 92-100; Mintz, "Taxing Future Consumption" and "Taxation with the Least Pain," *supra* note 8; Dahlby, *supra* note 10; Jonathan R. Kesselman, "Tax Design for a Northern Tiger" (2004) 10:1 *IRPP Choices* 1-46; and Clemens et al., *supra* note 10. Arguments have also been made to raise the age at which withdrawals must begin from tax-deferred savings plans and to reduce the rate of such mandatory withdrawals (William B.P. Robson, *A Better Riff on Retirement: The Case for Lower Minimum Withdrawals from Registered Retirement Income Funds*, C.D. Howe Institute E-brief 58 (Toronto: C.D. Howe Institute, July 2008)). Most recently, Jack M. Mintz and Thomas A. Wilson, "Reform Proposals for Replenishing Retirement Savings" (2013) 6:9 *SPP Research Papers* 1-14, advocated lifting the contribution limits for TFSA, RPP, and RRSP accounts without mention of the adverse distributional impacts.

limits is dismissed in a recent article by Finn Poschmann with the apt title “Why We Should Not Fear Expansion of Tax-Free Savings Accounts.”²⁵ Poschmann argues that “the fact that an economically beneficial tax policy choice offers benefits to high-income households, as opposed to low, does not disqualify it.”²⁶

Alternative Perspectives

In fact, the perspective on these issues has been less than unanimous among Canadian economists. A few have expressed qualified support for the GST rate cuts, based on several considerations:²⁷

- Reducing a regressive tax such as the GST has a progressive impact that is most favourable for lower-income households.
- Economic differences between the tax base of the GST and the PIT are not substantial except for the highest earners and wealth holders.
- A lower GST rate moderates the incentive for tax evasion, particularly for services supplied directly to homeowners.
- Economic distortions between taxed and untaxed items such as restaurant meals and groceries are relieved.
- A GST rate cut facilitates harmonization of provincial sales taxes with the GST, which promotes real investment and productivity growth.

In their original analysis that led to the TFSA, Kesselman and Poschmann identified the issue of distributional impacts and noted a tradeoff between base changes and tax-rate changes, particularly for taxpayers in the top bracket.²⁸ Concerns about the significant adverse distributional impacts of the proposal to double the TFSA

25 Finn Poschmann, “Policy Forum: Why We Should Not Fear Expansion of Tax-Free Savings Accounts” (2012) 60:2 *Canadian Tax Journal* 391-99.

26 *Ibid.*, at 396.

27 Jonathan R. Kesselman, “Cutting the GST: Good Politics and Good Economics,” *National Post*, January 10, 2006; Jonathan R. Kesselman, “Cutting the GST Stupid, Harmonizing the GST Smart,” *Globe and Mail*, web-exclusive ed., October 25, 2007; Grady, *supra* note 4; and Patrick Grady, “The Conservative GST Cut Has Catalyzed Sales Tax Harmonization,” *Global Economics Commentaries*, September 5, 2009 (http://global-economics.ca/GST_cuts.htm). Michael Smart and Richard M. Bird, “The GST Cut and Fiscal Imbalance,” in Charles M. Beach, Michael Smart, and Thomas A. Wilson, eds., *The 2006 Federal Budget: Rethinking Fiscal Priorities* (Montreal and Kingston, ON: McGill-Queen’s University Press, 2007), 73-102, described the GST cut as a desirable way to facilitate provincial sales tax harmonization in a policy package that included a cut in federal fiscal transfers to the provinces. Doubtless the GST rate cuts did facilitate the later harmonization of sales taxes in Ontario and British Columbia.

28 Jonathan R. Kesselman and Finn Poschmann, “Expanding the Recognition of Personal Savings in the Canadian Tax System” (2001) 49:1 *Canadian Tax Journal* 40-101.

contribution limits have been articulated by Armine Yalnizyan²⁹ and Kesselman.³⁰ Robin Boadway has advocated moving the PIT fully to a consumption base, but in a reform package that includes a more highly progressive rate structure and a lifetime tax on inheritances.³¹

In contrast to the relative neglect of vertical equity among Canadian tax policy analysts seeking a more consumption-based system, this issue has received much closer scrutiny among analysts elsewhere. In the United States, economists have investigated the distributional aspects of shifting the PIT fully to a consumption base.³² They have also critiqued on distributional grounds American proposals to replace the federal PIT with a flat-rate consumption-based tax, a USA (unlimited savings allowance) personal tax, or a national retail sales tax.³³ In Australia, economists have assessed analytically and quantitatively the distributional impacts of shifting the tax mix between direct and indirect taxes,³⁴ and an extensive monograph has been published on the topic.³⁵ Analysts have also estimated the regressivity of indirect taxes

29 Armine Yalnizyan, “Who Benefits from the TFSA?” *The Progressive Economics Forum*, April 8, 2011 (www.progressive-economics.ca/2011/04/08/who-benefits-from-the-tfsa).

30 Jonathan Rhys Kesselman, “Policy Forum: Expanding the Tax-Free Savings Account—Requisite Companion Reforms” (2012) 60:2 *Canadian Tax Journal* 375–89.

31 Robin Boadway, “Rethinking Tax-Transfer Policy for 21st Century Canada,” in Fred Gorbet and Andrew Sharpe, eds., *New Directions for Intelligent Government in Canada: Papers in Honour of Ian Stewart* (Ottawa: Centre for the Study of Living Standards, 2011), 163–203. We later posit serious doubts as to whether it is realistic, in practical and political terms, for Canada to consider adopting the effective taxes on wealth transfers needed for such a scheme to be distributionally neutral.

32 Don Fullerton and Diane Lim Rogers, “Lifetime Effects of Fundamental Tax Reform,” in Henry J. Aaron and William G. Gale, eds., *Economic Effects of Fundamental Tax Reform* (Washington, DC: Brookings Institution, 1996), 321–47; and David Altig, Alan J. Auerbach, Laurence J. Kotlikoff, Kent A. Smetters, and Jan Walliser, “Simulating Fundamental Tax Reform in the United States” (2001) 91:3 *American Economic Review* 574–95.

33 See the studies in Joel Slemrod, ed., *Tax Policy in the Real World* (New York: Cambridge University Press, 1999).

34 Neil Warren, *The Distributional Impact of a Change in the Tax Mix in Australia* (Sydney: Australian Tax Research Foundation, 1987); Neil Warren, “Indirect Taxes, Tax Mix and Tax Equity,” in John G. Head and Richard Krever, eds., *Flattening the Tax Rate Scale: Alternative Scenarios and Methodologies* (Melbourne: Longman, 1990), 363–85; John Creedy, “Revenue and Progressivity Neutral Changes in the Tax Mix” (1992) 25:2 *Australian Economic Review* 31–38; and Patricia Apps, *A Tax-Mix Change: Effects on Income Distribution, Labour Supply and Saving Behaviour*, Centre for Economic Policy Research Discussion Paper 371 (Sydney: Australian National University, Centre for Economic Policy Research, 1997).

35 John Creedy, *Modelling Indirect Taxes and Tax Reform* (Northampton, MA: Edward Elgar, 1999).

for five European countries and found that the adverse distributional impacts of a direct-indirect tax-mix shift could be offset by raising PIT rate progressivity.³⁶

Distributional Issues

A few of the consumption tax proponents have acknowledged, in passing, the adverse distributional impacts of the proposed tax reforms. However, they have addressed the issue in ways that do not fully remediate the adverse impacts. One commonly noted proposal to address the regressive impact of shifting the tax mix away from the PIT and toward the GST/HST is to enrich the refundable tax credits for lower-income households.³⁷ For example, Dahlby specifies “measures, such as refundable tax credits for low-income individuals, that would ameliorate any undesirable changes in the distribution of the tax burden.”³⁸ While such credits can offset the adverse impact on those receiving the credits—and even “overcompensate” the lowest-income households—they do nothing to offset the reduced progressivity that arises for all taxpayers above the credit phase-out level.³⁹ In order to neutralize the regressivity of the shift in tax mix, PIT rates would need to be cut by decreasing amounts as one moves up the income scale; in other words, the PIT rate schedule would need to be more steeply inclined. Our later analysis examines this issue, something that none of the advocates of shifting the tax mix has properly identified.

Another argument used by some advocates of both the tax-mix shift and the PIT base reform is that the distributional impacts should be assessed in a lifetime, rather than an annual, framework.⁴⁰ Yet this argument can at best reduce the degree of regressive impact from the tax reform; it cannot eliminate it. In an analysis of this issue, Don Fullerton and Diane Lim Rogers reported that “a tax that is progressive in an annual sense is also progressive (although less so) in the lifetime perspective. Similarly, annually regressive taxes are merely less regressive on a lifetime basis.”⁴¹

36 André Decoster, Jason Loughrey, Cathal O'Donoghue, and Dirk Verwerft, “How Regressive Are Indirect Taxes? A Microsimulation Analysis for Five European Countries” (2010) 29:2 *Journal of Policy Analysis and Management* 326-50. Their study reported that indirect taxes, including excise taxes and broad value-added taxes (VAT), were regressive with respect to disposable incomes (because of savings patterns) but progressive with respect to annual expenditures (because of exemptions and zero-rating of necessities).

37 This proposal has been made by, among others, Duclos and Gingras, *supra* note 6; McKenzie, *supra* note 15; Dahlby, *supra* note 12; and Bazel and Mintz, *supra* note 19.

38 Dahlby, *supra* note 12, at 8.

39 In a revenue-losing variant of a mooted Alberta sales tax that included a refundable tax credit, McKenzie, *supra* note 15, found that although the lowest income classes could be insulated from losses, the gains from the reform still were skewed strongly in favour of higher income groups. Also see *supra* note 20.

40 This argument has been made by, among others, Dahlby, *supra* note 10, and Busby and Laurin, *supra* note 20. We later offer further comments on lifetime measures of tax incidence.

41 Don Fullerton and Diane Lim Rogers, “Lifetime Versus Annual Perspectives on Tax Incidence” (1991) 44:3 *National Tax Journal* 277-87, at 278.

An earlier study by Davies et al. based on Canadian tax data had reached the same conclusions. Thus, regardless whether one wishes to assess tax incidence on the basis of annual or lifetime impacts, all of these proposals would reduce the tax system's progressivity.⁴² None of the economic analysts promoting the lifetime perspective has offered quantitative estimates of the degree to which that view would ameliorate the regressivity problem.

Our analysis of proposals to shift Canadian taxes further toward consumption will examine the implications of applying the condition of distributional neutrality as well as revenue neutrality. These conditions are not simply academic constructs but have relevance to the political economy of real-world tax reforms. If reform is not undertaken on a distribution-neutral basis and, as a result, high earners obtain disproportionate tax relief, it is also unlikely in practice to be revenue-neutral. Middle and moderate earners will resist attempts to increase their own tax burdens, and they will be most strongly opposed if they see high income earners enjoying greater tax relief. Thus, without distributional neutrality, overall tax revenues are likely to decline, and with a progressive tilt to total public expenditures, the poor, the vulnerable, and lower earners are likely to suffer the most from the resulting spending cuts. Because of this political process, distributional neutrality plays a central role in the assessment of proposed reforms.

THE PERSONAL INCOME TAX BASE

While Canada's direct tax on individuals is called a personal "income" tax, its base is in fact much closer to consumption than to income for the great majority of taxpayers.⁴³ The reasons for this are a host of provisions for deferring tax on savings and exempting capital incomes from tax, and reduced rates of tax on particular types of capital incomes. As a result, the personal tax base bears relatively heavily on labour earnings and relatively lightly on savings and capital incomes. This situation has major implications for proposals to shift the tax mix away from the PIT and toward indirect taxes on consumption, or to shift the PIT base further toward consumption, since the PIT base is already close to consumption. The exceptions are the highest earners and wealth holders, for whom the use of consumption tax treatment in the PIT is more restricted. This point also explains why the proposed tax reforms would

42 James B. Davies, France St-Hilaire, and John Whalley, "Some Calculations of Lifetime Tax Incidence" (1984) 74:4 *American Economic Review* 633-49. By some estimates, the overall Canadian tax system is roughly proportional above the lowest incomes (Frank Vermaeten, W. Irwin Gillespie, and Arndt Vermaeten, "Tax Incidence in Canada" (1994) 42:2 *Canadian Tax Journal* 348-416), in which case these proposals would incline it toward regressive.

43 This point is acknowledged by Larry F. Chapman and Jack Mintz, "Personal Income Taxation," in Heather Kerr, Ken McKenzie, and Jack Mintz, eds., *Tax Policy in Canada* (Toronto: Canadian Tax Foundation, 2012), 4:1-33, at 4:11: "Generally, many low- and middle-income taxpayers who own a house and retirement assets are taxed on an expenditure basis since they may have little other capital income subject to tax."

extend disproportionate benefits to top earners and why distributional impacts pose concerns. We next describe the major methods by which the Canadian PIT base approaches consumption.

Tax-Deferral Method

Tax deferral is a basic method for sheltering savings from income tax treatment in the PIT for Canada and most other countries.⁴⁴ The ostensible purpose is to encourage personal savings for retirement by deferring tax on a portion of labour earnings that are saved and applying tax only when the funds are withdrawn to finance spending. Since the definition of “income” for economic and tax purposes is

$$\text{Income} = \text{Consumption} + \text{Saving},$$

rearranging the income formula yields

$$\text{Consumption} = \text{Income} - \text{Saving}.$$

This second formula describes the tax-deferral method of implementing a consumption-based tax: take total income and allow a deduction for saving. When the individual withdraws savings, or “dissaves,” that amount is added to his income for a measure of current consumption.⁴⁵ Beyond deferring tax on the amounts saved, this method also eliminates the effective tax on the normal rate of return earned in tax-deferred accounts.

Canada’s largest vehicles for tax-deferred savings are the individual RRSP and the workplace-based RPP.⁴⁶ Relative to income tax treatment, these schemes are estimated to have reduced federal revenues in 2011 by \$9.9 billion and \$15.6 billion, respectively.⁴⁷ To avoid unlimited tax relief for the highest earners, the PIT limits the amount of savings afforded tax-deferred treatment. The ceiling is 18 percent of the individual’s “earned income”—which includes net rental income, net business income,

44 The tax-deferral method is sometimes called cash flow taxation. Most analysts would restrict assets such as closely held businesses to tax-deferral treatment (and exclude them from tax-prepaid treatment) on account of the ease of shifting factor payments between wages and returns to capital.

45 In the second formula, dissavings are negative savings, and because of the negative sign, they enter as an addition to income for tax purposes.

46 Additional tax-deferral vehicles in the PIT are the deferred profit-sharing plan (DPSP) and the registered retirement income fund (RRIF). Individual pension plans also offer small-business owners, incorporated professionals, and senior executives greater opportunity to make tax-deferred savings than is provided by RRSPs (Marie-Eve Gosselin and Jean-Pierre Laporte, “A Review of Individual Pension Plans,” *Personal Tax Planning* feature (2013) 61:1 *Canadian Tax Journal* 257-78).

47 Canada, Department of Finance, *Tax Expenditures and Evaluations 2012* (Ottawa: Department of Finance, 2012), at 18.

and gross employment earnings—with an annual dollar limit of over \$23,000 in 2013.⁴⁸ Any entitlement that the individual does not utilize in a given year can be carried forward for use in future years. For an individual who contributes to a tax-deferred scheme at the full 18 percent of earned income, the dollar ceiling equates to annual earnings of nearly \$130,000. Thus, anyone earning less than that amount is currently unconstrained in his or her ability to save on a consumption-tax basis unless the individual's saving rate is extremely high,⁴⁹ and proposals to raise the dollar ceiling would potentially affect only the fewer than 4 percent of tax filers with annual earned incomes above that amount.⁵⁰

Indirect sales taxes such as the federal GST, the federal-provincial HST, and provincial retail sales taxes also use the deferral method for taxing consumption. No sales tax is paid when the funds are initially earned through labour or business, no sales tax is applied to accruing investment income, and sales tax applies only when the initial funds plus accrued investment returns are finally spent. Thus, proposals to shift the overall tax mix away from the PIT and toward greater use of sales taxes will also shift the basis for taxation toward consumption to the extent that the PIT contains partial elements of income tax. However, to the extent that the PIT is already highly consumption-based for the great majority of taxpayers, this shift entails a relatively small move toward consumption taxation except for top earners.

Tax-Prepayment Method

The tax-prepayment method⁵¹ of applying consumption taxation derives from the decomposition of income into its two main components:

$$\text{Income} = \text{Income from labour} + \text{Income from capital.}$$

By exempting from tax the income from capital—which represents the return on savings—the taxation of labour income alone is equivalent to consumption taxation.

48 For 2013, the dollar limit for RRSP contributions is \$23,820 based on income in the previous year, and the dollar limit for RPP contributions is \$24,270. An individual's total limit is based on his or her RRSP plus RPP contributions plus the employer's RPP contributions on the employee's behalf.

49 If total federal plus provincial income taxes plus employee contributions for Canada Pension Plan and employment insurance are about 30 percent of gross income at the \$130,000 earning level, the 18 percent limit equates to a savings rate exceeding 25 percent of disposable income (0.18/0.7).

50 See table 2 below for the distribution of tax filers by total income assessed on their returns.

51 We use the terms "tax prepayment" and "tax-prepaid," while some other analysts have used the terms "exempt-yield," "tax exemption," and "wage tax." In concept, while tax prepayment has some equivalence to tax deferral, the two methods can yield different outcomes when the tax rate differs between the point of contribution and the point of withdrawal of funds. In Canadian practice, the two methods also differ because TFSAs allow recontribution of withdrawals while RRSPs do not.

In effect, the tax on future consumption is “prepaid” when the funds are initially earned. However, unlike the tax-deferral method, tax prepayment relieves from tax not only the “normal” rate of investment return but also any “supernormal” returns. In contrast, the tax-deferral method taxes the full return to capital including any supernormal component at the time of expenditure; it also implicitly subsidizes savings that yield a subnormal rate of return, so that the net effect on aggregate tax revenues will be minimal.⁵² The prepayment method can be simply applied within a direct PIT, although the desire to limit the extent to which individuals can access such tax-favoured savings requires the use of designated accounts.

The TFSA introduced in 2009 is Canada’s primary formal vehicle using the tax-prepayment method.⁵³ The TFSA grants individuals an annual \$5,500 contribution entitlement, with any unused room being carried forward for use in future years. Contributions receive no PIT deduction, but accruing investment returns are tax-free, as are any subsequent withdrawals. The provision of TFSAs means that even fewer higher earners are subject to taxation on their investment incomes, although most higher earners find it advantageous to exhaust their RRSP and RPP limits prior to making TFSA contributions.⁵⁴ Savers with low and moderate incomes face nil or low effective PIT rates, reducing the value of deductions for tax-deferred savings and thus making TFSAs relatively attractive for this group. However, the current TFSA limit is more than adequate for most savers at low and middle incomes, so that the primary beneficiaries of proposals to raise TFSA limits would be the highest earners and wealth holders. Taking account of both the RPP and RRSP limits and the \$5,500 annual TFSA allowance, and assuming saving at 15 percent of gross earnings, consumption tax treatment extends to annual earnings of \$195,000, excluding less than 2 percent of tax filers under the current system.⁵⁵

The tax-prepayment method is also applied with the lifetime capital gains exemption of \$750,000 for qualified small business corporation shares and eligible farm properties. Note that this tax exemption can shelter the savings from labour

52 See Benjamin Alarie, “Policy Forum: Assessing Tax-Free Savings Accounts—Promises and Pressures” (2009) 57:3 *Canadian Tax Journal* 504-32, and Jonathan R. Kesselman, “Policy Forum: Tax-Free Savings Accounts in a Consumption-Based Personal Tax” (2009) 57:3 *Canadian Tax Journal* 533-62, for discussion of the appropriate tax treatment of supernormal investment returns and the relative desirability of utilizing the tax-deferral versus the tax-prepayment method.

53 Registered educational savings plans (RESPs) permit no deduction for contributions, but tax on the investment returns is deferred and applied only at the rate of the recipient (who normally can claim tax credits for tuition and related educational expenses to offset the tax liability). Thus, to the extent that little or no tax may be due upon withdrawal, RESPs approach tax-prepaid treatment.

54 Of course, over a long transition period, more higher earners will be subject to income taxation on their non-tax-sheltered wealth accumulated prior to the introduction of TFSAs.

55 The 2013 limits for RRSPs plus TFSAs also equate to a saving rate of more than 23 percent of *net income* after reckoning the taxes and other payroll deductions at \$195,000 of gross income.

earnings embedded in the value of the property as well as the returns to capital per se. Another major, albeit informal, saving vehicle enjoying tax-prepaid treatment is owner-occupied housing in Canada; not only are capital gains upon the sale of a principal residence tax-free but so are the implicit incomes in the form of rent-free housing services. Similarly, the imputed incomes derived from the services of consumer durable goods such as household furnishings, appliances, and cars are free of PIT and thus consumption-taxed via the tax-prepayment method.

Reduced-Tax Method

For individual holdings of financial assets outside RPPs/RRSPs/TFSAs, business assets, and other real assets besides homes, the Canadian PIT offers further departures from income tax treatment that move the base toward consumption. First, capital gains on most financial and real assets are taxed at rates that are just half of the individual's marginal PIT rate, and this tax is deferred—often for many years—until the year of sale.⁵⁶ This treatment moves such gains substantially from income toward consumption using the tax-prepaid method. Second, dividends received from Canadian corporations (other than through tax-sheltered accounts) are granted dividend tax credits that significantly reduce the PIT burden. While these credits are intended to avoid the “double taxation” of dividends at the corporate and individual levels, in a small open economy such as Canada the corporate tax is likely borne mostly by consumers of non-tradable services and less mobile productive factors such as workers and resource assets.⁵⁷ Thus, shareholders are reimbursed at the PIT level for corporate income taxes that they may not actually be bearing.⁵⁸ Third, the Canadian PIT allows relatively unrestricted deductions of interest cost for leveraged holdings of financial assets; this can move the system further beyond a neutral consumption base to one that subsidizes rather than penalizes savings (which is like a negative tax on investment income).

Effective Tax on Capital Income

This panoply of PIT provisions that move the base toward consumption through various methods greatly reduces the effective taxation of capital income at the individual level. A study based on 1996 Canadian income tax returns found that “only

56 Capital gains tax is applied to nominal gains, but for most high-wealth individuals, the value of the half-rate of tax plus deferral far outweighs the lack of indexation in periods of moderate inflation such as we have seen in recent decades.

57 Foreigners are the marginal source of investment funds in corporate Canada, and they do not obtain the benefit of Canadian dividend tax credits. Moreover, Canadian subsidiaries of foreign corporations typically get tax credits from their home country for their Canadian corporate taxes.

58 See Robin Boadway and Neil Bruce, “Problems with Integrating Corporate and Personal Income Taxes in an Open Economy” (1992) 48:1 *Journal of Public Economics* 39–66; Robin Boadway, “Policy Forum: The Annual Tax Expenditure Accounts—A Critique” (2007) 55:1 *Canadian Tax Journal* 106–29; and Peter S. Spiro, “Can a Dividend Tax Credit Be Justified in a Small Open Economy?” May 2013 (<http://papers.ssrn.com/abstract=2268791>).

about a quarter of personal investment income is subject to income tax,⁵⁹ with the balance receiving consumption tax treatment.⁶⁰ This estimate would be further reduced by considering subsequent developments, namely,

- reduction of the capital gains tax inclusion rate from 75 percent to 50 percent;
- an increase in the dollar limits for RPP/RRSP contributions of about 70 percent versus a roughly 45 percent increase in average weekly earnings; and
- a 50 percent hike in the lifetime capital gains exemption in 2007.

Updating the earlier finding would likely yield a figure below 20 percent of personal investment income now subject to income tax, making the PIT fairly close to a consumption-based tax except for the highest earners and greatest wealth holders.⁶¹ This figure will decline further as holdings in TFSAs mount over time. One projection, by Kevin Milligan, is that a mature TFSA system will result in “[o]nly a very small share of Canadians [facing] taxation on their marginal savings decision.”⁶² Milligan further projects that after 20 years with a doubled annual TFSA limit of \$10,000, only 3.3 percent of households would face any PIT on their capital income from savings.⁶³

In addition to making financial investments, individuals can direct their savings to human capital in the form of education and training. Investments of both kinds are key determinants of productivity and economic growth, and thus any disincentives posed by the fiscal system may raise concerns. The major costs borne by the individual in human capital investment are forgone earnings for the time spent and out-of-pocket costs for tuition, fees, and related expenses. Net costs to the individual are affected by the tax treatment of each of these items, plus the subsidies implicit in public funding of education and training and explicit subsidies in the form of grants, bursaries, and scholarships. Forgone earnings are given the equivalent of an immediate writeoff as under a consumption-based tax.⁶⁴ However, a net tax burden arises in that the future increased earnings from the investment will be taxed at a

59 Satya Poddar and Morley D. English, “Canadian Taxation of Personal Investment Income” (1999) 47:5 *Canadian Tax Journal* 1270-1304, at 1284.

60 The measure of personal investment income used in the study by Poddar and English, *ibid.*, included interest, dividends, capital gains, and imputed rents on homes.

61 In table 2 below and the related text, we present more recent evidence of and discussion about the high concentration of taxable financial incomes in the highest income brackets.

62 Kevin Milligan, “Policy Forum: The Tax-Free Savings Account—Introduction and Simulations of Potential Revenue Costs” (2012) 60:2 *Canadian Tax Journal* 355-60, at 358.

63 *Ibid.*

64 Because of the relatively low earnings that most students forgo, and the consequent low tax rate that would apply to those earnings, this treatment is less favourable than allowing students to capitalize their forgone earnings and deduct them in future years of higher earnings post-graduation.

higher rate. An analysis for Canada in 2006 found that the effect for most individuals was a small net subsidy for post-secondary education, with stronger incentives for females.⁶⁵ Thus, the PIT provisions along with public subsidies already yield a system operating much closer to a consumption tax than an income tax for savings invested in human capital.

CRITICAL REVIEW OF THE ECONOMIC EVIDENCE

In essence, the consensus expert view in Canada is that shifting the tax mix further toward consumption-based sources or making the PIT base more consumption-oriented would yield the following benefits:

- improved incentives for working and labour force participation;
- improved incentives for saving and thus greater aggregate savings;
- increased real investment resulting from greater savings;
- increased economic efficiency and growth;
- greater horizontal equity across individuals over their lifetimes; and
- improved tax compliance through reduced avoidance and evasion.

In assessing these claims, we must keep in mind that the distinction between an income-based tax and a consumption-based tax is not synonymous with the difference between direct and indirect taxes. A direct personal tax can embody consumption-base principles, as we have shown that the Canadian PIT already does to a great extent. In this section, we provide a critical review of the economic evidence for each of the benefits listed above, and for most we find the consensus expert claims to be either much weaker than asserted or entirely lacking.⁶⁶

A general issue in assessing the economic evidence on several of the consumption-tax advocates' assertions is their relevance to Canadian tax policy. As we have indicated, and as we shall document further in the discussion below, Canada's PIT already approaches a consumption base for about 98 percent of taxpayers. Only the top 2 percent of earners face substantial PIT burdens on their capital-source incomes, and their capital gains and dividends already enjoy favourable tax treatment relative to a pure income base. As a consequence, most of the findings of existing economic research have limited, if any, applicability to Canadian tax policy. Theoretical economic

65 John B. Burbidge, Kirk A. Collins, James B. Davies, and Lonnie Magee, "Effective Tax and Subsidy Rates on Human Capital in Canada" (2012) 45:1 *Canadian Journal of Economics* 189-219.

66 Twenty years ago, an Australian economist concluded that "[a] tax mix change offers little in the way of efficiency gains in work versus leisure decisions and in intertemporal consumption choice decisions, to the aggregate level of savings and work effort, and to countering tax evasion and avoidance" (John Freebairn, "Economic Arguments for a New Consumption Tax" (1992) 3:1 *Economic and Labour Relations Review* 14-35, at 33); also see Jonathan R. Kesselman, "Role of the Tax Mix in Tax Reform," in John G. Head, ed., *Changing the Tax Mix* (Sydney: Australian Tax Research Foundation, 1986), 49-94, for similar conclusions.

models use stylized assumptions and compare pure income and consumption tax bases rather than Canada's hybrid PIT base, which embodies extensive consumption features. Similarly, many empirical economic studies use cross-national data, and their findings that the PIT is less conducive to growth or efficiency than value-added taxes (VAT) like Canada's GST are contingent on the heterogeneous PIT bases of various countries, many of which are more income-oriented than Canada's PIT.

Work Incentive Effects

Individuals face a choice in allocating their time between working for money income and undertaking unpaid non-market production and leisure activities. If employees' earned income is taxed while leisure time and home production are not, this provides an incentive for choosing less work time and more leisure and non-market time. A common assertion—both by economists and by tax advocates—is that a direct tax on personal income is therefore more adverse to work than an indirect tax on consumption. As Glen Hodgson writes, “[m]ost economists agree that a shift in personal taxation away from income taxes and toward consumption taxes, such as the GST, would improve incentives to work.”⁶⁷ This assertion is then used as one justification for shifting the tax mix away from PIT and toward greater use of indirect consumption taxes such as GST/HST. Reduced reliance on income taxes, it is argued, will provide more neutral incentives for how individuals allocate their time, and thus will improve economic efficiency.

The deficiency of this assertion is that it ignores the work disincentive effects of any indirect tax on consumption. A consumption tax is also effectively a tax on work, because most people get most of their income from working, and they use most of this income to purchase goods and services. Their incentive to work is determined by the amount of real goods and services that their income provides for them. An increase in the rate of GST/HST means that each hour of work provides less purchasing power, so that it reduces the incentive to work just as an increase of income tax would.⁶⁸ Only if individuals are subject to a “tax illusion,” such that they consider their nominal net-of-PIT income but ignore the impact of GST/HST on their real purchasing power, will a tax-mix shift yield improved work incentives.⁶⁹ None of the extensive research on labour supply behaviour has uncovered any such tax illusion.⁷⁰

67 Hodgson, *supra* note 11, at 6. Similar recent statements include Mintz, *supra* note 18, and Laurin and Robson, *supra* note 13.

68 To the extent that part of the earnings from work are saved, the consumption tax does not impose any immediate burden, but this is offset by the future tax that will apply to consumer spending out of those savings and the accumulated investment return to the savings.

69 Kesselman, *supra* note 66.

70 Jerry S. Hausman, “Taxes and Labor Supply,” in Alan J. Auerbach and Martin Feldstein, eds., *Handbook of Public Economics* (Amsterdam: Elsevier, 1985), 213-63; and Thomas MaCurdy, David Green, and Harry Paarsch, “Assessing Empirical Approaches for Analyzing Taxes and Labor Supply” (1990) 25:3 *Journal of Human Resources* 415-90.

Typical empirical analyses of labour supply include in the “tax wedge” both the direct tax on labour income and the indirect tax on consumption spending out of those earnings.⁷¹ A study for the Mirrlees taxation review in the United Kingdom concluded that “shifting the balance of taxation towards VAT cannot be expected to have a great impact on work incentives or levels of employment.”⁷²

A consumption-based tax can actually impose greater work disincentives than an income-based tax that raises the same concurrent level of revenues. A broad tax base of income (with few exempt receipts) is larger than a broad consumption base (with few exempt goods and services), since income equals consumption plus savings, and aggregate savings are positive. Therefore, to raise the same amount of revenues, a consumption-based tax must apply a higher tax rate than is required for an income-based tax; this higher tax rate is more distorting to the choice to work and thus has greater work disincentives.⁷³ This potential superior efficiency of an income tax in the labour market is offset by the superior efficiency of a consumption tax in the capital market related to non-distortion of saving behaviour. If one is willing to consider the future revenues that the savings will generate when ultimately spent under a consumption-based tax, the inferiority of such a tax in terms of work incentives is reduced but not eliminated.⁷⁴

Sometimes advocates of consumption-based taxation argue its superior work incentives by conflating changes in overall tax progressivity with changes to the tax base. A progressive tax-rate schedule will impose higher marginal rates on higher income earners, and this is potentially more distorting to their work incentives. Advocates for a “flat tax” formulated as a direct tax on consumption have made strong assertions about the increased work effort and entrepreneurial activity that would result.⁷⁵ This type of tax reform is clearly not distributionally neutral, since it provides large relief with respect to taxes and tax rates for the highest earners. Hence, any resulting increase in work incentives for highly paid workers would come at the

71 For example, see Lee Ohanian, Andrea Raffo, and Richard Rogerson, “Long-Term Changes in Labor Supply and Taxes: Evidence from OECD Countries, 1956-2004” (2008) 55:8 *Journal of Monetary Economics* 1353-62, at 1356, where the tax rates on labour income (τ_l) and consumption spending (τ_c) enter in symmetrical fashion in the formulation of the tax wedge as $1 - \tau = (1 - \tau_l)/(1 + \tau_c)$.

72 Ian Crawford, Michael Keen, and Stephen Smith, “Value Added Tax and Excises,” in James Mirrlees, Stuart Adam, Timothy Besley, Richard Blundell, Stephen Bond, Robert Chote, Malcolm Gammie, Paul Johnson, Gareth Myles, and James Poterba, eds., *Dimensions of Tax Design: The Mirrlees Review* (Oxford: Oxford University Press, 2010), 275-362, at 276.

73 Chapman and Mintz, *supra* note 43, at 4:10.

74 The present value of tax revenues for the income-based tax will still exceed that for an equal-rate consumption-based tax, on account of the taxation of investment income.

75 Robert E. Hall and Alvin Rabushka, *The Flat Tax* (Stanford, CA: Hoover Institution Press, 1985) and *The Flat Tax*, 2d ed. (Stanford, CA: Hoover Institution Press, 1995).

expense of reduced progressivity.⁷⁶ Similarly, a shift in the tax mix from the PIT to greater reliance on the GST could increase work incentives only if the effective PIT rate cut for some workers exceeded their effective the GST rate increase—that is, if they gained at the expense of other taxpayers. As observed in a report by the Organisation for Economic Co-operation and Development (OECD), “if a move towards [indirect] taxes on consumption [from PIT] would increase incentives to work, it would also increase inequality.”⁷⁷

Effects on Personal Savings

A major assertion by advocates of making the tax system more consumption-oriented (through either of the two reforms) relates to improved incentives for personal savings. By reducing the effective tax on investment income or shielding savings from tax until consumed, the proposed reforms are believed to increase aggregate savings. Yet the economic theory of saving behaviour entails offsetting substitution and income effects of changes in the tax rate on investment income. Reducing the tax rate on investment income raises the net-of-tax return to saving; this poses a substitution effect that makes future consumption more attractive relative to current consumption and thus encourages greater savings. But the reduced tax rate also exerts an income effect, in which the individual feels wealthier and thus tends to increase current consumption, with the result that less is saved out of current income. Without empirical evidence, one cannot tell which of these two theoretical effects dominates.⁷⁸ Moreover, many individuals are “target savers,” meaning that they have a targeted level of savings at retirement. Reducing the tax rate on their investment income means that they will need less saving over the years to reach their target, so that reduced tax actually reduces saving.

Empirical studies of the effects of taxation on personal savings have been beset by complexities of both methodology and data, and they have yielded findings that vary and are sometimes inconclusive, but seldom are large in magnitude. A major review of the subject concluded with the caveat that “one cannot review the voluminous literature on taxation and saving without being somewhat humbled by the enormous difficulty of learning anything useful about even the most basic empirical

76 Robert A. Moffitt and Mark O. Wilhelm, “Taxation and the Labor Supply Decisions of the Affluent,” in Joel B. Slemrod, ed., *Does Atlas Shrug? The Economic Consequences of Taxing the Rich* (Cambridge, MA: Russell Sage Foundation and Harvard University Press, 2000), 193-234, evaluated the impact of the sharp rate cuts of the 1980s Reagan tax reform on high-earning male workers and found “essentially no evidence of any response” (*ibid.*, at 221), so improved work incentives even under a flat tax appear unlikely.

77 Organisation for Economic Co-operation and Development, “Consumption Taxes: The Way of the Future?” *Policy Brief*, October 2007, 1-8, at 5.

78 If the reform is distribution-neutral, this can offset the income effect, so that the substitution effect should prevail; but a wealth effect can reduce saving. Also see Christopher Ragan, “Progressive Income Taxes and the Substitution Effect of RRSPs” (1994) 27:1 *Canadian Journal of Economics* 43-57, for analysis of how RRSPs within a progressive PIT can yield a substitution effect that decreases saving.

questions.”⁷⁹ Another analyst also warns that a “potentially serious concern is that individual saving behavior is far more erratic than economic simulation models predict.”⁸⁰ The most methodologically rigorous analysis of this issue, based on unique Danish data, yields two key findings on the effects of enhanced tax incentives:⁸¹ (1) enhanced incentives have a minimal impact on savings for the 85 percent of individuals who are “passive” savers; and (2) for the 15 percent who are “active” savers, the response is primarily to shift assets between taxable and tax-favoured accounts rather than to increase their total saving. A recent review of the issue for the Mirrlees taxation review similarly found that “it is unlikely that changes in interest rates due to preferential taxation or other movements to interest rates, will cause big changes in the level of saving.”⁸² Thus, the proposed tax reforms are unlikely to induce much, if any, additional personal saving.

Effects on Business Investment

Policy interest in the savings effects of tax reforms stems from the implied impacts on business investment in the Canadian economy. Empirical analysis of cross-country experience has found a substantial association between a country’s domestic savings and its real investment.⁸³ However, this linkage between domestic savings and domestic investment is less than complete and has been weakening over time. International capital flows are extensive particularly for countries such as Canada, through both portfolio and direct investment.⁸⁴ At the margin, business investment

79 B. Douglas Bernheim, “Taxation and Saving,” in Alan J. Auerbach and Martin Feldstein, eds., *Handbook of Public Economics*, vol. 3 (Amsterdam: Elsevier, 2002), 1173-1249, at 1240.

80 George R. Zodrow, “Should Capital Income Be Subject to Consumption-Based Taxation?” in Henry J. Aaron, Leonard E. Burman, and C. Eugene Steuerle, eds., *Taxing Capital Income* (Washington, DC: Urban Institute Press, 2007), 49-81, at 64.

81 Raj Chetty, John N. Friedman, Soren Leth-Petersen, Torben Nielsen, and Tore Olsen, *Active vs. Passive Decisions and Crowdout in Retirement Savings Accounts: Evidence from Denmark*, NBER Working Paper no. 18565 (Cambridge, MA: National Bureau of Economic Research, November 2012).

82 Orazio P. Attanasio and Matthew Wakefield, “The Effects on Consumption and Saving of Taxing Asset Returns,” in *Dimensions of Tax Design*, supra note 72, 675-736, at 728.

83 The seminal study by Martin Feldstein and Charles Horioka, “Domestic Saving and International Capital Flows” (1980) 90:358 *Economic Journal* 314-29, found a strong relationship between national saving and investment rates based on data for 1960 to 1974, a period of much lower international capital mobility than the contemporary setting. Capital controls were removed by several countries in the 1970s, thus augmenting capital mobility. Also see Jeffrey A. Frankel, “Measuring International Capital Mobility: A Review” (1992) 82:2 *American Economic Review* 197-202, for a critique of measurement issues relating to capital mobility.

84 For evidence regarding Canada in particular, see the findings in P.C. Afentiou and A. Serletis, “International Capital Mobility and the Long Run Investment and Saving in Canada” (1993) 46:2-3 *Economia Internazionale* 147-67; also see Florian Pelgrin and Sebastian Schich, *National Saving-Investment Dynamics and International Capital Mobility*, Bank of Canada Working Paper 2004-14 (Ottawa: Bank of Canada, April 2004). These studies suggest an incomplete linkage between domestic savings and domestic investment levels.

in Canada will be determined by investors who have a reasonable sense of the risk-adjusted rates of return in different countries, taking into account the taxes on business profits (which apply in the host country) rather than taxes on personal income (which apply in the home country). Even if the proposed reforms were to significantly raise personal savings, these are just one component of total domestic savings, which include savings in the business sector and the net savings of the governmental sector (the budgetary surplus or deficit).

The linkage between personal savings and business investment is further weakened by research finding that the marginal source of funds for most corporate capital investment is retained earnings rather than new stock issuance to investors. This view has been tested empirically and verified with respect to the taxation of dividends. Therefore, even if cutting the tax rate on dividends or capital gains increased the value of stock prices, it would have little effect on capital investment.⁸⁵ This view is reinforced by the finding that dividend taxation has relatively little impact on stock prices. This outcome has been empirically confirmed for Canada, where marginal investors are foreigners or pension funds, entities that are not affected by Canadian taxes on dividends.⁸⁶ In the period since 1999, business capital investment in Canada has been consistently less than corporate gross savings.⁸⁷ Since 1985, personal savings also have displayed no discernible relationship to business capital investment in Canada.⁸⁸ Thus, business investment—at least for mid-sized and large firms—evidently is not constrained by the supply of savings from the household sector.

Firms in Canada's small-business sector cannot readily access the public capital markets or internationally mobile capital available to large firms. Those factors could mean that any increased personal savings resulting from the tax reforms would raise investment in small businesses. However, smaller enterprises already enjoy favourable treatment through very low corporate tax rates,⁸⁹ which allow them to retain earnings and pay taxes on those earnings at rates much lower than the PIT rate on distributions. Subsequently, these retained earnings can be taken from the

85 Kenneth J. McKenzie and Aileen J. Thompson, "Dividend Taxation and Equity Value: The Canadian Tax Changes of 1986" (1995) 28:2 *Canadian Journal of Economics* 463-72; and Alan J. Auerbach and Kevin A. Hassett, "On the Marginal Source of Investment Funds" (2003) 87:1 *Journal of Public Economics* 205-32.

86 Andrew Bird, "Dividends and Shareholder Taxation: Evidence from Canada" (unpublished paper, Carnegie Mellon University, Tepper School of Business, 2013).

87 Statistics Canada CANSIM tables 378-0019, "Financial Flows, Corporations and Government Business Enterprises" (corporate gross savings defined as retained earnings plus capital consumption allowance), and 380-0002, "Gross Domestic Product (GDP), Expenditure-Based" (business capital investment). In fact, the gap is even larger, since investment includes spending by unincorporated firms whose profits are not included.

88 Statistics Canada CANSIM tables 380-0004, "Sector Accounts, Persons and Unincorporated Businesses" (savings in the household sector), and 380-0002, "Gross Domestic Product (GDP), Expenditure-Based" (business investment).

89 Unincorporated small businesses are typically even less efficient in scale than corporate small enterprises and already enjoy various favourable tax advantages.

company completely free of tax via the lifetime capital gains exemption. These provisions represent a subsidy to small corporations relative to their larger rivals, and this induces an inefficiently excessive share of investment flowing to a sector that has lower productivity and lower worker compensation. The large share of small business in the economy has been identified as a primary cause of lower productivity in Canada.⁹⁰ Thus, any additional tax inducement increasing investment in small business would likely be adverse for the overall economy.⁹¹

Economic Efficiency and Growth Effects

Our preceding analysis of work, savings, and investment effects casts doubt on the ability of consumption-oriented tax reforms to significantly raise the economy's efficiency or growth. However, that analysis does not encompass more subtle effects such as the sectoral composition of investment or intertemporal resource allocation. Various theoretical models and empirical strategies have sought to include these effects, and Canadian economists and policy analysts advocating consumption-based tax reforms have been strongly influenced by such research. Many of these studies forecast significant economic gains from shifting taxes toward consumption. Nevertheless, because these studies are overwhelmingly based on foreign or cross-country data, applying their findings to the Canadian context is hazardous. Here we refer readers to reviews of the literature⁹² and identify problematic aspects of the assumptions and policy implications of a number of these studies. Moreover, consumption tax advocates frequently cite quantitative estimates from two studies based on Canadian data, and we assess the reliability of those studies' policy implications.

Much of the widespread support among economists for consumption-based taxation stems from early theoretical analyses finding that zero taxation of capital income

90 Danny Leung, Césaire Meh, and Yaz Terajima, "Productivity in Canada: Does Firm Size Matter?" [Autumn 2008] *Bank of Canada Review* 5-14, and references therein.

91 Other standard proposals to increase the PIT's consumption basis—such as expanding access to tax-deferred (RRSP) and tax-prepaid (TFSA) savings—have restrictions on the ability to invest in shares of closely held businesses. These restrictions are well justified on grounds of preventing avoidance through the sheltering of labour earnings of owner-proprietors along with their capital returns. (A consumption-based tax is not intended to shelter labour income.)

92 See, for example, Gareth D. Myles, *Economic Growth and the Role of Taxation*, prepared for the OECD (Exeter and London: University of Exeter and Institute for Fiscal Studies, March 2007); Zodrow, *supra* note 80; Jens Arnold, *Do Tax Structures Affect Aggregate Economic Growth? Empirical Evidence from a Panel of OECD Countries*, OECD Economics Department Working Paper no. 643 (Paris: OECD, October 2008); and Åsa Johansson, Christopher Heady, Jens Arnold, Bert Brys, and Laura Vartia, *Taxation and Economic Growth*, OECD Economics Department Working Paper no. 620 (Paris: OECD, July 2008). Empirical studies using cross-country data to investigate the economic growth impacts of tax levels have been extensively critiqued (Joel Slemrod, William G. Gale, and William Easterly, "What Do Cross-Country Studies Teach About Government Involvement, Prosperity, and Economic Growth?" [1995] no. 2 *Brookings Papers on Economic Activity* 373-431), and these critiques would apply equally when seeking to assess the differential effects of the various tax bases.

is optimal. Yet, in a comprehensive review of this research for the Mirrlees taxation review, James Banks and Peter Diamond conclude that considering additional factors undermines the earlier findings and implies that some taxation of capital income is optimal.⁹³ Among the factors that they cite are the interaction between leisure and intertemporal preferences, initial wealth holdings, non-marketed risks, age-dependent characteristics, different saving propensities across earnings types, permanent-income uncertainty, and diverse aspects of saving behaviour. These challenges to the theoretical presumption of the optimality of consumption-based taxation support a continuing role for income-based personal taxation in the overall revenue system.

Additional issues weaken the relevance of much previous research to Canada. First, the theoretical studies typically compare pure income-based to pure consumption-based taxes, and the empirical studies do not distinguish the varying degrees to which the PITs of various countries are already consumption-based. Thus, these studies do not account for the large extent to which the Canadian PIT already embodies a consumption base. Second, intersectoral distortions between the business and housing sectors may be muted by a shift toward consumption, but this feature is lacking in most modelling and not properly controlled in estimation. For example, the Canadian tax treatment of home equity is less favourable than the treatment in the United States. Third, the relative openness of the Canadian economy to trade and financial flows is omitted from most theoretical models and empirical cross-country estimates. But, as stressed by one economist, “to the extent international capital markets are competitive, models that ignore international capital flows may give very misleading results regarding the relative efficiency properties of income and consumption taxes.”⁹⁴

Two further issues affect the applicability of research findings to practical tax policy reforms whether in Canada or elsewhere. First are findings that the PIT’s rate progressivity—rather than its income base—is responsible for much of the reduced economic efficiency or growth relative to flat-rate indirect taxes on consumption.⁹⁵

93 James Banks and Peter Diamond, “The Base for Direct Taxation,” in *Dimensions of Tax Design*, supra note 72, 548-648. Other recent economic analyses have also concluded that some taxation of capital income is optimal, for a variety of reasons. For example, see James B. Davies, Jinli Zeng, and Jie Zhang, “Time-Consistent Taxation in a Dynastic Family Model with Human and Physical Capital and a Balanced Government Budget” (2009) 42:3 *Canadian Journal of Economics* 1023-49, at 1023, concluding that “a consumption tax . . . can be improved on by taxing capital income more heavily than labour income.”

94 George R. Zodrow, “The Choice Between Income and Consumption: Efficiency and Horizontal Equity Aspects,” in Sijbren Cnossen and Richard M. Bird, eds., *The Personal Income Tax: Phoenix from the Ashes?* (Amsterdam: North-Holland, 1990), 85-115, at 92.

95 Reviews of the theoretical and empirical literature find that the PIT’s rate progressivity explains at least part of its estimated more adverse impact on growth: Myles, supra note 92; Arnold, *ibid.*; and Johansson et al., *ibid.* Modelling by Fullerton and Lim Rogers, supra note 32, at 339, reaches a contrasting conclusion that “any enhancement of progressivity involves little apparent efficiency loss.”

Thus, any economic gains in shifting from the PIT to indirect taxes arise at the cost of adverse distributional impacts. Second is the fact that most of the efficiency gains predicted in models for tax shifts from income to consumption arise from the implied capital levy on existing wealth at the time of the reform; this mainly has an impact on retirees and older workers. Politically feasible tax reforms would contemplate some compensation to losing groups during the transition, and this would consume part of the revenues that would otherwise augment economic efficiency.⁹⁶ As Alan Auerbach has concluded,

there are large potential economic gains from a move to consumption taxation . . . [but] much or even all of these gains evaporate when progressivity is maintained and transition relief is provided to owners of existing assets.⁹⁷

Lim Rogers expounds on this view:

[T]he efficiency gains from a consumption tax . . . from even a purist's version (with perfect flatness and a pure consumption base) are rather modest—almost certainly no more than one percent of lifetime income. . . . Deviations from the pure version, in the form of either transitional relief or enhancements to progressivity, can reduce still further the size of efficiency gains.⁹⁸

In short, economists' estimates of the efficiency or growth gains from shifting the tax system toward consumption are highly sensitive to the assumptions and methodology, implying much uncertainty about the size or even the existence of such gains.

A Department of Finance working paper by Maximilian Baylor and Louis Beauséjour is most frequently, and uncritically, cited by Canadian analysts advocating increased reliance on consumption taxes.⁹⁹ This model is used to simulate the gains in

96 Louis Kaplow, "Capital Levies and Transition to a Consumption Tax," in Alan J. Auerbach and Daniel N. Shaviro, eds., *Institutional Foundations of Public Finance: Economic and Legal Perspectives* (Cambridge, MA: Harvard University Press, 2008), 112-46, critically assesses this capital levy aspect of imposing a consumption tax.

97 Alan J. Auerbach, "Comment," in *Taxing Capital Income*, supra note 80, 83-88, at 86-87. Zodrow, supra note 94, at 92-93, similarly cites the losses on generations at and following a shift toward consumption taxes and the policy measures that would likely be implemented to compensate those losses as vitiating any prospective steady-state efficiency gains. Also see Zodrow, supra note 80, at 66.

98 Diane Lim Rogers, "Sorting Out the Efficiency Gains from a Consumption Tax," in *Proceedings of the Eighty-Eighth Annual Conference on Taxation* (Columbus, OH: National Tax Association-Tax Institute of America, 1996), 40-46, at 45.

99 Maximilian Baylor and Louis Beauséjour, *Taxation and Economic Efficiency: Results of a Canadian CGE Model*, Working Paper 2004-10 (Ottawa: Department of Finance, November 2004). The findings of this study have been cited by, among others, the Institute for Competitiveness & Prosperity, supra note 9; Clemens et al., supra note 10; Dahlby, supra note 12; and Hodgson, supra note 11. The study's findings have also been highlighted in federal budget papers.

economic welfare¹⁰⁰ from cutting various types of taxes by \$1.00. These are estimated to be about \$1.30 for tax cuts on capital (whether by raising capital cost allowances, cutting PIT on capital incomes, or cutting sales taxes on capital investment); \$0.37 for corporate income taxes; \$0.32 for PIT (a blend of tax on capital income and mostly labour income); \$0.15 for payroll and labour income taxes; and just \$0.13 for consumption taxes, such as the GST/HST, that do not strike business capital. Relying on these results, many Canadian analysts have inferred that substantial economic gains could be derived by shifting the tax mix toward consumption or by reducing capital income within the PIT base. These results also imply that reducing PIT rates is less advantageous than shifting the PIT base toward consumption, since part of the revenue loss of rate cuts is dissipated on labour earnings.

The reliability of the Baylor-Beauséjour model as a useful guide to tax policy is conditional on various elements in its construction. The model assumes that a very large proportion—nearly 90 percent—of domestic savings is productively invested in Canada.¹⁰¹ Our earlier discussion of the Canadian economy's high degree of international capital mobility casts doubt on this assumption, and as a result the study's estimates may be greatly overstated. Other aspects of the model may also affect its reliability: it lacks key features such as differentiation between small and large firms, and among age cohorts and particularly retirees; and it lacks a detailed account of the tax and transfer system, such as the extent to which Canada's PIT already provides consumption-type treatment.¹⁰² These deficiencies affect the reliability of the model's estimates of the relative efficiency costs of alternative tax bases. As Auerbach has stated about models of this genre, “[s]imulation evidence to date has not taken into account a variety of issues that could significantly affect the estimated efficiency gains from adopting a consumption tax.”¹⁰³

A second widely cited set of estimates on the comparative economic efficiency of alternative tax bases in Canada is that of Dahlby and Ergete Ferede.¹⁰⁴ This research is based on an empirical formulation and thus avoids the tight assumptions

100 This is known as the marginal excess burden (MEB) of a tax, where, for example, the estimated MEB of capital taxes is 1.30. The study also provides estimates of the impacts on real gross domestic product (GDP), and these compare in relative magnitudes with the welfare effects (which include the value of leisure).

101 Even more crucially, the model does not allow for responsiveness of foreign investors to changes in the net return to Canadian corporate business; if the mooted tax reforms had an impact on Canadian saving and investment in domestic business, this would be offset by reduced foreign investment in Canada, with high capital mobility and an unchanged world rate of return.

102 For these points we thank John Lester, an economist who worked at the Department of Finance at the time of the study and contributed to the Baylor-Beauséjour analysis.

103 Alan J. Auerbach, “The Choice Between Income and Consumption Taxes: A Primer,” in *Institutional Foundations of Public Finance*, supra note 96, 13-46, at 41.

104 Bev Dahlby and Ergete Ferede, *What Does It Cost Society To Raise a Dollar of Tax Revenue? The Marginal Cost of Public Funds*, C.D. Howe Institute Commentary no. 324 (Toronto: C.D. Howe Institute, March 2011).

needed in model building; it also reflects the actual hybrid nature of Canada's PIT base. Dahlby and Ferede reported their findings in the form of the comparative marginal cost of funds (MCF) from each tax base—the real cost to the economy of raising an additional dollar of revenue from a small increase in the associated tax rate.¹⁰⁵ They estimated the MCF for alternative federal tax bases as follows: corporate income tax \$1.71; PIT \$1.17; and GST \$1.11. Various other studies have used these figures uncritically to argue that a shift in Canada's tax mix from the PIT to the GST would enhance the economy's overall efficiency. However, the technical study by Dahlby and Ferede that provides the basis for their estimates indicates that the MCFs of the PIT and the GST do not differ significantly.¹⁰⁶ This result is not surprising in view of the highly consumption-oriented base of Canada's PIT, but those advocating a shift in the nation's tax mix toward the GST have overlooked this point.

Income Smoothing and Lifetime Equity

An income-based tax strikes the returns to savings and investment, and in this manner it penalizes saving for future consumption versus spending labour earnings when they are received. This aspect of an income tax has been described as “double taxation” since the earnings are taxed both when received and again on the investment returns to the portion saved. In contrast, a consumption-based tax treats earnings in a neutral fashion whether they are spent immediately or saved for future consumption.¹⁰⁷ Savings are important to individuals and families in buffering against short-run and transitory variations in labour earnings, thus allowing consumption levels to be smoothed over shorter periods. Savings are also important in facilitating the smoothing of consumption levels between working years and retirement years, with the predictable drop of labour earnings during retirement. Consumption smoothing allows individuals to maximize their well-being over time, given that a smoother consumption path is more highly valued than a fluctuating path with the same average

105 Roughly speaking, $MCF = 1 + MEB$, for comparison with the figures reported above for the Baylor-Beauséjour model. For the more precise formulation, see Bev Dahlby, *The Marginal Cost of Public Funds: Theory and Application* (Cambridge, MA: MIT Press, 2008), at 3.

106 Bev Dahlby and Ergete Ferede, *The Effects of Tax Rate Changes on Tax Bases and the Marginal Cost of Public Funds for Provincial Governments*, C.D. Howe Institute Working Paper (Toronto: C.D. Howe Institute, March 2011) (also published with the same title in (2012) 19:6 *International Tax and Public Finance* 844-83). The estimated coefficient on the federal PIT rate in the authors' preferred specification of their “dynamic personal income tax base regression” is -0.305 with a standard error of 0.162 for a t -value of 1.88 , meaning that any reasonable confidence interval would imply an MCF for federal PIT overlapping that of the GST (Dahlby and Ferede, *supra*, at 13). When this study was later published in a journal, the figure for the MCF of the GST was omitted; one of the study authors explained to us that they felt that their original assumption of equal impact from provincial and federal sales tax rate variations was inappropriate.

107 The consumption-based tax imposes a burden that is equal in present value regardless of when the funds are spent, since the discounting for future consumption exactly offsets the compounding of investment returns, on the assumption that the discount rate is the same as the rate of return.

level.¹⁰⁸ Thus, a consumption-based tax potentially leads to higher levels of individual utility than an income-based tax even with the same total tax burden.

The efficiency gains from consumption smoothing in shifting the tax base toward consumption and the associated impacts on savings are important in assessing such reforms. Dahlby has computed the utility or welfare gains to individuals from moving the tax base to consumption based on a standard economic model of saving behaviour.¹⁰⁹ Using a range of assumed values for the substitutability between current and future consumption and the income elasticity of consumption, most of his estimates imply welfare gains from reduced taxation of capital income but also reduced saving rates. Because the gains would accrue only to persons not already accessing consumption tax treatment—high earners and wealth holders—those persons would enjoy increased utility even if the reform were distribution-neutral in monetary terms. Dahlby's finding that the affected groups might actually save less in aggregate with the tax reform implies a reduction in the funds for investment, which is the only means by which the rest of society could gain from the reform. Thus, his study suggests the possibility that high earners and wealth holders would gain from the move toward consumption taxation while most others could actually lose in the long run from less economic growth, even if the reform were gauged as distribution-neutral.

Avoidance and Evasion Effects

An incremental shift in the mix toward indirect taxes would yield uncertain gains in tax compliance and no savings in tax administration. Both the PIT and GST/HST would remain in operation, with all of their administrative and compliance burdens. Real-world evidence on the operation of VAT in Canada and abroad reveals that a GST/HST has significant compliance vulnerabilities of its own.¹¹⁰ Various evasion schemes have emerged such as claims for input rebates on fraudulent exports. Small suppliers of many services and of some goods regularly evade GST/HST by cash sales, barter, and unreported transactions, similar to what happens under the PIT.¹¹¹ An empirical study found that overall tax evasion increased with the introduction of Canada's GST in 1991.¹¹² The new sales tax provided visible bargaining power by

108 The relationship between consumption smoothing over time and the measured regressivity of consumption taxes is examined in an analytical model by Kartik B. Athreya and Devin Reilly, "Consumption Smoothing and the Measured Regressivity of Consumption Taxes" (2009) 95:1 *Economic Quarterly* 75-100.

109 Dahlby, *supra* note 10, at 84.

110 Michael Keen and Stephen Smith, "VAT Fraud and Evasion: What Do We Know and What Can Be Done?" (2006) 59:4 *National Tax Journal* 861-87.

111 To the extent that underground activities are sectorally concentrated, general equilibrium analysis suggests that a tax-mix shift will pose little leverage on non-compliance. Jonathan R. Kesselman, "Evasion Effects of Changing the Tax Mix" (1993) 69:2 *Economic Record* 131-48. See Auerbach, *supra* note 103, at 25-26, for a simple explanation of this incidence process.

112 Peter S. Spiro, "Evidence of a Post-GST Increase in the Underground Economy" (1993) 41:2 *Canadian Tax Journal* 247-58.

vendors for cash sales from purchasers, and this behaviour is likely to increase with higher GST rates.¹¹³ A shift in the tax mix toward the GST would allow for reduced PIT rates, but all of the PIT base provisions inducing tax avoidance by high earners would remain in place. While incentives for tax avoidance might moderate with significantly lower PIT rates, on a distribution-neutral basis this would require massive rate hikes for the GST.¹¹⁴

Shifting the PIT base further toward consumption would yield at best limited gains in tax compliance and administration. If undertaken on a distribution-neutral basis, the reform's effects on tax planning and tax avoidance would be ambiguous. The larger amounts of capital income that received consumption-tax treatment would be freed of incentives for tax avoidance and evasion; these items would also be freed of the need for cost-basis record keeping and tax auditing. Simultaneously, the increased marginal tax rates needed for distributional neutrality would exacerbate tax planning as well as avoidance and evasion incentives for capital incomes that remained taxable. The higher marginal tax rates that also applied to labour and unincorporated business incomes of higher-bracket taxpayers would likely exert disincentives for productive activity and inducement for tax planning and non-compliance. One example is the increased incentive for proprietors to claim more ordinary personal consumption outlays as tax-deductible business expenses.

DISTRIBUTIONAL EFFECTS OF PROPOSALS

Two variants of proposals to make the Canadian tax system more consumption-oriented have been advanced: (1) shifting the tax mix away from the PIT and toward indirect taxes like the GST/HST; and (2) shifting the PIT base further toward consumption. While proposals for tax-mix change have clearly articulated revenue-neutral reforms, where the revenue losses from some changes would be fully offset by revenue gains from other components of the reform, this is less common for PIT reform proposals. However, most proposals of both varieties have given inadequate attention to the distributional impacts of the reform, which raise the prospect of decreasing the overall tax system's progressivity. To begin this analysis, we discuss two methodological issues related to measurement. We then address the likely distributional impacts and the changes needed to make each type of reform distribution-neutral as well as revenue-neutral. We conclude by discussing proposals to mitigate the adverse distributional impacts of moving the PIT base fully to consumption through lifetime wealth transfer taxes.

113 The extension of tax to many services under the GST/HST also increases evasion, and several European countries have responded to this problem by reducing their VAT rates on selected services. See Copenhagen Economics, *Study on Reduced VAT Applied to Goods and Services in the Member States of the European Union: Final Report* (Copenhagen: Copenhagen Economics, June 2007).

114 This finding will be demonstrated in the next section.

Measurement of Distributional Impacts

A basic issue in measuring the distributional impacts of a tax change is the metric for well-being of individuals or households. Some economists prefer to classify taxpayers by their consumption rather than their income, and others take the further step of utilizing *lifetime* income. Taking a lifetime perspective provides a more permanent measure that avoids the variations in income that individuals experience over time owing to transitory shocks and life-cycle earnings patterns. However, a lifetime measure places extreme demands on our empirical knowledge and our assumptions about individual behaviour and economic structure.¹¹⁵ A lifetime measure also ignores many real-world phenomena, including the heterogeneity of individual experiences with temporary or persistent economic shocks; liquidity and borrowing constraints that face most individuals, particularly early in adulthood; and myopia, hyperbolic discounting, and other departures from the economic model of rational behaviour. Neither of these alternative measures accords well with the real world of tax policy making. Public discourse, political campaigns, budget making, and budgetary document presentations are framed almost exclusively in terms of taxpayers' annual incomes. For all of these reasons, our analysis retains the standard annual income measure, while acknowledging that a lifetime perspective moderates the estimates of progressivity for the PIT and regressivity for the GST/HST.

Tax policies that shift toward consumption—either through PIT base changes or through tax-mix shifts—can affect the real value of wealth holdings at the time of the reform. The simplest example is a hike in the GST rate offset by reduced PIT rates; this raises the tax-inclusive consumer price level and thereby devalues current wealth holdings. However, depending on the form of an individual's wealth holding, offsetting increases in the value of wealth can occur. For non-tax-sheltered and tax-prepaid wealth, the associated cut in PIT rates provides no such offset; but for tax-deferred wealth, the cut in PIT rates means that withdrawals (which are fully taxable under the PIT) will enjoy increased real value and thus offset the GST-induced increase in price level. Similarly, reforming the PIT toward a consumption base can have varying impacts on an individual's real wealth, hinging on the form of the wealth holdings. Moreover, when reforms are anticipated, particularly when pre-announced or implemented in stages, the altered expectations about price levels can affect the values of both real and financial assets. Because these wealth impacts are highly heterogeneous and uncertain, we do not include them in our distributional analysis.

115 See, for example, the model-based analysis by Fullerton and Lim Rogers, *supra* note 32, which simulates the effects of tax reforms using lifetime income measures. Laurence J. Kotlikoff, "Comment," in *Economic Effects of Fundamental Tax Reform*, *supra* note 32, 347-51, severely critiques Fullerton and Lim Rogers's modelling on the basis of a divergence of views about appropriate structural and behavioural assumptions.

Distributional Effects: Tax Mix Shift

The federal PIT in Canada is highly progressive, and this progressivity is needed to offset the proportionality or regressivity of most other revenue sources.¹¹⁶ Without the PIT or with a PIT much reduced in relative size, the overall Canadian tax system would be transformed from a roughly proportional pattern to a regressive one. The GST and the HST are both regressive in their annual impact, even with exemptions and zero-rating of several types of consumer necessities.¹¹⁷ This regressive pattern is offset for the lowest incomes by the provision of federal and provincial refundable credits. However, the regressive impact of GST/HST resumes for incomes above the modest income levels where those credits phase out. For those willing to take a lifetime perspective on tax incidence, the regressivity of these sales taxes is substantially reduced but not eliminated.

As a result of this differential incidence between the PIT and the GST/HST, a shift of revenues away from the PIT and toward the GST/HST would reduce overall tax progressivity unless the PIT rate cuts were weighted heavily in favour of the lower brackets relative to the upper brackets. This outcome stems in part from the pattern of saving rates, which increase significantly as one moves up the income scale; income that is saved is not spent on consumption and thus does not incur GST/HST. Moreover, the fact that GST/HST applies only to spending out of net-of-PIT incomes combined with the PIT's progressivity further reduces the scope for reducing PIT rates in the upper brackets when increasing GST/HST rates. If an increase in the GST/HST rate is balanced by distribution-neutral cuts in PIT rates, the latter cuts will vary by the taxpayer's initial PIT rate bracket and rate of saving (or spending) out of after-tax income.

116 For extensive critical review of the distributional pattern of PIT and other taxes in Canada and other countries, see Jonathan R. Kesselman and Ron Cheung, "Tax Incidence, Progressivity, and Inequality in Canada" (2004) 52:3 *Canadian Tax Journal* 709-89 and references cited therein, including the classic study by Vermaeten et al., supra note 42. For a review that focuses on the distributional effects of indirect consumption taxes, see Neil Warren, "The Distributional Effect of Consumption Taxes in Tax Systems," in John G. Head and Richard Krever, eds., *Tax Reform in the 21st Century* (Alphen aan den Rijn, the Netherlands: Kluwer Law International, 2009), 217-76. Also see *Tax Expenditures and Evaluations*, supra note 47, at 31-47, for findings that the federal PIT is highly progressive and even more so when considering federal refundable tax credits and income-tested benefits. Provincial PITs vary in their degree of progressivity, but many provinces apply a more progressive rate schedule than the federal PIT (Kesselman, supra note 24).

117 Studies have found that the Canadian GST is even more regressive than the manufacturers' sales tax that it replaced (G.C. Ruggeri and K. Bluck, "On the Incidence of the Manufacturers' Sales Tax and the Goods and Services Tax" (1990) 16:4 *Canadian Public Policy* 359-73) and that replacing provincial retail sales taxes with the HST likely exerted a further, albeit small, increase in regressivity (Michael Smart and Richard M. Bird, "The Economic Incidence of Replacing a Retail Sales Tax with a Value-Added Tax: Evidence from Canadian Experience" (2009) 35:1 *Canadian Public Policy* 85-97).

Table 1 displays the distribution-neutral tradeoff between PIT marginal rates and the GST/HST rate¹¹⁸ for various assumed initial marginal tax rates (t_0) and spending propensities (A) out of after-tax income.¹¹⁹ For taxpayers at moderate incomes with an initial PIT rate of 20 percent and A at 100 percent (for all spending and no saving), the PIT rate can be cut by 0.80 of 1 percentage point for each 1 percentage point hike in the GST/HST. At the other end of the income spectrum, at an initial PIT rate of 50 percent and A at 75 percent (25 cents of an extra after-tax dollar is saved), the PIT rate can be cut by only 0.37 of 1 percentage point. Consider a distribution-neutral policy reform that aimed to cut the top-bracket PIT rate by 5 percentage points from 50 percent to 45 percent. This reform would require a 13.5 percentage point hike ($5/0.37$) in the GST/HST rate and would permit the 20 percent PIT bracket rate to be reduced by 10.8 percentage points (13.5×0.8), which is more than twice the implied PIT rate cut for the top bracket.

The preceding example illustrates the problems in using changes to the tax mix as a way of reducing upper-bracket PIT rates. Reformers seeking significant cuts in top PIT rates through a tax-mix change are therefore likely to be frustrated unless they also accept massive hikes in GST/HST rates or a regressive shift in the tax burden. This analysis further assumes that all income is subject to PIT, whereas in fact increasing proportions of income are not taxable at higher incomes on account of the consumption-based provisions described earlier. Moreover, the limited difference between the bases of the PIT and the GST/HST—with many consumption elements in the PIT base—implies that any economic gains from shifting the overall tax base would be similarly limited. Because those gains are more likely to assume the form of improved economic efficiencies in lifetime consumption by affected households than to result in increased savings and investment, the real gains would be concentrated among high-income households rather than dispersed more widely.

Even if a tax-mix change with reduced PIT and increased GST/HST were applied in a distribution-neutral manner across income classes, it would still exert redistributive effects in other dimensions. Take the case of three individuals at the same taxable income and with the same amount of wealth but held in different forms. Person A has \$100,000 in home equity (or TFSA savings), which is a tax-prepaid asset; person B has \$100,000 in an RRSP, which is a tax-deferred asset; and person C

118 For more complex formulas of the distribution-neutral rate tradeoff between direct and indirect tax rates that consider additional factors, see Creedy, *supra* note 34.

119 These illustrations ignore the differential tax coverage of the goods and services purchased by consumers at different levels of income. According to Michael Smart, “Departures from Neutrality in Canada’s Goods and Services Tax” (2012) 5:5 *SPP Research Papers* 1-24, at 8, the “VAT revenue ratio” or proportion of all consumption effectively taxed by Canada’s federal GST in 2008 was 51 percent on average. Owing to exempt and zero-rated items, this ratio is lowest for low-income households, but declines from the fourth to the top quintile (Luc Godbout and Suzie St-Cerny, “Are Consumption Taxes Regressive in Quebec?” (2011) 59:3 *Canadian Tax Journal* 463-93, at 488) and likely declines further for the top decile and percentile of households because of foreign spending.

TABLE 1 Distribution-Neutral Tradeoff Between PIT Rate and GST/HST Rate

Initial PIT rate (t_0) for GST/HST rate 0	Spending rate (A)	PIT rate (t_1) for GST/HST rate 0.01	Decrease in PIT rate: ($t_0 - t_1$) \times 100
0.20	1.00	0.1920	0.80
0.20	0.95	0.1924	0.76
0.30	1.00	0.2930	0.70
0.30	0.95	0.2934	0.66
0.30	0.90	0.2937	0.63
0.40	0.90	0.3946	0.54
0.40	0.80	0.3952	0.48
0.50	0.75	0.4963	0.37
0.50	0.66	0.4967	0.33

Notes:

Illustrated for a 1 percentage point rate of GST/HST ($e = \text{tax-exclusive rate} = 0.01$).

$$\text{Formula: } t_1 = \frac{t_0 - Ae + t_0e}{1 + e(1 - A)},$$

where $A = \text{spending rate out of after-PIT income (or } 1 - \text{saving rate)}$.

Source: Authors' calculations based on the formula in Jonathan R. Kesselman, "Role of the Tax Mix in Tax Reform," in John G. Head, ed., *Changing the Tax Mix* (Sydney: Australian Tax Research Foundation, 1986), 49-94, at 87.

has \$100,000 in unsheltered financial assets yielding taxable income. The GST/HST also applies the tax-deferred method, so that a distribution-neutral tax shift would leave unaffected person B, the RRSP holder; the reduced PIT rate on RRSP withdrawals would be offset by the increased GST/HST rate on the spending, and both would occur at the same time. The same tax-mix shift would be relatively adverse to person A, since the PIT rate cut would provide no benefit for a tax-prepaid asset that would face no further tax even without the rate cut, yet this individual would be subject to the higher GST/HST rate. The tax-mix shift would be relatively favourable to person C, who would now face a lower PIT rate on income from financial assets that would more than offset the higher GST/HST ultimately incurred on the spending. Similarly, the tax-mix shift would exert differential effects across cohorts at different stages of their life-cycle savings.

Distributional Effects: PIT Base Reform

The other major means of shifting the Canadian tax system further toward consumption is to modify provisions of the PIT. These reforms would reduce PIT revenues and thereby also shift the revenue mix toward the GST/HST unless PIT rates were simultaneously raised. Any of the three methods cited earlier for consumption taxation could be employed, and here we list specific proposals that have been advanced using each method:

- *Tax-deferral method:* Increase the dollar limits and/or percentage-of-earnings limits on contributions to RPPs and RRSPs; extend the current age of 71 for mandatory annuitization or periodic withdrawals from such plans.

- *Tax-prepayment method*: Increase the annual contribution limits for TFSAs from the current \$5,500; allow annual or lifetime tax exemptions on limited amounts of interest, dividend, and/or capital gain incomes.¹²⁰
- *Reduced-tax method*: Reduce the tax inclusion rate from the current 50 percent for realized capital gains, possibly making such gains entirely tax-free; allow dividend tax credits for eligible shares of Canadian corporations held in tax-deferred plans.

We focus now on the distributional implications of these kinds of reforms, which have typically been ignored or downplayed by their advocates. Table 2 displays the distribution of the types of incomes and deductions that would be most affected by the reforms; the data are for the 2010 tax year, the most recent available. Tax filers have been grouped into eight classes based on their total assessed incomes, with a separate tabulation for the combined class of \$150,000+.¹²¹ Given income inequality in Canada, it is not surprising to observe that the ratio of percentages of total income assessed to total returns rises sharply as one moves up the income scale. The substantial progressivity of the federal PIT can be seen in the table's last row for net taxes. However, most striking is the high concentration of financial incomes—interest, dividends, and capital gains—in *the taxable incomes* of the highest income classes as shown in table 2.¹²² Our measure of this concentration is to compare, for a given income class, the percentage of all income of that type with the percentage of total income assessed.¹²³

For example, the aggregated income class of \$150,000+ (with just 2.2 percent of all tax filers) has 16.6 percent of total income assessed but 24.9 percent of all interest income, 51.4 percent of all taxable dividends, and 62.9 percent of all taxable capital gains. Those figures mean that capital incomes of these kinds constitute a much higher proportion for the total incomes of higher-income filers than for middle- and

120 Prior to the major reforms of the late 1980s, individuals were allowed an exemption for up to \$1,000 of interest and dividend income each year. Beginning in 1985, individuals could access a lifetime exemption on up to \$100,000 of taxable capital gains, but this provision was phased out in the 1990s.

121 Note that fully 34 percent of the 24.8 million returns filed for 2010 were non-taxable. For the lowest income class (loss-\$19,999), non-taxable returns constituted over 90 percent of all returns. For all tabulated income classes of \$35,000 and higher, 98 percent or more of all returns were taxable. Canada Revenue Agency, *Preliminary Income Statistics—2012 Edition*, 2010 taxation year (Ottawa: CRA, 2012), table 2, “All Returns by Total Income Class.”

122 Note that the gross-up of eligible Canadian dividends and the 50 percent reduction for taxable capital gains do not affect the distribution of these income sources across income classes, since these proportions are independent of the tax filer's income.

123 Of course, lower and middle earners hold most of their savings in tax-deferred or tax-prepaid forms, so that their interest, dividends, and capital gains in those accounts do not appear in the tax statistics; this will exaggerate the measured degree of concentration of such incomes among high-income taxpayers. However, that is irrelevant for the current analysis, which focuses on the impacts of proposals to reduce the taxation of *currently taxable* forms of investment income.

TABLE 2 Distribution of Income Sources and Deduction Types, 2010 Tax Year

	Assessed income range										All
	Loss- \$19,999	\$20,000- \$34,999	\$35,000- \$49,999	\$50,000- \$69,999	\$70,000- \$99,999	\$100,000- \$149,999	\$150,000- \$249,999	\$250,000+			
	<i>percent</i>										
Total returns	37.6	20.0	15.5	12.2	8.7	3.8	1.4	0.8	100.0	2.2	
Total income assessed ...	8.8	13.1	15.7	17.3	17.3	11.0	6.5	10.1	100.0	16.6	
Interest income ^a	10.6	15.8	14.5	13.4	11.7	9.0	7.4	17.5	100.0	24.9	
Taxable dividends ^b	1.2	3.4	6.8	10.5	12.8	13.8	13.6	37.8	100.0	51.4	
Taxable capital gains ^c	2.0	3.3	4.6	6.8	9.3	11.1	13.1	49.8	100.0	62.9	
RPP contributions	0.6	4.0	13.3	24.7	35.2	15.8	4.6	1.8	100.0	6.4	
RRSP deductions	1.2	5.4	11.3	17.5	22.4	20.5	12.9	8.9	100.0	21.8	
Interest expense ^d	4.0	6.9	9.1	12.0	14.7	13.7	12.1	27.5	100.0	39.6	
Net federal tax	0.6	5.5	11.2	16.7	20.5	15.3	10.5	19.8	100.0	30.2	

^a Includes bond, bank, and mortgage interest; income from trusts; foreign investment income.

^b Taxable amount of dividends from Canadian corporations; includes 44 percent gross-up for eligible dividends and 25 percent gross-up for non-eligible dividends; offset by dividend tax credits.

^c Taxable amounts are 50 percent of capital gains realized in 2010.

^d Includes interest expense paid on money borrowed to earn investment income; fees for management or safe custody of investments; safety deposit box charges; accounting fees for recording investment income; and investment counsel fees.

RPP = registered pension plan.

RRSP = registered retirement savings plan.

Source: Authors' calculations from Canada Revenue Agency, *Preliminary Income Statistics—2012 Edition*, 2010 taxation year (Ottawa: CRA, 2012), table 2, "All Returns by Total Income Class."

lower-income filers.¹²⁴ This concentration is even starker for the highest income class of \$250,000+, with just 0.8 percent of all tax filers: relative to their 10.1 percent of total income assessed, they receive 17.5 percent of all interest income, 37.8 percent of all taxable dividends, and 49.8 percent of all taxable capital gains. Consequently, proposals to reduce the taxation of interest, dividends, and/or capital gains would reduce PIT progressivity unless offset by a steepening of the tax-rate schedule.

Next consider contributions to RPPs and RRSPs, which use the tax-deferral method for introducing a consumption base into the PIT. Table 2 displays a pattern for RPP contributions that rises sharply relative to total income assessed as one moves up the income scale as far as the \$70,000-\$99,999 class. For the three highest income classes, this ratio declines, reflecting the workplace basis of RPPs and the fact that many high earners derive their income from privately owned businesses, the professions, or self-employment. In contrast, the ratio of RRSP deductions to total income assessed continues to rise into the \$150,000-\$249,000 class before declining in the top income class. This pattern reflects both the higher saving rates of high earners and the impact of the dollar limitation on RRSP contributions. Increasing the dollar ceiling would yield a disproportionately large benefit for high earners, since very few lower to upper-middle earners exhaust their current limits with the unlimited carryforwards. In 2010, a total of 21 million Canadians had an aggregate of \$633 billion of accumulated unused RRSP contribution room available.¹²⁵

An item missing from table 2 is TFSA contributions, since these do not appear on tax returns that form the basis for statistics compiled by the Canada Revenue Agency. While contributing to a TFSA may appeal to individuals in many diverse situations, it is most compelling to high earners who have exhausted their contribution limits for RPPs/RRSPs and who have taxable assets that can be transferred, directly or indirectly, into a TFSA.¹²⁶ For the great majority of taxpayers, the current \$5,500 annual limit on TFSA contributions is more than adequate to satisfy incremental saving needs. Analysis of proposals to double the TFSA contribution limit suggests that the additional tax benefits would go overwhelmingly to high earners and wealth holders.¹²⁷

Tax-deductible interest expense is also relevant in assessing proposals to shift the tax system further toward consumption, and table 2 shows this item rising sharply relative to income class. The classes with income above \$150,000 (comprising just

124 Note that the bottom two tabulated income classes receive a higher percentage of all taxable interest than their share of total income, but the majority of filers in those groups are non-taxable so that their interest income in fact bears no tax.

125 Statistics Canada, CANSIM database, v26560465, v26560468. By comparison, 25 million Canadians filed tax returns in that year; some of the difference is explained by filers with no earned income generating RRSP contribution room, such as welfare and pension beneficiaries.

126 In-kind contributions of eligible securities to a TFSA are permitted, but capital gains on such securities are deemed to be realized and taxable at the time of transfer, while capital losses are denied any tax deduction.

127 Kesselman, *supra* note 30.

2.2 percent of filers) claim 39.6 percent of all interest expense; the 0.8 percent of filers with incomes above \$250,000 alone claim 27.5 percent. These tax deductions are allowed for interest incurred for financing investments held outside RRSPs/TFSAs (but not for consumption or home purchase). However, these deductions cannot be justified in Canada's current PIT, which neither includes full capital incomes on an accrual basis (as would a pure income base) nor includes proceeds from loans (as would a pure consumption base).¹²⁸ The current treatment is very favourable to high earners who deduct their interest expense to finance leveraged investments with returns that are taxed on a deferred and half-rate basis.

Pursuing any of the cited policy reforms to make the PIT more consumption-based would clearly reduce the system's effective progressivity. Almost all Canadian advocates of these changes have neglected or downplayed this impact and the need for offsetting increases in the progressivity of the tax-rate schedule—particularly for the highest income brackets, which would benefit disproportionately from the reforms. Adverse distributional impacts of such reforms could be offset *on average* for taxpayers in any income range through changes in the PIT rate schedule. Over the course of a lifetime, for any average level of earnings, individuals with above-average savings would pay less than previously, and those with below-average savings would pay more than previously. That outcome accords with the nature and intention of a more consumption-based tax system. However, following the reform and for an extended transition period, the impacts would vary widely depending on the age or cohort of the individual and whether savings were held most in tax-deferred, tax-prepaid, or taxable forms. These variations have been described above; some individuals would enjoy windfall gains of reduced taxes, with no incremental saving incentive, while others would suffer lump-sum losses.

Lifetime Wealth Transfer Taxes

Reforming the direct personal tax to a fully consumption-based scheme has been proposed by various tax analysts over the years. One version is the flat tax formulated by Robert Hall and Alvin Rabushka,¹²⁹ which would integrate personal and business taxes with a uniform tax rate, thus eliminating rate progressivity. More common have been proposals for a personal expenditure tax (PET) that would retain progressivity of the personal rate structure but apply some combination of the tax-deferred and tax-prepaid methods to all savings and capital incomes. An early prototype of the PET was designed by the Meade taxation review committee in the United Kingdom,¹³⁰ and in 2010 the successor Mirrlees review advocated a similar scheme with

128 Alternatively, a consumption-based tax would deny deductibility of interest expense and exclude proceeds from loans.

129 Hall and Rabushka, *supra* note 75.

130 Institute for Fiscal Studies, *The Structure and Reform of Direct Taxation: Report of a Committee Chaired by Professor J.E. Meade* (London: Allen & Unwin, 1978).

the additional feature of annual taxation of capital returns exceeding the normal rate of return.¹³¹ Boadway's support of a progressive PET for Canada follows the Meade formulation.¹³² All of these PET proposals other than the flat tax would simultaneously introduce a lifetime wealth transfer tax; this tax would be applied at progressive rates to donors' cumulative inter vivos transfers and bequests. Such a wealth transfer tax is deemed essential by these proponents to prevent capital accumulated but not spent during a person's lifetime from escaping tax under the PET.¹³³

Some variant of these proposals for a fully consumption-based personal tax, with appropriate rate progressivity, might be attractive if the companion tax on lifetime wealth transfers were deemed feasible, effective, and durable. We have reasons to doubt that such a wealth tax would meet these criteria, especially in the Canadian context. With the 1972 income tax reforms, the federal government withdrew from estate taxation, and the provinces abandoned such taxes in the following years. The prospect of reintroducing estate taxes has never been popular among Canadians, and the pattern around the world has been a small and declining role for taxes on transfers, bequests, and wealth (other than real property) in total revenues.¹³⁴ Political economy can help to explain these phenomena: with high thresholds, such taxes affect relatively few individuals, offering limited revenue potential, and the wealth and status of these families facilitates political lobbying to eviscerate the tax legislation. The resulting instability of wealth transfer taxes yields inequities as well as taxpayers who are waiting for their desired change of government. High costs of administration and compliance together with extensive tax-planning opportunities further encumber such taxes, as do difficulties in taxing decedents' real and financial assets held abroad. We feel that a more effective course is to leave some capital income taxable annually under the PIT particularly for high-income and high-wealth individuals.

131 James Mirrlees, Stuart Adam, Timothy Besley, Richard Blundell, Stephen Bond, Robert Chote, Malcolm Gammie, Paul Johnson, Gareth Myles, and James Poterba, *Tax by Design: The Mirrlees Review* (Oxford: Oxford University Press, 2011), 297-303 and 332-34. The normal return to capital is exempt from any consumption-based tax, but higher returns may reflect investor skills, inside knowledge, economic rents, or factors such as market power or political influence, and therefore should be taxable. Difficulties with the Mirrlees review's proposed "rate-of-return allowance" include annual valuation of all affected assets held by individuals and determining the normal rate of return.

132 Boadway, *supra* note 31.

133 Robin Boadway, Emma Chamberlain, and Carl Emmerson, "Taxation of Wealth and Wealth Transfers," in *Dimensions of Tax Design*, *supra* note 72, 737-814, outline the rationale for such a tax to accompany a progressive PET.

134 See Kenneth Scheve and David Stasavage, "Democracy, War, and Wealth: Lessons from Two Centuries of Inheritance Taxation" (2012) 106:1 *American Political Science Review* 81-102, who document and analyze the declining role of inherited wealth taxation around the world over two centuries.

CONCLUSION AND DISCUSSION

Many tax economists, policy analysts, and policy commentators have advocated making Canadian taxes more consumption-based—either by shifting the tax mix to less use of the PIT and greater use of the GST/HST, or by shifting the PIT base further toward consumption. However, the rationales for these reform proposals suffer from serious deficiencies. Proponents of such policies have focused on studies that suggest large gains in economic incentives, efficiency, and growth, but these theoretical and econometric estimates are notoriously fickle and sensitive to key assumptions.¹³⁵ The two most frequently cited Canadian studies have conclusions that proponents interpret in overly strong and definitive terms. Proponents also often cite findings from foreign or cross-country studies, and they ignore the fact that Canada's PIT base is already close to consumption for the great majority of taxpayers other than those at the highest income levels.

Our review of the evidence suggests that the economic gains from the proposed reforms are likely to fall far short of the claims and may be negligible or even non-existent. The effects of either type of reform on work incentives are likely to be minimal and could well be adverse rather than conducive to working. The impact of the proposed reforms on aggregate domestic savings are uncertain, but likely small at best, and even increased personal savings are unlikely to translate into much domestic investment, given the openness of the Canadian economy and heavy corporate reliance on internal finance. Small business might be induced to invest more, but tax preferences already accord them inefficiently favourable treatment. Moreover, the gains by top wealth holders in allocating their consumption more efficiently over time will not necessarily yield greater savings—the main channel for transmission of benefits to the rest of the economy.¹³⁶ Thus, the economic case for such reforms is undermined by several weak links, since it is based on asserted behavioural responses for which the relevant evidence is at best unsettled.

At the same time, Canadian advocates of consumption-based tax reforms have too often tended to ignore or minimize the adverse distributional impacts of their proposals. They have neglected the need to steepen the progressivity of the PIT rate schedule—cutting upper-bracket rates less than lower-bracket rates—if a shift in the tax mix toward greater use of the GST/HST is to avoid regressive impacts. Limited cuts in upper-bracket PIT rates also imply that any associated efficiency gains will be correspondingly attenuated. Because the types of capital incomes subject to the PIT are highly concentrated at top incomes, the advocates have similarly neglected the need to increase upper-bracket rates if a shift of the PIT base toward consumption

135 For example, see our earlier citation of cautions by leading economic authorities on this topic, including Auerbach, *supra* notes 97 and 103; Kotlikoff, *supra* note 115; Lim Rogers, *supra* note 98; and Zodrow, *supra* notes 94 and 80.

136 Other channels for efficiency gains could include reduced inter-asset distortions, such as the bias as between home equity and business investment.

is to avoid regressive impacts. Any incentive gains anticipated for higher earners are therefore likely to be muted or entirely absent. Thus, most proponents of consumption-based tax reform appear to overstate the efficiency gains while minimizing or entirely ignoring the equity losses. Even if the efficiency gains were significant, the adverse distributional impacts would still need to be addressed.

Pursuing reforms to shift Canadian taxes toward consumption at the business rather than personal level offers a much better prospect of achieving the vaunted gains in investment, productivity, and growth. This difference follows from the cited international mobility of capital and corporations' primary reliance on internal finance, which impair the effectiveness of PIT reforms and PIT-GST/HST tax-mix changes. Cuts in corporate tax rates and increased depreciation rates for business will raise the net return to foreign as well as domestic investors and thereby stimulate investment; these changes are also among the most economically efficient of tax reforms.¹³⁷ Moreover, harmonizing provincial sales taxes with the GST moves the tax base from its hybrid form (with roughly 40 percent of the burden being borne by business) to a true consumption-based tax for households. Tax harmonization is found to be effective in raising business investment by reducing the cost of capital purchases,¹³⁸ while imposing little change in distributional impacts.¹³⁹ Sales tax harmonization is primarily a tax base reform and only to a minor extent a tax-mix shift since most of the savings for business have been passed through to consumers via lower prices.¹⁴⁰

If any economic gains from shifting Canadian taxation toward consumption are much smaller than the advocates claim—and given that these shifts have an adverse impact on distribution—what rationale does that leave for such tax reforms? As one analyst has observed, “[t]his is not to say that a consumption tax is a bad idea, but rather to say that the reform may be difficult to justify on the grounds of economic efficiency alone.”¹⁴¹ When considering expanded use of indirect taxes like the GST/HST, a clue lies in the policy experience of countries that apply VAT at much higher rates than Canada alongside heavy use of direct taxes on individuals and

137 See Dahlby, *supra* notes 105 and 12 and studies cited therein. See also Arnold, *supra* note 92, and Johansson et al., *ibid*.

138 Michael Smart and Richard M. Bird, “The Impact on Investment of Replacing a Retail Sales Tax with a Value-Added Tax: Evidence from Canadian Experience” (2009) 62:4 *National Tax Journal* 591-609.

139 Smart and Bird, *supra* note 117, find only a slightly regressive impact on Ontario households, while the results in Jonathan R. Kesselman, “Consumer Impacts of BC’s Harmonized Sales Tax: Tax Grab or Pass-Through?” (2011) 37:2 *Canadian Public Policy* 139-62, suggest possibly a slightly progressive impact on BC households.

140 Kesselman, *supra* note 139; and Michael Smart, “The Impact of Sales Tax Reform on Ontario Consumers: A First Look at the Evidence” (2011) 4:3 *SPP Research Papers* 1-21.

141 Lim Rogers, *supra* note 98, at 45.

businesses. For example, the Nordic countries apply VAT at 25 percent, and they employ their large total revenues from all sources to fund expansive services that are highly progressive. Thus, if Canadian direct taxes are already being deployed to their economically optimal limits, increased rates of GST/HST could be justified in *revenue-enhancing* moves to address pressing social and societal needs; the progressive impact of the incremental spending could outweigh the regressive impact of the additional revenues.¹⁴²

142 In contrast, some Canadian proponents of a shift from the PIT to the GST/HST specifically state that the reform should be revenue-neutral (for example, Mintz, *supra* note 18, and Laurin and Robson, *supra* note 13) or even revenue-reducing (Clemens et al., *supra* note 10). On the revenue side alone, a tax system that is highly progressive can exert a large redistributive effect only to the extent that the overall tax level is large (Kesselman and Cheung, *supra* note 116, at 732). Also see Lane Kenworthy, *Progress for the Poor* (Oxford: Oxford University Press, 2011), at chapter 8.

