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Saver's Choice: Comparing the Marginal Effective Tax Burdens on RRSPs and TFSAs

By
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- Canada's graduated personal income tax leads most taxpayers to expect higher tax rates when they are working than when they are living on lower incomes from their retirement savings. Yet for many people, marginal effective tax rates on income from retirement savings are higher than those they face during working life.
- Comparing marginal effective tax rates across income levels suggests that many Canadians with savings in tax-deferred vehicles, like Registered Retirement Savings Plans, should put more future saving in tax-prepaid savings plans, particularly Tax-Free Savings Accounts.
- Pension-plan sponsors, employers contributing to group RSPs, financial service providers, and governments whose future income may depend on taxes on individual savings, should anticipate how differences in marginal tax rates in work and retirement change the rewards from saving in different forms.

The 2008 federal budget introduced a new individual saving option, the Tax-Free Savings Account (TFSA), which allows tax-free accumulation of investment income within a registered plan. Canadians over age 18 have annual investment room of $5,000, indexed for inflation. Unused room can be carried forward indefinitely.[1]

Unlike most other registered savings plan models, such as Registered Retirement Savings Plans (RRSPs) or Registered Pension Plans (RPPs), contributions to TFSAs are not tax-deductible, and are funded from after-tax income. And whereas later withdrawals of principal or earnings from RRSPs and RPPs are counted in taxable income, withdrawals from TFSAs are not.

While not actively marketed as a primary retirement saving tool, TFSAs represent, for many taxpayers, a more tax-efficient retirement saving vehicle than traditional tax-deferred accounts. Why? Because the effective rate of tax payable on retirement income is often higher than that imposed on regular income during working life.

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1 See http://www.tfsa.gc.ca/ for a more complete overview of TFSA's provisions.

Table 1: Marginal Effective Tax Rates Matter

	Same tax rate (40%) on labour income saved and on retirement income withdrawal		Tax rate on labour income saved (40%) is higher than on retirement income withdrawal (30%)		Tax rate on labour income saved (30%) is lower than on retirement income withdrawal (40%)	
	(dollars)					
	RRSP	**TFSA**	**RRSP**	**TFSA**	**RRSP**	**TFSA**
Amount saved for retirement	1,000	1,000	1,000	1,000	1,000	1,000
Taxes	0	(400)	0	(400)	0	(300)
Net amount saved	1,000	600	1,000	600	1,000	700
Value after 20 years (5% annual rate of return)	2,653	1,592	2,653	1,592	2,653	1,857
Taxes	(1,061)	0	(796)	0	(1,061)	0
Net income at retirement	**1,592**	**1,592**	**1,857**	**1,592**	**1,592**	**1,857**
	RRSP and TFSA are equivalent		RRSP is superior		TFSA is superior	

Source: Authors' calculations.

Tax-recognized saving plans – whether tax-prepaid, such as TFSAs, or tax-deferred, such as RRSPs – shift emphasis away from income and toward consumption as the basis of taxation (Kesselman and Poschmann 2001). In tax-prepaid plans, income taxes are paid when funds are saved, whereas in tax-deferred plans, income taxes are paid when funds are withdrawn for consumption. For a given rate of accumulation within the plans, only the timing of taxation differs. From the perspective of investors, the plans are arithmetically equal, on a present-value basis, if the tax rate at the time of saving equals the tax rate at the time of consumption (Table 1, Column 1).

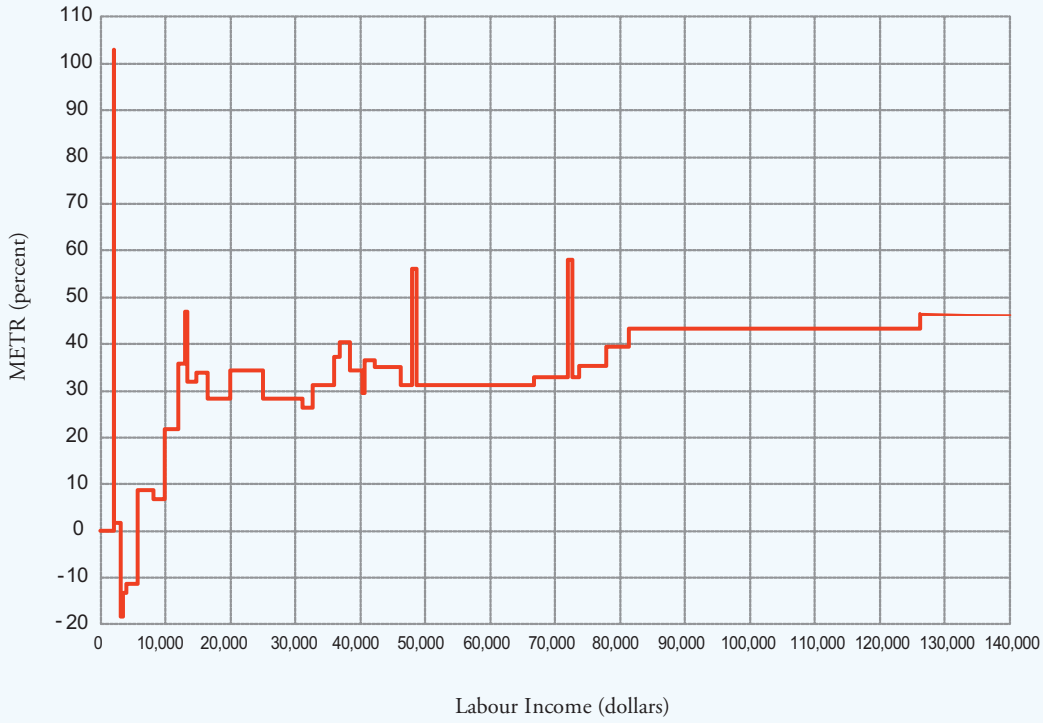
Because the federal government and most provinces have graduated personal income-tax schedules, most taxpayers expect their tax rates to be higher when working than when they retire and draw on pensions and savings to replace a portion of their working incomes. If this expectation is right, tax-deferred saving vehicles make more sense. Whether this expectation is right, however, depends on the particular marginal effective tax rates an individual faces in work and retirement, and these configurations turn out to be different from what most people expect.

Estimating Marginal Effective Tax Rates

The marginal effective tax rate (METR) is the tax rate bearing on an incremental dollar of income, or the next dollar earned. For individuals, comprehensive METR measures take into account the income thresholds and statutory rates of the personal income tax system, as well as the impacts of tax deductions and credits and income-tested federal and provincial benefits.

METRs do not follow the geared-to-income pattern of statutory rates (Figure 1 illustrates the situation of an Ontario worker in 2009). At very low income levels, METRs usually are negative, reflecting the subsidy to work provided by the Working Income Tax Benefit (WITB). They quickly increase, however, mainly because of clawbacks of the WITB and

Figure 1: Marginal Effective Tax Rates for a Single Individual in Ontario, 2009



Source: Marginal effective tax rates computed for a stylized individual using Statistics Canada's Social Policy Simulation Database and Model (SPSD/M), version 16.1.

Behind the scenes…

Income	Tax Provision
$2,000	End of EI contribution refund
$2,034	EI contributions begin
$3,052	Working Income Tax Benefit (WITB) begins
$3,500	CPP contributions begin
$4,000	Ontario Property and Sales Tax Credit begins to be clawed back
$5,647	Maximum WITB amount is attained, reaches a plateau
$8,128	Federal GST credit supplement begins
$9,850	WITB begins to be clawed back
$11,991	Federal income tax becomes payable
$12,962	Ontario income tax becomes payable
$13,310	WITB is fully clawed back
$14,702	End of the Federal GST credit supplement
$16,593	End of Ontario Tax Reduction claw back
$20,000	Ontario Health Premium (OHP) begins
$25,000	OHP reaches first plateau
$31,100	Ontario Property and Sales Tax Credit fully clawed back
$32,636	Federal Sales Tax Credit begins to be clawed back
$36,000	OHP rises
$36,848	Ontario income tax: second threshold begins
$38,500	OHP reaches second plateau
$40,276	Federal Sales Tax Credit is fully clawed back
$40,726	Federal income tax: second threshold begins
$42,300	Maximum EI contributions reached
$46,300	Maximum CPP contributions reached
$48,000	OHP rises
$48,600	OHP reaches third plateau
$66,765	Ontario surtax: first cut-in level
$72,000	OHP rises
$72,600	OHP reaches fourth plateau
$73,698	Ontario income tax: third threshold begins
$77,987	Ontario surtax: second cut-in level
$81,452	Federal income tax: third threshold begins
$126,264	Federal income tax: fourth threshold begins

other income-tested benefits. Spikes in the chart represent income levels where the phasing out of credits or the appearance of new clawbacks boosts the tax rate paid on the next dollar of income.

Separate METR calculations can be done for different family types, different income sources, and different provinces. For example, Appendix A compares the METRs on labour income with those on retirement income for an individual taxpayer in Quebec, Ontario and Alberta. In these provinces, as everywhere in Canada, for many plausible levels of work and retirement income, METRs on income in retirement will exceed METRs on income from work.

Tax-Prepaid versus Tax-Deferred

Tax provisions frequently change, so people near the beginning of working life face uncertainty about whether their METRs will be higher or lower at retirement. For people who are closer to the end of working life, however, existing tax provisions allow a reasonable guess about the situation they will face. Since the TFSA is a new feature of the Canadian tax scene, moreover, people who are approaching the point at which they will stop saving and begin drawing on income in retirement will have the bulk of their registered savings in tax-deferred accounts. These people, who can reasonably anticipate what their taxable incomes will be in retirement, have a good basis for comparing their METRs during work and retirement – and, therefore, for judging whether they are better off putting their next dollar of retirement saving in an RRSP or a TFSA.

In Appendix B, we evaluate the difference in METRs on working-life income versus retirement income using this year's tax system parameters and assumptions about income replacement scenarios. Following the conventional view that income in retirement will generally be lower than income during working life, since retirees do not incur work-related expenses, have typically paid off mortgages, and no longer have children at home, we illustrate replacement rates of 60 percent, 70 percent and 80 percent of labour income at retirement (Appendix B).[2] In these illustrations retirement income from private sources is all taxable (because, as noted already, TFSAs are relatively new). Retirement income also includes net Old Age Supplement (OAS) and Guaranteed Income Supplement (GIS) payments, which are subject to income-tested clawbacks.

We emphasize that this analysis applies to marginal rates only – that is, the effective tax burden on the last dollar of income saved or withdrawn. Canadians who have many years of saving ahead of them face a more complex challenge: allocating their saving between tax-prepaid and tax-deferred options to minimize their average lifetime tax burden. The results in Appendix B are most straightforwardly applicable to people nearing retirement with savings in tax-deferred vehicles, and to some extent to younger workers who anticipate income from career-average – or, if their earnings trajectories are predictable – final-earnings-based defined-benefit pension plans.

A positive value in the bar charts (Appendix B) indicates a lower METR at retirement, meaning greater rewards from putting an incremental dollar in a tax-deferred vehicle such as an RRSP. Conversely, a negative value indicates a higher METR at retirement, meaning greater rewards from putting an incremental dollar in a TFSA.

At low income levels, METRs at retirement significantly exceed those of working life. This is caused mainly by the GIS clawback rate for seniors, which may be 50 or 75 percent depending on family configuration; an observation that has been the subject of much attention in the past (Shillington 2003, Poschmann and Robson 2004, Milligan 2005).

A more surprising finding is the small proportion of instances when working-life METRs significantly exceed those in retirement (where bars in Appendix B are largely positive):

- At an 80 percent income replacement rate, this is generally true only for workers earning from about $33,000 to

2 The view that retirees need to replace about 70 percent of their gross working income to maintain their living standards in retirement is so widespread that it seems a natural benchmark figure for this analysis. In general, lower-income Canadians achieve higher replacement rates and higher-income Canadians achieve lower ones (LaRochelle-Côté, Sébastien, Garnett Picot, and John Myles. 2007; Ostrovsky, Yuri and Grant Schellenberg. 2009). Therefore we present results for 80 and 60 percent ratios to encompass these possibilities.

$40,000.

- At a 70 percent income replacement rate, it is generally true only for those earning from about $35,000 to $47,000, and, mainly in Ontario, from $76,000 to $93,000.
- At a 60 percent income replacement rate, the higher METR applies only to those earning from about $39,000 to $54,000, and mainly in Ontario, from about $81,000 to $109,000.

In Alberta in particular, where the tax system is less geared-to-income and simpler than in other provinces, individuals who are currently close to retirement appear better off putting their incremental retirement saving in a TFSA-like arrangement, rather than in tax-deferred vehicle, no matter their target income-replacement rate.

To repeat, the lessons in Appendix B apply most directly to people currently close to retirement whose decisions about how much incremental saving to put in TFSAs as opposed to tax-deferred vehicles will not affect their METRs in retirement. People further away from retirement must inevitably deal with greater uncertainty about earnings, investment returns, and future tax changes – for them, moreover, the cumulative effect of decisions about which vehicles to save in may have significant impacts on their taxable incomes, and therefore their METRs, in retirement. For all Canadians, however, the contrast between METRs in working life and in retirement is a vital consideration in choosing how to save.

Conclusion and Policy Implications

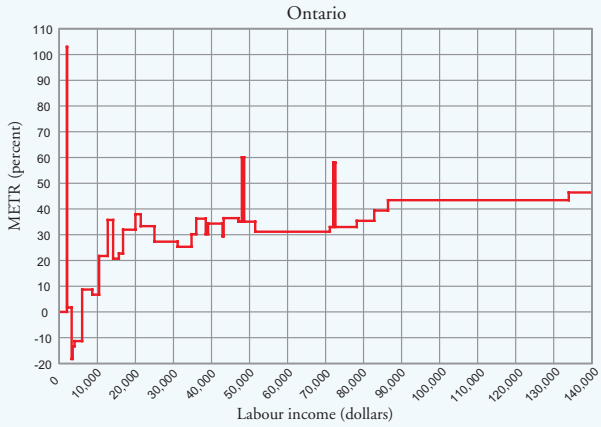
This paper challenges the widespread assumption that saving for retirement in a tax-deferred plan is the right way to go. For many Canadians, investing for retirement on a tax prepaid basis – such as in a TFSA – may be more advantageous.

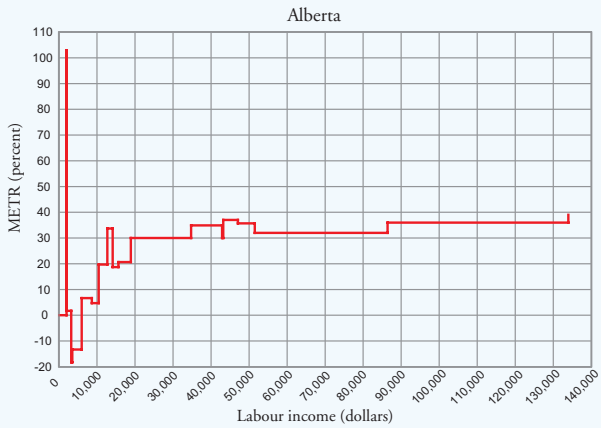
Therefore, governments wanting to strengthen incentives for private retirement saving – the so-called third pillar of retirement income – should be thinking of expanding opportunities to save on a tax-prepaid basis. One option would be to allow taxpayers more freedom in allocating saving room between RRSP/RSP accounts and TFSAs, and more room for saving in TFSAs.

The advantages of saving with TFSAs for many people also mean that pension-plan sponsors, employers contributing to group RRSPs, and financial intermediaries will need to accommodate growing demand for tax-prepaid vehicles. As governments are examining various proposals to supplement the pension coverage of workers who do not participate in an occupational pension plan, new proposals should accommodate tax-prepaid opportunities. Governments will also need to adjust their long-term fiscal plans to reflect the fact that the tax base will continue to shift away from income, and toward consumption, which will affect the timing of tax revenue.

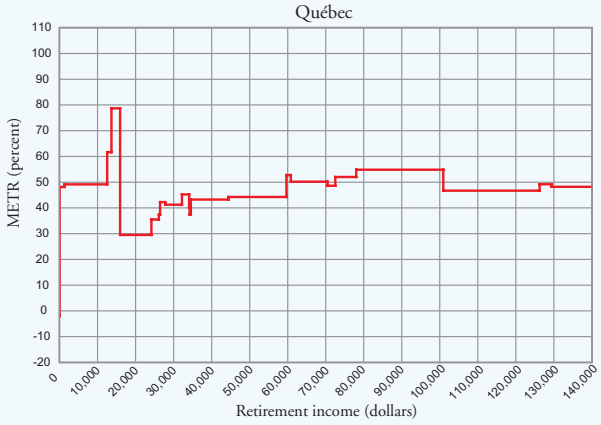
Appendix A — Marginal Effective Tax Rates (METRs) on Labour Income and on Income Withdrawals from Registered Plans at Retirement, 2009

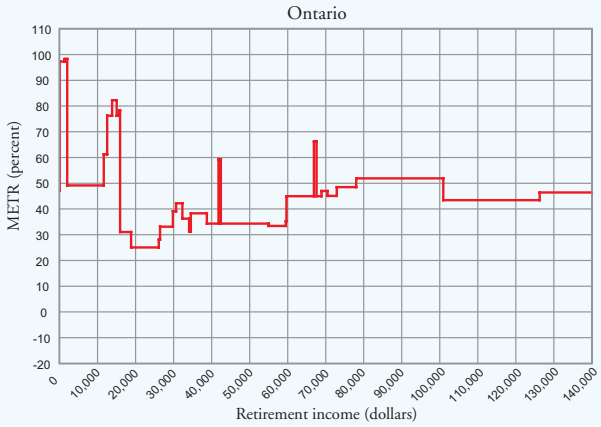
Labour Income

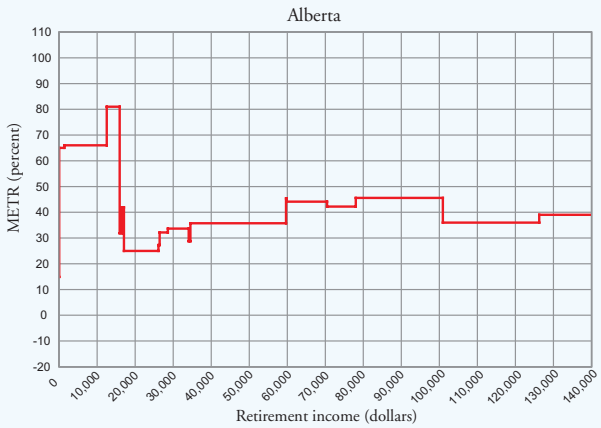




Retirement Income





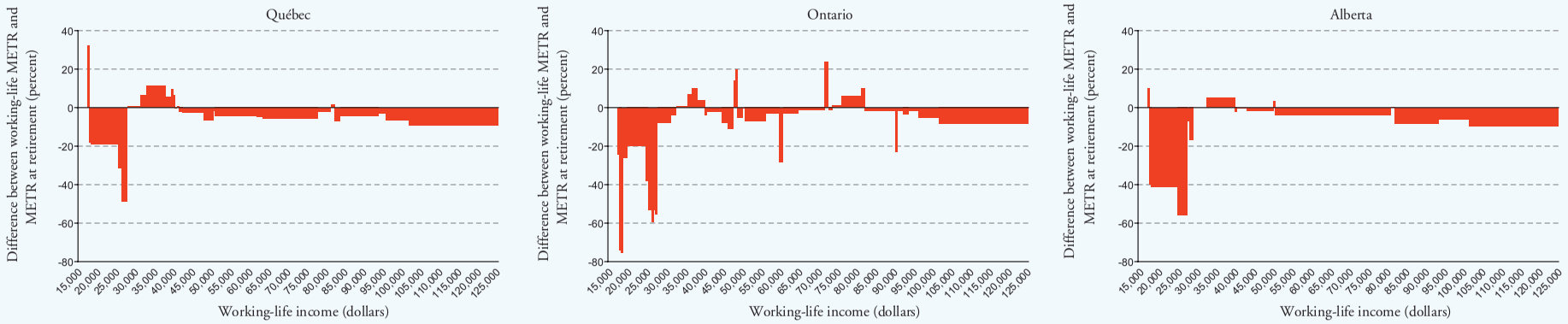


Source: Marginal effective tax rates computed for a stylized single individual using Statistics Canada's Social Policy Simulation Database and Model (SPSD/M), version 16.1; responsibility for the data and their interpretation lies with the authors.

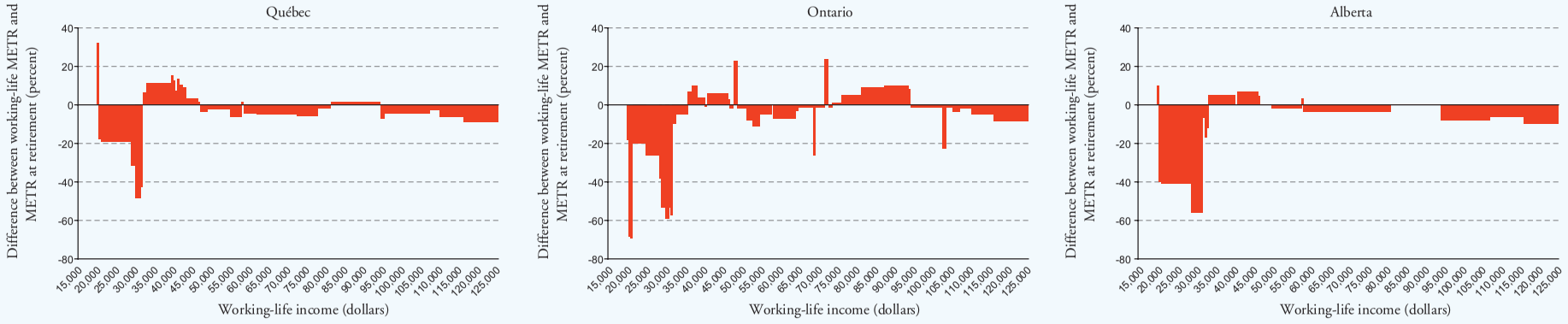
Appendix B

Difference between the Marginal Effective Tax Rate (METR) on Labour Income and the METR on Income Withdrawal at Retirement, for Various Retirement Income Replacement Rates (Retirement Income From Private Sources Is All Taxable)

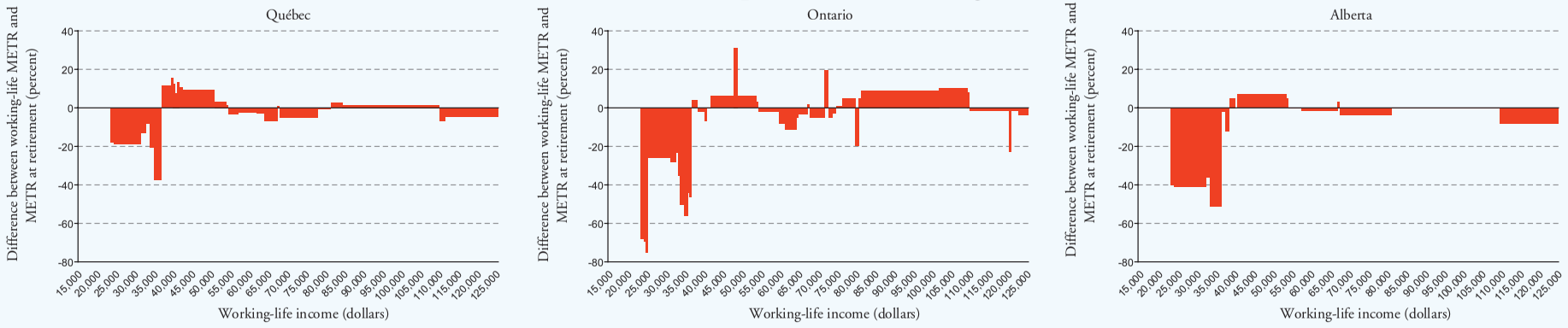
Retirement Income Replaces 80% of Working-Life Income



Retirement Income Replaces 70% of Working-Life Income



Retirement Income Replaces 60% of Working-Life Income



Notes to Appendix B: A positive value in the bar charts indicates a lower METR at retirement, thereby granting a tax advantage to RRSP saving. Conversely, a negative value indicates a higher METR at retirement, leading to a situation in which TFSAs would be more tax efficient.

Calculation of income at retirement includes net OAS and GIS payments, and assumes that retirement income from private sources is all taxable. Employment insurance premiums and Canada/Quebec Pension Plan contributions are excluded from the analysis. Bar charts start when net OAS plus GIS payments are insufficient to provide for the target income replacement rate.

Source: Marginal effective tax rates computed for a stylized single individual using Statistics Canada's Social Policy Simulation Database and Model (SPSD/M), version 16.1.

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