

Background Issues

Marginal and average effective tax rates in Ontario

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Statutory income tax rates – the tax rates prescribed by federal and provincial tax legislation – tell only part of the story when it comes to evaluating the “take-home” share of the incremental dollar a taxpayer earns. The marginal effective tax rate measures a broader effect – the METR captures incremental earnings’ impact on all relevant refundable credits, benefits, transfer programs and tax reduction mechanisms¹ and captures also the cost of payroll taxes, such as employment insurance and public pension plan contributions. The average tax rate is a ratio where the numerator is the net government fiscal position with respect to the taxpayer – taxes received less benefits paid – and the denominator is the taxpayer’s disposable income.²

Employees can directly observe the cost of payroll taxes when they review their pay stubs. They will not see, however, their earning’s incremental impact on transfer benefits. The lagged effect of a rise in income will be evident in monthly or quarterly receipts from government, if applicable, otherwise the amounts will be reconciled when an income tax return is filed; these changes are reported in the METR as if they occur instantly. In the discussion below, the employee portion of payroll taxes is included in the METR; in principle, some portion of the employer’s share, including employer health taxes and workers’ compensation premiums, also bears on employees’ take-home pay.³

At present, virtually all federal and provincial tax recognition for families is income tested, meaning that an incremental dollar of net income⁴ reduces the credit or benefit by some statutorily defined percentage. For most families, the relevant federal programs are the low-income credit intended to offset goods and services tax payments (the GST credit) and the child tax benefit or the national child benefit with provincial supplements. Provincial child benefit supplements have a big influence on the METRs faced by low-income families; provincial

¹ Some provinces, Ontario included, have used tax reduction mechanisms to effectively forgive some or all of the first few dollars of income tax payable; the result is a lower tax bill for low-income earners, at the expense of a higher marginal rate (than otherwise) over the income range where tax liability first kicks in.

² There are many other possible formulations. The merit of this one is that when transfer benefits provide all of a taxpayer’s income, his average tax rate is minus 100 percent. Calculations here exclude sales taxes. It is possible, and theoretically defensible, to include sales taxes in the marginal and average rates. For the METR, it is enough to assume that all income will be spent at some time, at whatever is the current sales tax rate on a standard bundle of household expenditure. The sales tax’s contribution to the METR will be that rate times one minus the METR exclusive of sales taxes. The calculation for average rates would be the product of the effective sales tax rate and disposable income.

³ The literature suggests that perhaps half or two-thirds of employer payroll costs are passed on through employees’ wages.

⁴ Or a minor variant of net income, depending on the program and the year.

surtaxes are more relevant for higher-income families. For older workers, the stiff clawback rates that apply to the guaranteed income supplement and spouse allowance (GIS/SpA) dominate the bottom of the income spectrum. At higher incomes, older workers face a reduction in their personal nonrefundable credit amount (the age amount, now reduced at the rate of 15 percent of net income above about \$29,000).

In the United States, state and local taxes interact with federal taxes when they are deductible. There is no such deductibility in Canada's personal income tax, nor do benefits or their reductions or clawbacks offset each other. Hence provincial and federal taxes and benefits and their clawbacks and reductions stack on top of one other, generating quite high METRs over the income ranges to which they apply. Benefit reductions themselves have a range of reduction rates – for families with three children, the reduction in the federal child benefit is currently 32.5 percent of income above about \$22,000; above \$35,000 the rate is four percent. And because the income tests (the benefit reductions) are specifically intended to target program payments to low-income families, the stacked METRs are largest for low-income families with children.

Consider two ways to evaluate trends in METRs: Figure 1 following illustrates rate profiles for a given family type over time, as federal and provincial tax and benefit policies were substantially changed by successive governments. Figures 2 through 4 show rates for one time slice (2005), illustrating the differences across family types.⁵

In Figure 1, the major difference between 1988 and 1995 is the creation of the child tax benefit, in place of the Family Allowance, the personal nonrefundable amount for dependent children, and the refundable child tax credit – and the rise of personal income taxes, including surtaxes, at the federal and provincial levels. Provincial policies' influence on the shape of the curves was relatively slight in 1988 and 1995: provincial taxes (other than surtaxes) were set as a fixed percentage of basic federal tax, and provincial child benefits or tax reductions were modest.

Between 1995 and 2004, the key drivers of change were, for higher-income earners, some reductions in federal and provincial tax rates, including surtaxes and, for lower-income workers, a rise in METRs owing to the expansion of federal and provincial child benefits – the national child benefit system.⁶ Figures 1 and 2 also shows a range of negative METRs, which are created

⁵ Slightly different family types and income definitions are used in the various figures; for example; taxable income is used on the X-axis in Figures 2 and 3 so that spikes in the new Ontario Health Premium appear in their expected places; Figure 4 uses employment income because to highlight the impact of taxes and clawbacks on private incremental income that a senior might choose to earn, excluding pension income which, for seniors, is not usefully thought of as discretionary. A different income definition would be appropriate if the focus of discussion was, for example, to the tax treatment of savings.

⁶ The 2004 numbers do not include Ontario's health premium, which will be fully phased-in in 2005.

by Ontario's child care supplement for working families, which increase with income for low earner and reach a plateau, then turn downward when family income hits \$20,000.⁷⁸

The impact of having children reveals itself in Figures 2 and 3; the differences are driven not by income taxes themselves but by the rules governing federal and provincial child benefits and their clawbacks.⁹ Note that the highest marginal rates generally coincide with low income ranges where families are net benefit recipients: the average tax rate is less than zero. Meanwhile, benefits are intended to be targeted to low income families, driving the high METRs. Therefore, comparing Figure 2 with Figure 3, the average tax rate profile shows a steeper slope in the former, coincident with generally higher METRs at any particular income.¹⁰

Comparing Figures 3 and 4 brings out the impact of federal and provincial elderly benefits and their reductions or clawbacks. The main influence at low incomes is the federal GIS plus provincial topup. The amounts are small, but for a significant percentage of the poorest families these benefits are a major component of income. The price of providing a meaningful targeted benefit is the clawback, which affects almost a third of Old Age Security recipients. Any income above a trivial amount triggers a GIS reduction of 50 percent, or 75 percent in couple that are joint recipients of GIS/SpA and OAS benefits. At higher incomes, as mentioned above, comes the reduction of the age amount and eventually (above about \$60,000 in individual income) the federal OAS clawback. As in Figure 2, the steep METRs mostly coincide with being a net benefits recipient, and in that range the slope of the average tax rate line is very steep.

The impacts of these high METRs are uncertain, although they are usually assumed to be a work disincentive that depresses individual and national income. For younger workers, high marginal rates may not constitute a serious disincentive, because their lifetime wellbeing will be influenced by lifetime income, and therefore their lifetime career trajectory, rather than the takehome share of their incremental dollar. On the other hand, public policy ought not discourage workers from making work/leisure choices that suit their needs and preferences over

⁷ The same point at which the health premium kicks in for a single earner.

⁸ The differences between the negative rates shown in 2004 and 2005 (Figures 1 and 2) are artefacts of the calculation method. Meanwhile, Figure 1 shows a negative rate in 1995, representing not the provincial program but the defunct federal working income supplement.

⁹ Figures 1 and 2 each assume that all employment income is earned by one spouse; this makes it easier to identify line up the influences of taxes and benefits whose thresholds are keyed to family net income rather than individual net or taxable income. The assumption also makes it easier to compare Figures 2 and 3, isolating the impact of children.

¹⁰ As a matter of arithmetic, the point slope of the average tax rate line (not the level) is determined by the METR.

any particular horizon and, on this view, an extremely high METR would be a significant concern exactly because of its distortionary effects and pursuant impact on social welfare.¹¹

The flip side is that the higher the tax rates and METRs, given a public budget constraint, the larger the possible benefit payable to favoured recipients. Lowering clawbacks would not only make benefits less affordable (and ultimately, perhaps, smaller in the hands of low income recipients), it would extend upward through the income range the number of people exposed to the clawback. If the policy goal is to pay the highest possible benefits to people with the lowest incomes, high METRs for low-wage workers are defensible.

It is inescapable, however, that high METRs will cause some share of the population to forego incremental work opportunities. The higher the rate, the more people within a given income range will respond to the marginal incentive. This is especially likely to be the case when the replacement income (available through public benefits) is competitive with the after-tax income available from work: It is socially preferable to make work pay. As things stand, Ontario has a marginal rate profile that sees the METR rise quickly at very low incomes and, more or less, stay there through to high incomes.

Brief METR spikes over a very narrow income range are less likely to be a major economic problem than are high, persistent plateaus. A spike may be jumped-over with a small raise, and therefore mostly irrelevant, while a high plateau bears on a wide range of incremental work decisions. Hence while the narrow but unfortunate spikes that policy interactions sometimes create might be a problem, and a readily fixable one through fine-tuning program parameters,¹² a larger concern is an extended range of high METRs, as between \$30,000 and \$50,000 in Ontario, encompassing a huge percentage of families.

The difficulty with this observation, however, is that it is costly to address. The first part of a solution is not to make the problem worse, by enlarging benefits. Second, the federal and provincial government can work separately and together (as with the child benefit system) to arrive at program parameters that minimize the unfortunate interactions that cause high

¹¹ Ordinary utility theory shows deadweight loss to increase as a function of the degree of responsiveness to marginal incentives, and therefore as a function of the magnitude of the marginal tax rate itself. Deadweight loss is by definition a subtraction from aggregate social welfare.

¹² Between the May budget and tabling budget legislation in June, the Ontario government did just that, smoothing out one of the spikes caused by the Ontario Health Premium. That new tax, however, still creates an extra six-point spike in the METR in an income range where the METR is already very high.

METRs.¹³ This involves fiscal tradeoffs; one specific option is to replace part of the income-tested child benefit with a personal amount for dependent children (as existed before 1992), which can be done at the federal and provincial level. Third, the threshold at which benefit reduction kick in can be reduced: This is already in federal plans for the child benefit supplement. Fourth, as incomes and opportunities grow, the dollar values of the benefits themselves can be contemplated as targets for reduction.¹⁴

For senior taxpayers, the policy issues are similar, but there is another dimension: METRs' impact on work, saving and retirement decisions. The social preference for paying benefits to the worst-off is undeniable; so too is the fact that the high post-retirement METRs that apply to private work or pension income create incentives to retire (early) and to rely on public pension benefits. The potential negative impacts on productivity, self-sufficiency and on aggregate social welfare are obvious.

Solutions here include better tax treatment of savings. One option is tax-prepaid savings plans, which could allow at least some private pension-like savings to enter income without triggering federal and provincial social benefit reductions. Another might be to allow late-working-life income to accrue toward a post-age-65 partial exemption from the GIS income test. Another option is simply to allow a small but meaningful private income exemption before the GIS income test kicks in.¹⁵ Finally, of course, the clawback rates could themselves be lowered.

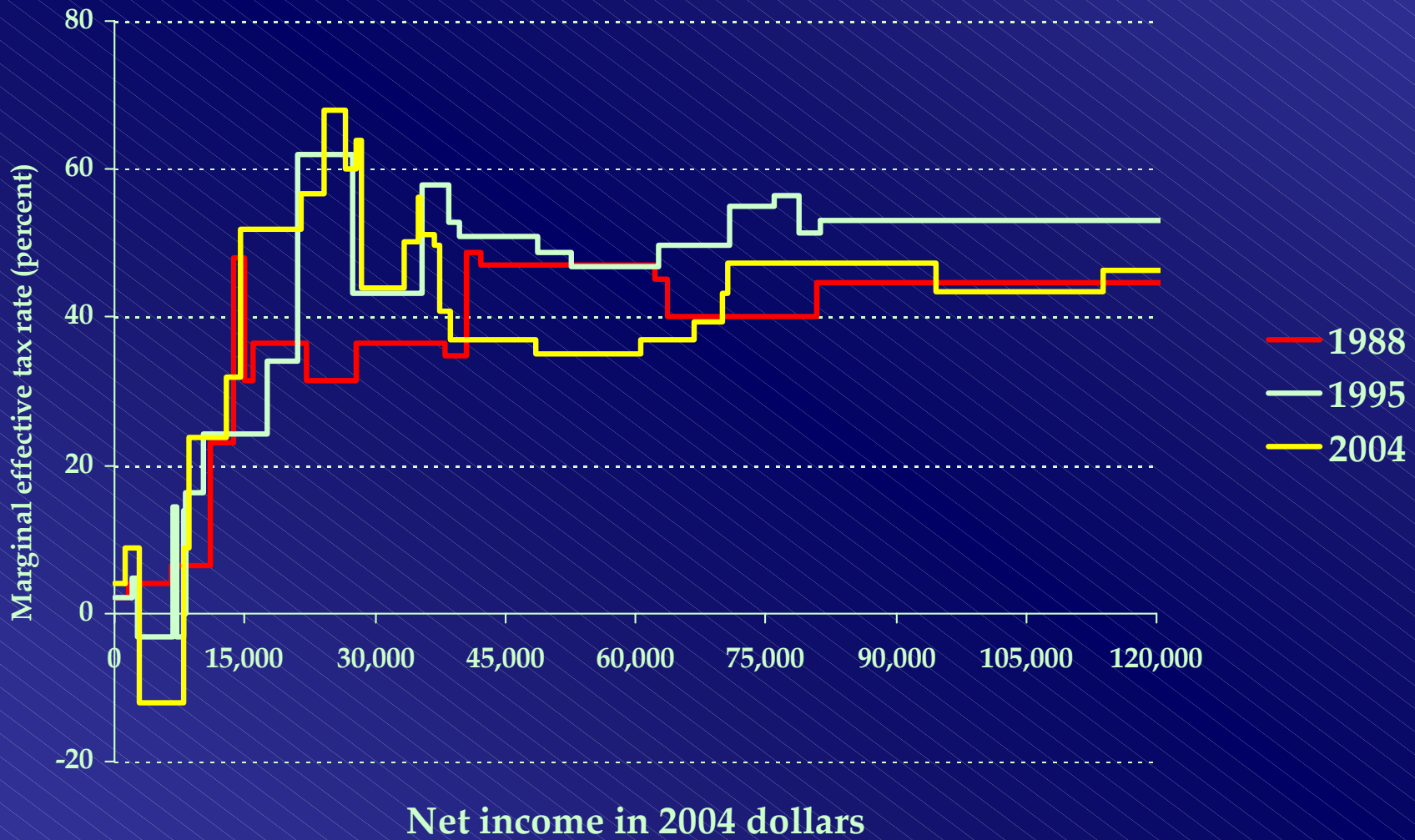
All choices involve tradeoffs, either from the perspective of the public purse (to spend more rather than less) or from the point of view of targetting generous benefits to the most needy. To choose requires setting priorities.

¹³ The first step here is to be aware of the existence and scale of the problem, which itself has been an historical failing, in part owing to benefit decisions having been made by social policy decisionmakers who were unaware of the potential for high METRs and unwanted downstream effects.

¹⁴ Real growth in incomes will automatically reduce payments; most benefits and thresholds are indexed, so inflation will not do the heavy policy lifting.

¹⁵ This option, and to some degree the one prior, effectively pushes the METR plateau up the income scale, rather than eliminating it.

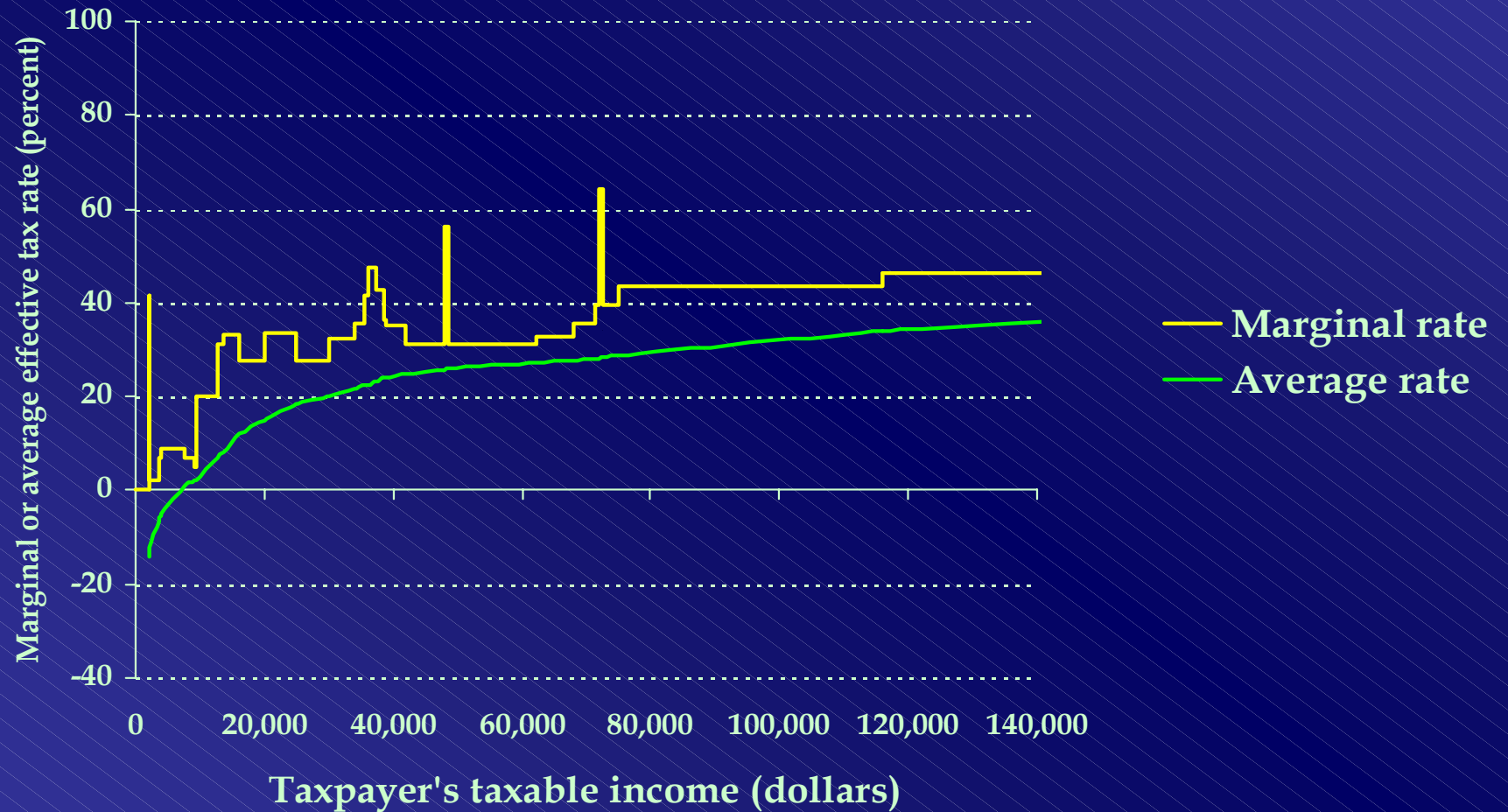
Marginal Effective Tax Rates for Single Earner Couple with Two Children – Selected years, Ontario



2005 Ontario Average and Marginal Effective Tax Rates Single Earner Couple with Two Children



2005 Ontario Average and Marginal Effective Tax Rates Single Earner with No Children



2005 Ontario Average and Marginal Effective Tax Rates Single Senior with No Children

