



FISCAL AND TAX COMPETITIVENESS

What Has Happened to Quebecers' Marginal Effective Tax Rates?

By

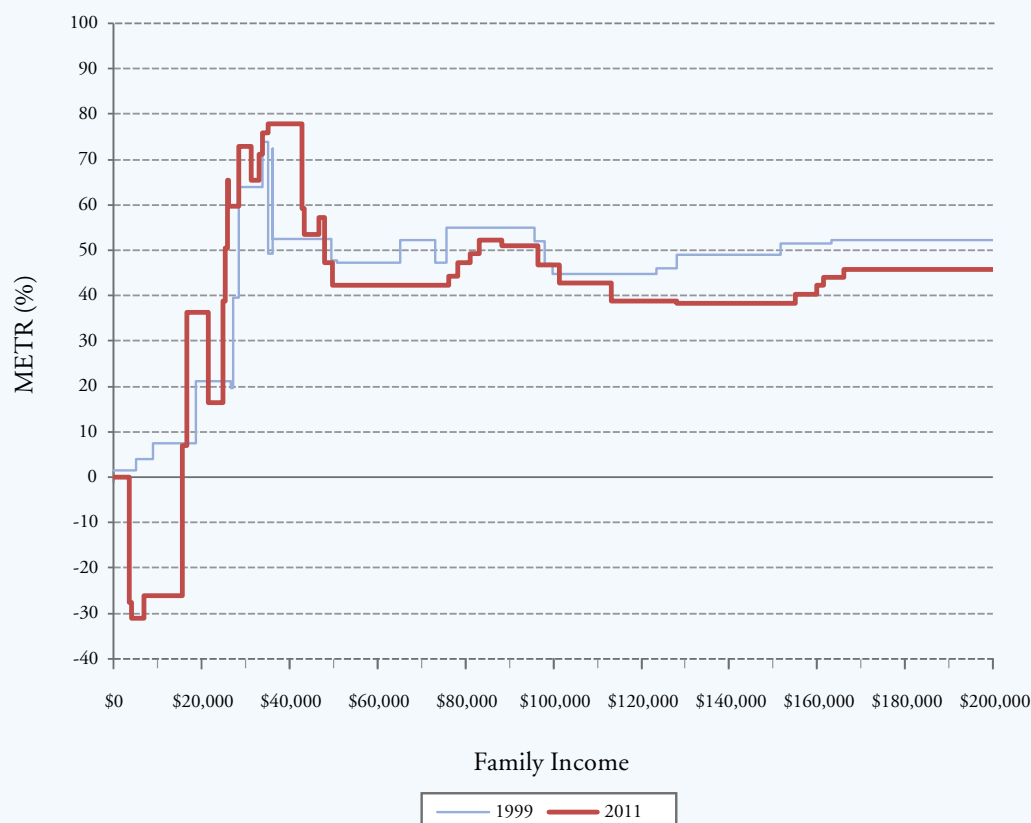
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- More than a decade after Quebec and the federal government implemented significant personal income tax rate reductions, what has happened to Quebecers' take-home pay? We answer the question by looking at marginal effective tax rates (METRs) on personal income, which measure the impact of federal and provincial income taxes combined with the impact of reductions and clawbacks of income-tested tax credits and benefits.
- Income-tested credits and benefits mostly target financial support to low-to-middle-income families with children and to low-income seniors. However, clawbacks and rate reductions apply to those credits and benefits as incomes rise above set thresholds, raising METRs for those income groups and family types.
- Overall, METRs are lower than a decade ago, but for many low-to-middle-income Quebec families with children, they are higher. The province's residents generally face the highest tax rates in the country, with an average METR in 2011 exceeding the national average by four percentage points.

After-tax take-home pay is a vital concern for taxpayers. Tax rates are primarily determined by the schedule of federal and provincial personal income tax rates, which are set by legislation as percentages of individual taxable income above set thresholds. Quebec and federal tax rates on personal income have declined significantly since the early 2000s. In Quebec, statutory rates have gradually fallen from 20, 23 and 26 percent in 1999 to 16, 20 and 24 percent in 2011. Similarly, the 2000 federal budget launched a process taking basic federal tax rates from 17, 26 and 29 percent that year, with the highest rate kicking in at individual taxable income of \$59,180, to rates of 15, 22, 26 and 29 percent in 2011, with the top rate now kicking in at \$128,800.

After-tax incomes are also affected by reductions and clawbacks of the benefits and credits that target support to low- and middle-income households, particularly families with children, or seniors. As their income passes certain thresholds, the reductions and clawbacks begin, acting as a disincentive to make additional income. The combined impact of tax rates, benefit reductions, and clawbacks is the marginal

Figure 1: Marginal Effective Tax Rates (METR) for a Typical Dual-Earner Family of Four (Two Parents, Two Children), Quebec, 1999 and 2011



Assumptions: Each parent earns 50 percent of the family's income and children are both under five years old. The family's income source is employment. For calculating tax credits for shelter costs, \$1,000 per month rent is assumed. Child care expenses are not modeled.

Source: Authors' calculations using Statistics Canada's SPSPD/M, v. 18.1. Responsibility for the results and their interpretation lies with the authors.

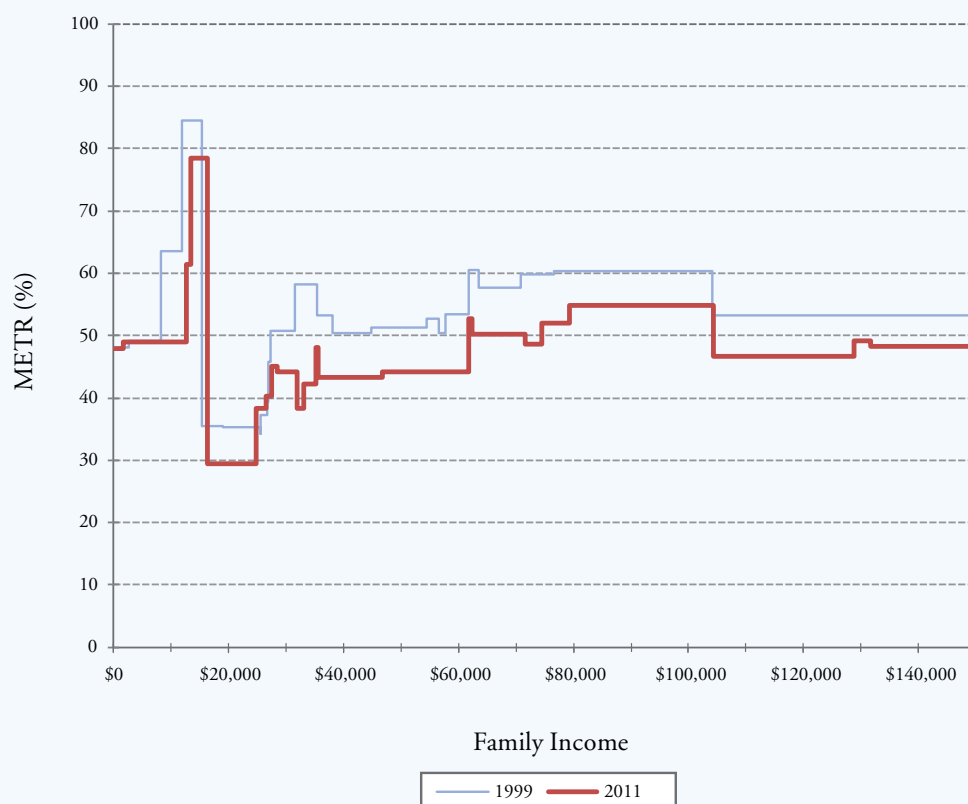
effective tax rate, or METR, on incremental income. High METRs reduce the gains for individuals from working more hours, and increase the gains from efforts to avoid taxes.

This *e-brief* examines current Quebec METRs, and how they compare with those of other provinces, following a decade of falling tax rates and increasing benefits and credits. Rate reductions, combined with the elimination of federal surtaxes, have resulted in generally lower METRs for Quebec families; by an average of more than six percentage points, since 1999. However, the province's residents generally face the highest tax rates in the country, with an average METR in 2011 exceeding the national average by four percentage points. For many families – mostly low-to-middle-income families with children – rates are very high in 2011 compared to 1999.

Background: The Impact of Targeted Benefits

Graduated income tax rate schedules impose tax burdens that rise as a percentage of income as taxpayers' incomes rise. In the Canadian system, this geared-to-income approach has spread, in particular with the introduction of the Child Tax Credit in 1978, paid to families with young children. The value of the credit, when introduced, was scaled back for families with income above \$18,000, and eliminated entirely at a family income above \$26,000.

Figure 2: Marginal Effective Tax Rates (METR) for a Typical Single Senior Individual, Quebec, 1999 and 2011



Assumptions: METRs calculated for a single senior individual, incremental income is from taxable pension sources, with no employment income. For calculating tax credits for shelter costs, \$1,000 per month rent is assumed.

Source: Authors' calculations using Statistics Canada's SPSPD/M, v. 18.1. Responsibility for the results and their interpretation lies with the authors.

In 1992, the federal government rolled together several family-related deductions, credits and benefits into a larger, income-tested Child Tax Benefit. This became the basis for the larger-yet National Child Benefit System which, beginning in 1998, sought to provide, through the tax and transfer system, minimum incomes for families with children. The program has changed over the years: the basic federal benefit for a first child grew from less than \$2,000 in 2000 to over \$3,400 in 2011.

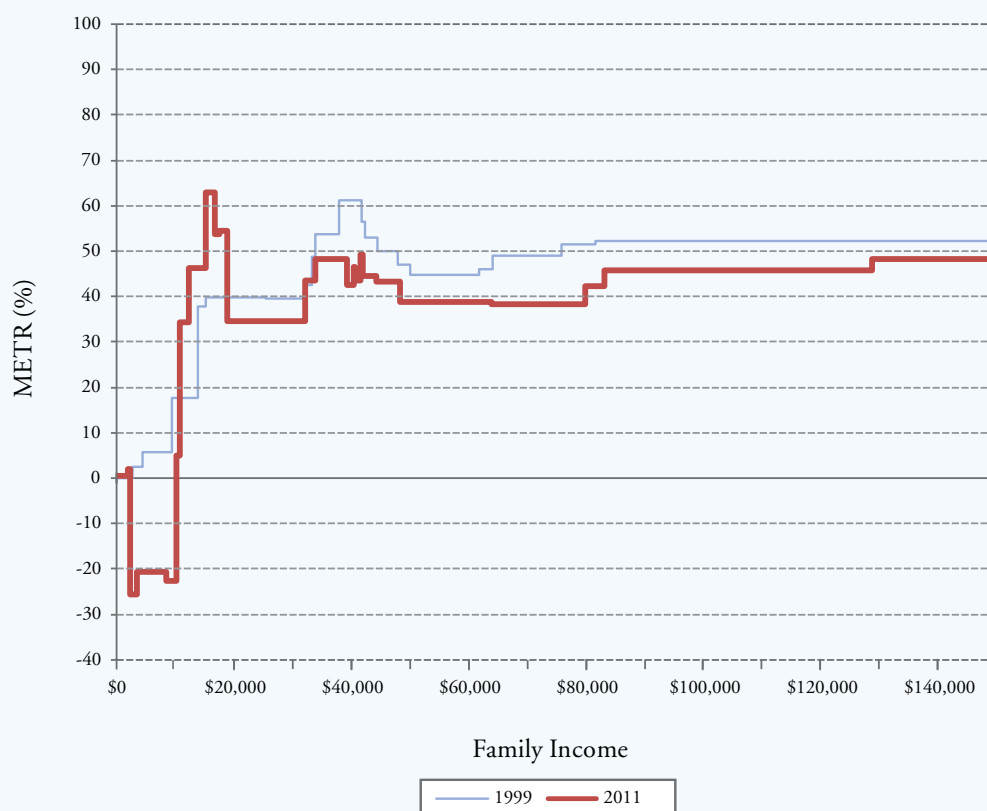
The effective tax rates that are needed to limit the cost of these benefits and credits have also grown in either magnitude, meaning higher clawbacks or reduction rates, or in breadth of application, meaning higher than otherwise METRs apply to families farther up the income scale.¹ For many earners, this sharply reduces the gains from working (Davies 1998, Poschmann 1999, Poschmann and Richards 2000).²

Yet the child benefit system has been successful at providing transfer income to families with children that have little or no market income, and the amount is now substantial – the federal benefit for a family with three children in 2011 is about \$10,000. In addition, the Quebec provincial benefit is about \$4,450. But targeting benefits to families on the low end of the income scale, which is necessary to keep the programs' costs down, has a big impact on METRs,

1 For families with three children, the federal child benefit clawback on the basic benefit applies to family incomes up to about \$150,000.

2 A personal marginal tax rate increase of 10 percent reduces reported taxable income by 2 to 7 percent, depending on income level (Canada 2010).

Figure 3: Marginal Effective Tax Rates (METR) for a Typical Single Individual Without Children, Quebec, 1999 and 2011



Assumptions: METR calculated for a single individual aged under 65 on his/her income from employment, with no other sources of income. For calculating tax credits for shelter costs, \$1,000 per month rent is assumed.

Source: Authors' calculations using Statistics Canada's SPSP/M, v. 18.1. Responsibility for the results and their interpretation lies with the authors.

especially when the reductions are substantial. In the case of the federal low-income supplement for families with three children, the benefit reduction rate now adds 33.3 percent to the METRs above income of about \$24,500.

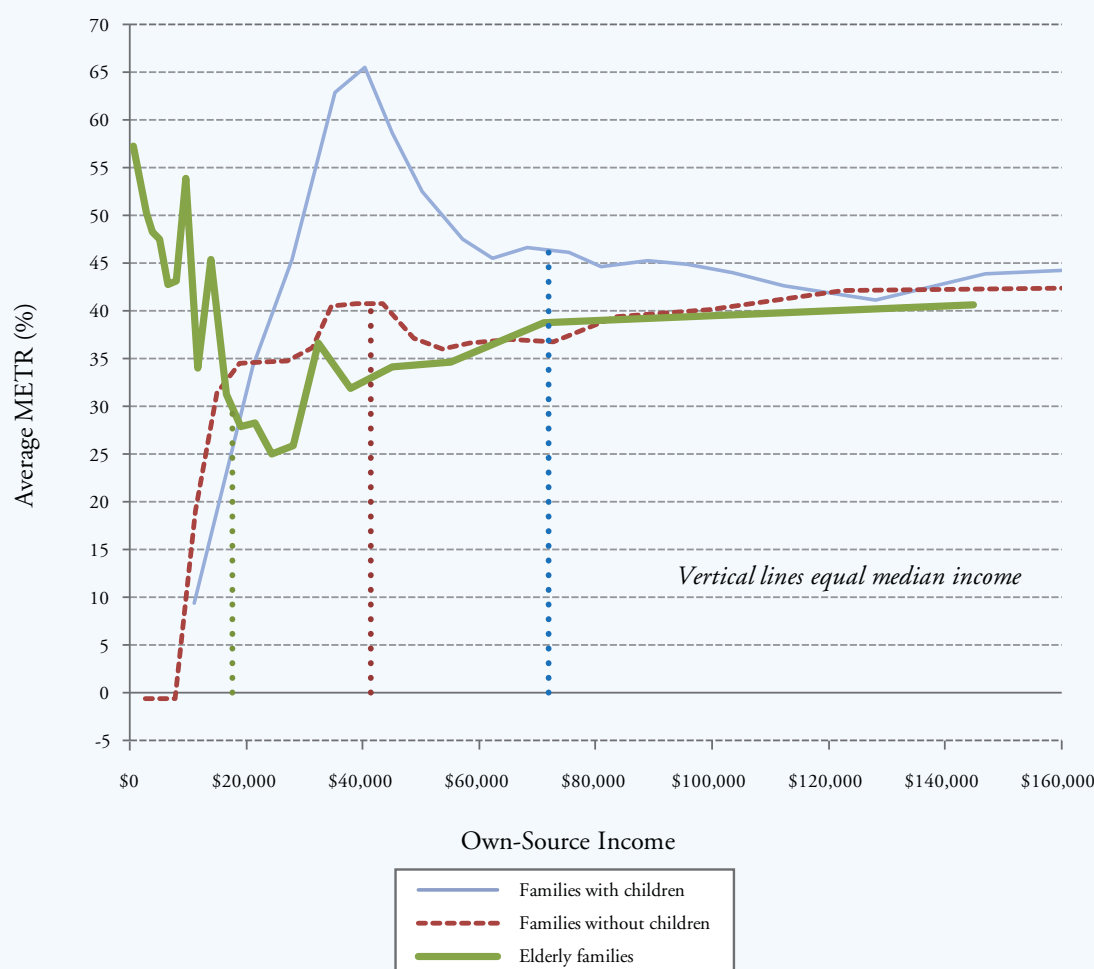
The impact of these taxes, benefits and clawbacks is substantial, and it exposes families at low-to-mid-income levels to METRs higher than those for higher-income families. For families in Quebec, for example, they are persistently over 60 percent for typical wage earners with two young children, topping almost 80 percent around the \$40,000 mark (see Figure 1). For all Quebec families with children in the \$25,000-to-\$45,000 income range, average METRs increased by 7 percentage points in the last decade, leaving them higher than in Ontario (Laurin and Poschmann 2011).

For seniors, METRs are also high at the low end of the income scale. The main influence on seniors' METRs is the sharp phase-out of the Guaranteed Income Supplement, a federal cash transfer that has been successful in reducing the incidence of poverty among Canada's seniors. The benefit comes at a price, however, which includes METRs higher than 80 percent for some of the lowest-income families. The income-tested phase-out of provincial benefits such as the Solidarity Tax Credit,³ as well as the federal nonrefundable age tax credit⁴ and the nonrefundable Quebec combined

3 Announced in the 2010 provincial budget, the Solidarity Tax Credit replaces the Quebec Sales Tax (QST) credit, the property tax refund and the credit for individuals living in northern villages. Individuals and families eligible for both the housing and QST components see their credit amount reduced by 6 percent of income over the \$30,490 threshold.

4 The federal age tax credit amount has grown from about \$3,500 in 2000 to almost double that now.

Figure 4: Average Family Marginal Effective Tax Rates (METRs) in Quebec, by Family Types 2011



Note: This chart shows average METRs calculated for each income vintile. Vintiles divide the income range into 20 equal parts, so that the bottom vintile, for example, represents the 5 percent of families whose incomes are lower than the next 95 percent. Families with children are single- or dual-parent families with minor children. Families without children are non-elderly single individuals and married or common-law couples without children. Rates are computed on the incremental income earned by the higher earning spouse. Recipients of social assistance are excluded from the sample. Elderly families are single individuals at least 65 years old and married or common-law couples with at least one spouse 65 years old or older, without children. Rates for elderly individuals are computed on income from taxable pension sources.

Source: Authors' calculations using Statistics Canada's SPSPD/M, v. 18.1. Responsibility for the results and their interpretation lies with the authors.

age, living alone, retirement credit⁵ leaves low-income seniors facing among the highest possible METRs in Canada (Figure 2).

The METR profile is simpler for households without children or seniors. They have benefited less from transfers, but the steep reduction of the Quebec/federal Working Income Tax Benefit from the \$10,500 income threshold to about \$20,000, and the combined rate reductions of the Quebec living-alone credit and newly introduced Solidarity Tax Credit, still expose them to METRs above 40 percent up to about \$50,000 in income (Figure 3).

⁵ The base credit, calculated for families and consisting of amounts for age (older than 65), living alone, and eligible pension income, is reduced at a rate of 15 percent of income past the roughly \$31,000 threshold.

While family characteristics differ, we can aggregate families within an income class and type, as in Figure 4, to illustrate common experience. Summarizing: seniors face high METRs at the bottom of the income scale, but generally not so high as those for low-to-middle-income families with children, who face average METRs above 45 percent mark on earnings ranging from \$20,000 to \$60,000. For families without children, the average METR profile is roughly in line with a simple graduated tax rate system. However, the METR rises quickly and, after incomes exceed about \$20,000, has a profile like that of a flat rate tax. For both seniors and families with children, the half of families whose income is below the median generally face higher METRs than do the half of families above the median.

The Big Picture Assessment

Averaged across all family types and income levels, federal and Quebec personal income tax relief programs implemented in 1999 and 2000 have been a success in lowering METRs: the all-in average was 37.4 percent in 2000, whereas it is 32.7 today (Table 1). For the majority of Quebecers, however, average METRs still exceed 40 percent and remain higher than for their counterparts in other provinces.

For policymakers who focus on the questions that surround targeted benefits, the results bear a mixed message. That transfers and targeted credits deliver financial benefits is clear, but these benefits come at the expense of extraordinarily high METRs, reducing the gains from working for many of their beneficiaries. This cautions against further expansion of the targeted transfer system, for example by expanding low-income supplements or creating new, targeted benefits.

Policymakers interested in keeping down METRs overall should focus on a broad tax base and low, flat rates, rather than implementing or expanding targeted benefits that make general tax relief more difficult to achieve.

Table 1: Average Marginal Effective Tax Rates (METRs), all Family Types, by Income Group and Province

2011						
Family Market Income	Up to \$15,000	\$15,001 to \$35,000	\$35,001 to \$60,000	\$60,001 to \$100,000	\$100,001 and over	All Families
Province	Percent					
Newfoundland	26.7	32.2	33.5	35.7	37.1	33.1
P.E.I.	38.5	32.0	35.8	36.5	39.5	36.1
Nova Scotia	27.3	32.5	36.5	38.1	41.1	34.9
New Brunswick	31.5	30.5	34.7	34.7	35.7	33.3
Quebec	25.0	35.0	42.1	40.8	42.4	36.6
Ontario	19.5	29.2	35.5	33.9	38.5	31.6
Manitoba	24.9	32.1	36.0	37.0	40.3	34.1
Saskatchewan	30.1	27.6	34.4	34.4	36.5	32.8
Alberta	28.9	24.9	34.1	32.9	34.8	31.7
B.C.	19.8	28.2	31.7	30.2	35.0	28.8
Canada	22.9	30.4	36.5	35.1	38.2	32.7

1999						
Family Market Income	Up to \$15,000	\$15,001 to \$35,000	\$35,001 to \$60,000	\$60,001 to \$100,000	\$100,001 and over	All Families
Province	Percent					
Newfoundland	30.9	36.9	43.5	46.7	49.6	39.7
P.E.I.	37.5	32.6	40.2	43.8	46.3	38.9
Nova Scotia	27.8	34.2	42.5	43.4	45.5	37.9
New Brunswick	27.9	35.2	42.3	43.4	45.4	37.8
Quebec	29.8	39.9	50.8	49.7	49.8	43.0
Ontario	25.4	30.4	40.2	40.3	44.0	36.3
Manitoba	29.3	34.2	43.0	45.1	46.6	39.0
Saskatchewan	28.4	37.0	42.5	44.7	46.6	38.9
Alberta	24.0	30.6	40.4	41.1	42.5	35.7
B.C.	20.5	32.1	41.4	41.5	45.4	35.0
Canada	26.3	33.9	43.4	43.2	45.3	38.0

Note: Each income group contains approximately one-fifth of families. Rates are computed on the incremental income earned in employment for non-elderly families, and on income from taxable pension sources for elderly families. Incremental income is earned by the higher earning spouse for married or common-law couples. Recipients of social assistance are excluded from the sample.

Source: Authors calculations using Statistics Canada's SPSPD/M, v. 18.1. Responsibility for the results and their interpretation lies with the authors.

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