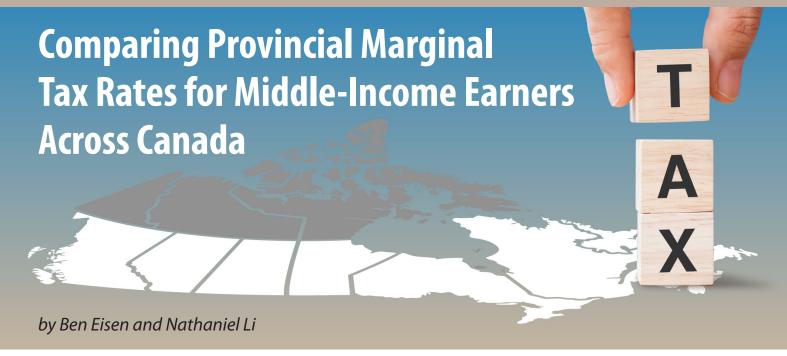
# FRASER BULLETIN



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### **S**UMMARY

- Due to different provincial income tax rates as well as the thresholds at which rates apply, individuals at the same level of income in different provinces often face significantly different marginal and effective tax rates.
- This research bulletin examines variations in the marginal personal income tax that individuals face at various levels of income with a particular focus on the difference in marginal statutory rates faced at the national average income.
- There is a clear division between provinces east of the Ontario-Quebec border and those to the west. Amongst the western provinces and Ontario, the marginal provincial rate at the national average income level ranged from 7.70 to 12.75 percent. In Quebec and Atlantic Canada marginal rates are higher, ranging from 13.80 percent in Prince Edward Island to 16.62 percent in Quebec.
- We provide further context by analyzing how these variations in marginal tax rates influence the additional pre-tax earned income that would be required for individuals across Canada earning the national average income to increase their after-tax income by \$100. For example, a British Columbian must earn \$139 to increase their take-home pay by \$100. In Nova Scotia and New Brunswick that figure is \$155.
- Individuals earning the national average income in Atlantic Canada generally face similar marginal tax rates as individuals earning much higher incomes (\$150,000 to \$500,000-plus, depending on the province) in Western Canada.
- The provincial tax burden for an individual at the average income level in British Columbia is \$2,353, \$2,369 in Ontario, and \$3,338 in Alberta. By comparison, the provincial tax burden in the Atlantic provinces at this income level ranges from \$4,463 in New Brunswick to \$5,318 in Nova Scotia.

#### Introduction

Canada differs from other high-income countries in that it relies more heavily on sub-national governments to raise tax revenue than most peer countries (Veldhuis, Murphy, and Clemens, 2013). In 2019, provincial governments collected 39.4 percent of all tax revenue (Veldhuis, Murphy, and Clemens, 2013). By comparison, American states collected 20.8 percent of tax revenue in the United States (Enache, 2021). Canadian provinces generally maintain higher provincial income tax rates and collect more provincial income tax than our peers. For example, Ontario's top income tax rate is 20.53 percent. By comparison, the highest state income tax rate in the United States is in California at 13.3 percent.

Due to different provincial income tax rates as well as the thresholds at which rates apply, individuals at the same income level in different provinces often face significantly different marginal and effective tax rates.

This research bulletin examines the variation in the marginal personal income tax that individuals face at various levels of income with a particular focus on the difference in the marginal statutory rates faced at the national average income. One recent study examined the variation in the marginal tax rate that high-income earners face across Canada (Whalen, Eisen, and Li, 2022). This paper will build on that analysis by examining the marginal provincial income tax rate that middle-income individuals across Canada face 1

We focus on marginal tax rates here because the marginal rate an individual faces influ-

<sup>1</sup> This bulletin is published through the Fraser Institute's Atlantic Canada Prosperity Initiative (ACPI) and focuses primarily on the Atlantic provinces.

ences work incentives and economic decision-making.

The plan of the bulletin is as follows. The first section compares the statutory marginal tax rate that an individual with the national average market income<sup>2</sup> in each province faces. This section discusses how these variations in marginal tax rates influence the additional pre-tax earned income that would be required for individuals across Canada to increase their aftertax income by \$100 as a method by which to illustrate the differences in marginal statutory personal income tax rates and their immediate economic effects.

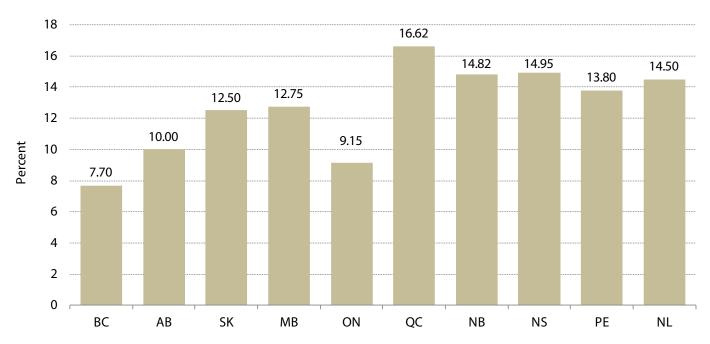
The report's second section provides further context by comparing the income level at which individuals across Canada face various marginal income tax rates because of the different tax rates and bracket thresholds in the various provinces. Specifically, we compare the marginal provincial tax rate that middle-income residents of higher-tax provinces face to that paid by high-income taxpayers in lower-tax jurisdictions. A final brief concluding section follows.

### Comparing marginal income tax rates across Canada for middle-income earners

The number of provincial tax brackets varies as does the thresholds at which they apply and the tax rates applied. As a result, people with similar income levels face different marginal personal income tax rates depending on the province in which they reside (figure 1).

<sup>&</sup>lt;sup>2</sup> Market income is the sum of earnings (from employment and net self-employment), net investment income, private retirement income, and the items under other income. It is also called income before taxes and transfers.

Figure 1: Provincial statutory marginal income-tax rate at average market income of \$52,750 in Canada, 2022



#### Notes:

(1) Personal income tax rates include surtaxes where applicable. Quebec's tax rate is adjusted for the federal abatement. (2) The maket income in 2022 was forecast based on the market income of individuals in 2019 expressed in 2022 constant dollars. Inflation values for 2022 were claculated based on the average of private forecasters and the Bank of Canada's projections.

Sources: CRA (2022); Revenu Quebec (2022); Statistics Canada (2022a, 2022b, 2022c); calculations by authors.

This section compares the provincial marginal tax rate facing individuals across Canada earning the national average market income.<sup>3</sup> In 2022, the national average market income is \$52,750.<sup>4</sup>

The lowest marginal tax for those earning the national average market income is in British Columbia at 7.70 percent. The highest rate is in Quebec at 16.62 percent. There is a clear division between provinces east of the Ontario-Quebec border and those to the west. Amongst the western provinces and Ontario, the marginal provincial rate at the national average income level ranged from 7.70 to 12.75 percent. In Quebec and Atlantic Canada marginal rates are higher, ranging from 13.80 percent in Prince Edward Island to 16.62 percent in Quebec.

Table 1 presents the marginal provincial tax rates at various levels of income, including

<sup>&</sup>lt;sup>3</sup> The provinces differ in their average incomes. In this study we use the national average income for our analysis. For simplicity, we abbreviate this to "average income earner," by which we refer to an earner at the national average rather than the average in any specific province.

<sup>&</sup>lt;sup>4</sup> The market income for 2022 was forecast based on the market income for families and unattached individuals in 2019 expressed in 2022 constant dollars.

Table 1: Provincial Marginal Tax Rates<sup>1</sup> at National Average Market Income and Various Income Levels, 2022

	Marginal tax rate (%) at average market income (\$52,750)	Marginal tax rate (%) at \$60,000	Marginal tax rate (%) at \$80,000	Marginal tax rate (%) at \$100,000
British Columbia	7.70	7.70	7.70	12.29
Alberta	10.00	10.00	10.00	10.00
Saskatchewan	12.50	12.50	12.50	12.50
Manitoba	12.75	12.75	17.40	17.40
Ontario	9.15	9.15	9.15	17.41
Quebec <sup>2</sup>	16.62	16.62	16.62	20.62
New Brunswick	14.82	14.82	14.82	16.52
Nova Scotia	14.95	16.67	16.67	17.50
Prince Edward Island	13.80	13.80	16.70	16.70
Newfoundland & Labrador	14.50	14.50	15.80	15.80

#### Notes:

Sources: CRA (2022); Revenu Quebec (2022); calculations by authors.

\$60,000, the national average income level (\$52,750), \$80,000, and \$100,000. Table 1 shows that for most middle-income levels, the general rule of lower marginal rates west of the Ontario-Quebec border and higher rates to the east of it hold. One important exception to this rule is Ontario at the \$100,000 level. At \$100,000 the provincial marginal tax rate in Ontario is more closely aligned with the eastern provinces. For Manitoba, provincial marginal tax rates at both \$80,000 and \$100,000 are comparable to the Atlantic provinces and Quebec.

The differences in the provincial marginal income tax rates have important implications for the take-home pay of individuals across the country who are earning the national average income. 5 At the average income, individuals face a federal marginal rate of 20.5 percent. This means that for Albertans, British Columbians, and Ontarians, the marginal provincial rate at this level of income is less than half of the fed-

<sup>(1)</sup> Personal income tax rates include surtaxes where applicable.

<sup>(2)</sup> For comparability, the Quebec tax rates are adjusted downwards due to the federal abatement. The federal abatement results in Quebecers paying less in federal taxes than other provinces. A direct comparison between statutory provincial rates, without adjusting for the abatement, can be misleading in terms of judging the differences in tax rates paid in Quebec versus other provinces.

<sup>&</sup>lt;sup>5</sup> Our analysis shows the marginal tax rate that individuals earning the average national income face. Of course, the average income in each province differs, so the average national income is a relatively higher income level (compared to the rest of the population) in Atlantic Canada than in Alberta or British Columbia. It is therefore noteworthy for this analysis that in all provinces the marginal provincial tax rate that an individual faces when earning the national and provincial average income is the same across Canada.

Table 2: Additional Income Needed For **Individual Earning National Average** Market Wage to Increase Take-Home Pay by \$100.

Province	Additional Income Needed				
British Columbia	\$139.3				
Alberta	\$143.9				
Saskatchewan	\$149.3				
Manitoba	\$149.8				
Ontario	\$142.1				
Quebec	\$159.0				
New Brunswick	\$154.6				
Nova Scotia	\$154.9				
Prince Edward Island	\$152.2				
Newfoundland & Labrador	\$153.8				

Sources: CRA (2022); Revenu Quebec (2022); calculations by authors.

eral rate. For Quebecers and Atlantic Canadians, however, provincial marginal taxes at this level of income are much closer to the federal rate.

Table 2 shows the varying level of pre-tax income required in each province based on the statutory marginal personal income tax rates that apply at the average level of income such that the worker would generate \$100 of aftertax income. This calculation includes the effect of the marginal federal income tax at this income level as well as the provincial income tax in each province.

In the province with the lowest marginal provincial income tax at this level, British Columbia, an individual would need to earn an additional \$139 in income to increase their take home pay by \$100. In the highest tax province at this income level, Quebec, this number is \$159. For New Brunswick and Nova Scotia, it is \$155. For Newfoundland & Labrador, it is \$154, and for PEI it is \$152.

These data mean that an individual earning the average market income in, for example, Nova Scotia, must earn \$16 more than a British Columbian to increase their take home pay by the same \$100. The gap between Nova Scotia and Ontario on this metric is \$13. For Alberta it is \$11.

These results show that differences in marginal tax rates across Canada do not only effect high-income individuals but, rather, that they significantly influence the amount of increased productivity or additional labour required by an individual in various provinces to increase their take home pay at the margin-by \$100.

### Comparing income levels required to face similar marginal tax rates across Canada

Another way to consider the differences in the provincial personal income tax rates that Canadians across the country face is to consider the different income levels at which an individual would face a similar provincial marginal income tax rate as a resident of each of the Maritime provinces.

Table 3 shows the marginal income tax rate that residents of each province face at several income levels. The table ranges from the average income level (\$52,750) at the bottom end to \$500,000 at the top end.

Table 3 shows that average income earners (column 1) in Atlantic Canada generally face provincial marginal tax rates that are comparable to those facing high-income earners (columns 4 to 6) elsewhere in the country, particularly in the three western-most provinces. Nova

Table 3: Provincial Marginal Tax Rates<sup>1</sup> at Various Income Levels, 2022

	Marginal tax rate (%) at average market income (\$52,750)	Marginal tax rate (%) at \$80,000	Marginal tax rate (%) at \$100,000	Marginal tax rate (%) at \$150,000	Marginal tax rate (%) at \$250,000	Marginal tax rate (%) at \$500,000
British Columbia	7.70	7.70	12.29	14.70	20.50	20.50
Alberta	10.00	10.00	10.00	12.00	14.00	15.00
Saskatchewan	12.50	12.50	12.50	14.50	14.50	14.50
Manitoba	12.75	17.40	17.40	17.40	17.40	17.40
Ontario	9.15	9.15	17.41	18.97	20.53	20.53
Quebec <sup>2</sup>	16.62	16.62	20.62	21.46	20.31	20.31
New Brunswick	14.82	14.82	16.52	17.84	20.30	20.30
Nova Scotia	14.95	16.67	17.50	21.00	21.00	21.00
Prince Edward Island	13.80	16.70	16.70	18.37	18.37	18.37
Newfoundland & Labrador	14.50	15.80	15.80	17.30	20.80	21.30

#### Notes:

Sources: CRA (2022); Revenu Quebec (2022); calculations by authors.

Scotia provides an illustrative example. An individual earning the national average income in Nova Scotia (\$52,750) faces a marginal tax rate of 14.95 percent. This almost identical to the marginal tax rate faced by an individual earning \$500,000 in Alberta, for instance (15 percent) and higher than that faced by an individual in Saskatchewan earning \$500,000 (14.50 percent). It is also higher than the marginal rate an individual earning \$150,000 in British Columbia faces (14.70 percent).

In New Brunswick, the average income earner faces a marginal tax rate of 14.82 percent. This is higher than the marginal rate faced by an individual earning \$500,000 in Saskatchewan (14.5 percent) and only slightly lower than in Al-

berta (15.0 percent—column 6 in table 3). The marginal rate those at the average income level in New Brunswick face is higher than the rate in both Alberta and Saskatchewan for individuals in those provinces earning \$250,000 (column 5 in table 3). The marginal rate for average income earners in New Brunswick is also higher than that facing British Columbians earning \$150,000 per year.

The average income earner in Newfoundland & Labrador faces a higher marginal income tax rate than an individual earning \$250,000 in Alberta and the same marginal rate as an individual earning \$250,000 in Saskatchewan. In fact, an average income earner in Newfoundland & Labrador faces the same marginal tax rate as an

<sup>(1)</sup> Personal income tax rates include surtaxes where applicable.

<sup>(2)</sup> For comparability, the Quebec tax rates are adjusted downwards due to the federal abatement. The federal abatement results in Quebecers paying less in federal taxes than other provinces. A direct comparison between statutory provincial rates, without adjusting for the abatement, can be misleading in terms of judging the differences in tax rates paid in Quebec versus other provinces.

Table 4: Provincial Tax Burden<sup>1</sup> at Various Income Levels, 2022

	Basic Personal Income Tax Exemption	Provincial Tax Burden at average market income (\$52,750)	Provincial Tax Burden at \$60,000	Provincial Tax Burden at \$80,000	Provincial Tax Burden at \$100,000
British Columbia	11,302	2,353	2,911	4,451	6,399
Alberta	19,369	3,338	4,063	6,063	8,063
Saskatchewan	16,615	3,914	4,820	7,320	9,820
Manitoba	10,145	4,959	5,883	8,693	12,173
Ontario	11,141	2,369	3,032	4,862	7,379
Quebec <sup>2</sup>	16,143	5,511	6,716	10,039	13,660
New Brunswick	10,817	4,463	5,538	8,502	11,640
Nova Scotia	8,481	5,318	6,416	9,750	13,142
Prince Edward Island	11,250	4,898	5,898	9,123	12,463
Newfoundland & Labrador	9,803	4,525	5,577	8,499	11,659

#### Notes:

Sources: CRA (2022); Revenu Quebec (2022); calculations by authors.

individual earning \$500,000 in Saskatchewan and slightly less than a resident of Alberta at that income level (column 6 in table 3).

In Prince Edward Island, the marginal rate facing an individual earning the average market income is somewhat lower than the other Atlantic provinces at 13.80 percent. This is below the marginal rate of taxpayers in any province earning \$150,000. However, taxpayers earning \$80,000 in PEI face a marginal rate (16.70 percent) that is higher than that facing taxpayers earning \$150,000 in any of the three westernmost provinces.

This section has shown that average income earners across Atlantic Canada face a similar marginal income tax rate to high-income residents of lower-tax provinces.

### Differences in total provincial tax burdens across Canada

Partly due to the marginal tax rates discussed in the previous section as well as different basic personal income tax exemptions and rate thresholds across the provinces, the overall provincial tax burden varies considerably across Canada. Table 4 illustrates this point. It

<sup>(1)</sup> Personal income tax include surtaxes where applicable. Only the basic personal exemption was deducted.

<sup>(2)</sup> For comparability, the Quebec tax rates are adjusted downwards due to the federal abatement. The federal abatement results in Quebecers paying less in federal taxes than other provinces. A direct comparison between statutory provincial rates, without adjusting for the abatement, can be misleading in terms of judging the differences in tax rates paid in Quebec versus other provinces.

presents the basic personal income tax exemption in each province and the total provincial tax burden paid by an individual earning the national average income in that jurisdiction as well as at \$60,000, \$80,000, and \$100,000.

Table 4 shows that the pattern for the differences in the overall provincial tax burden across Canada is similar to that described above for the marginal rate that the national average income earner faces. For example, the provincial tax burden for an individual at the average income level in British Columbia is \$2,353, \$2,369 in Ontario, and \$3,338 in Alberta. By comparison, the provincial tax burden in the Atlantic provinces at this income level ranges from \$4,463 in New Brunswick to \$5,318 in Nova Scotia.

At higher income levels, the provincial tax burden is higher in the Atlantic provinces than in Western Canada. At \$100,000 of income an individual in the three western-most provinces faces an overall provincial tax burden ranging from \$6,399 in British Columbia to \$9,820 in Saskatchewan. In Atlantic Canada, the provincial tax burden at this income level ranges from \$11,640 in New Brunswick to \$13,142 in Nova Scotia. At this income level, the total tax burden for Manitoba is more closely aligned with Atlantic Canada than with the western provinces.

This brief section has shown that the total provincial tax burden for middle-income earners in Atlantic Canada are much higher than in Western Canada, and at the thresholds shown below \$100,000 are also much higher than in Ontario.

#### Conclusion

Canada differs from other high-income countries in that it relies more heavily on sub-national governments to raise tax revenue. The provinces vary considerably in the rates and

applicable thresholds of their personal income tax systems. This bulletin has shown that individuals at the same level of income in different provinces often face materially different marginal tax rates.

An individual earning the average national income in Atlantic Canada or Quebec faces a marginal tax rate between 13.80 and 14.95 percent depending on their province of residence. By comparison, residents of Ontario and all provinces to the west of Ontario at this same income level face a marginal rate ranging from 7.70 percent to 12.75 percent.

This difference in marginal provincial tax rates effects the amount of additional income a person must earn to increase their take home pay by \$100. In Nova Scotia, for example, an individual must earn \$155 to increase their take home pay by \$100, compared to a low of \$139 in British Columbia.

We have also shown that average income earners in the Atlantic region face similar tax rates to high-income earners in lower tax jurisdictions, particularly Canada's three western-most provinces.

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