

HIGH TAX RATES ON TOP EARNERS IN ATLANTIC CANADA AND QUEBEC

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Executive Summary

Canadians earning high incomes in Atlantic Canada and Quebec generally face the highest effective tax rates in Canada. This is the case across three income levels above \$100,000 and four types of households—single individuals, couples with no children, couples with one child, and couples with two children. At the same time, these provinces generally have the lowest shares of high-income earners in the country.

In this study, we measure the personal income-tax burdens faced by these four types of families to understand differences among various provinces across the country. Calculating tax rates provides an overall picture of how each province compares—and competes—with other provinces with the income thresholds and tax rates it imposes on those earning high incomes in the province. The study measures effective income-tax rates on four family types: single (unattached) persons, couples with no children, couples with one child, and couples with two children. Combined with analysis of taxation at various income levels above \$100,000—12 categories in all—this provides a picture of the effective personal income-tax rates for a variety of households across the country.

Across all four family types, we observe a common finding: Atlantic Canada along with Quebec tend to maintain higher personal income-tax rates while Ontario and western Canada have the lower rates. Specifically, for unattached persons with income over \$100,000, Prince Edward Island has the highest effective tax rate at 33.9%, followed by Quebec at 33.7%. Newfoundland & Labrador is third at 33.1%, Nova Scotia fourth at 33.0%, and New Brunswick sixth at 31.4%.

For couples with no children and income over \$100,000, Quebec and the Atlantic provinces again rank at the top of the most-taxed provinces. Quebec is highest with an effective personal income-tax rate of 28.0%, followed by Newfoundland & Labrador at 26.2%, Prince Edward Island at 25.5%, and Nova Scotia at 24.7%. New Brunswick fares better in this category at 23.3%, which is the seventh highest in Canada.

When looking at couples with one child and income over \$100,000, Newfoundland & Labrador stands out as the Atlantic province with the highest rate, at 25.4% (only

Quebec is higher, at 26.5%). The three Maritime provinces are middle of the pack in this category, with Nova Scotia ranking fifth (22.9%), New Brunswick seventh (22.5%), and Prince Edward Island eighth (22.4%).

For families with two children and over \$100,000 in income, Quebec again ranks first at 27.0%, followed closely by Nova Scotia at 26.1%, and Newfoundland & Labrador at 25.3%. Prince Edward Island ranks sixth at 23.1%, while New Brunswick has the second-lowest rate in the country, at 21.9%.

Some themes emerge. Quebec applies the highest effective personal income-tax rates in Canada, closely followed by Newfoundland & Labrador, Nova Scotia, Prince Edward Island, and New Brunswick. The eastern-most provinces in Canada have higher effective personal income-tax rates than the western-most provinces in most cases examined.

The Atlantic Canadian provinces also have the lowest shares of high-income earners in Canada. In some cases, the differences are dramatic. For example, Prince Edward Island's share of all earners over \$100,000, at 15.5%, is nine percentage points lower than Alberta's, at 24.5%. There is also an east-west divide in the shares of households earning over \$100,000. Quebec and the four Atlantic Provinces have the lowest shares of households earning over this amount, while Ontario and the four western provinces have the highest shares. At 19.7%, Manitoba has the lowest share of earners over \$100,000 east of Quebec but this would still rank higher than Quebec and the Atlantic Provinces. Generally, provinces with higher effective personal income-tax rates have lower shares of Canadians earning high incomes.

These findings have important implications for the Atlantic provinces as they contemplate tax policy. The results here provide further evidence that personal income taxes—and particularly taxes on high-income earners—in the Atlantic provinces are not competitive with those in the rest of the country. The data also reveal that there are fewer high-income earners (relative to the all tax filers) in Atlantic Canada than in the rest of the country. These findings should re-ignite discussion of reforms of personal income tax and reductions across the region.

Introduction

Examining personal income-tax (PIT) rates and the differences among provinces is important for creating a better understanding of Canada's tax system. Specifically, this study measures effective tax rates on high-income earners across Canada, and compares these rates to the presence of high-income earners in each province.¹ In other words, are high personal income-tax rates correlated with the presence of Canadians earning high-incomes in places like Atlantic Canada, which has some of the highest statutory marginal personal income-tax rates of any jurisdiction in North America (Hill, Li, and Palacios, 2020)? At the same time, the region struggles with weak economic growth and has difficulty attracting and retaining people (Whalen, Li, and Eisen, 2021).

In this study, we present data on the current personal income-tax rates faced by those earning higher incomes in Atlantic Canada, compared to the rest of Canada. The study includes analyses at various income levels and across different types of families to provide a detailed picture of effective personal income-tax rates. Given that a high personal income-tax burden would, all else equal, suggest the region is less attractive to high-income earners, we will conclude by presenting data on the number of Canadians earning high-incomes in the region compared to the rest of Canada.

1. This study does not include a literature review, instead focusing on measurement of taxes faced by high income earners. Interested readers can consult, among other studies, Ohanian, Raffo, and Rogerson (2006) for how taxes affect work decisions; Milligan and Smart (2015) on responsiveness to tax changes; Ferede (2018) for effects on entrepreneurship.

Data Sources and Methodology

The data source for this analysis is the Social Policy Simulation Database and Model (SPSD/M) from Statistics Canada. The SPSPD/M is a micro-analysis system that includes detailed information drawn from a number of specialized databases for more than one million Canadians in over 300,000 households with approximately 600 variables included for each individual. The variables include earnings, taxes paid, transfers received from government, and demographic characteristics. It is the only database available in Canada that integrates taxes, government transfers, and other characteristics. The SPSPD/M currently relies on data from a number of surveys and other sources from 2017, which is then used to forecast to 2021.²

In this study, we focus primarily on effective personal income-tax rates rather than marginal personal income-tax rates. Atlantic Canada does have high *marginal* statutory tax rates at most income levels,³ that is, the tax rate applied to the next dollar of income earned. However, *effective* tax rates provide an overall picture of the total burden of personal income taxes. Within the calculation, we include taxable income, applicable federal and provincial personal income-tax rates,⁴ as well as federal and provincial tax credits to arrive at income tax payable, which is then compared to total taxable income for the household to calculate an effective tax rate (also sometimes known as an average rate).

Our modelling analyzes four types of families earning over \$100,000 per year: a single person, a couple with no children, a couple with one child, and a couple with two children. We also measure taxes based on different income levels. We then compare the personal income taxes faced by these various family types at various income levels in the Atlantic provinces against taxes in the rest of Canada,⁵ in order to gain insight into the competitiveness of the region's personal income taxes on earners with upper-middle to high incomes.

2. General description of SPSPD/M from Palacios, Li, Clemens, and Fuss, 2022. Detailed information and files for current version (29) are available here: <<https://www.statcan.gc.ca/en/microsimulation/spsdm/spsdm>>.

3. Marginal effective tax rates (METR) is another measure that incorporates the impact of transfers. While METRs are an important tool for analysis, they are beyond the scope of this paper.

4. Throughout this study, we use the combined provincial and federal personal income-tax rate. While federal rates on personal income tax apply uniformly across the country, provincial rates (and thresholds) vary. Therefore, when we refer to the effective personal income-tax rate in, for example, Nova Scotia, we mean the combined federal and provincial rate.

5. While this study does not provide comparisons to US states, it should be noted that other research has shown the Atlantic provinces to be among the jurisdictions in North America with the highest marginal rates on personal income taxes. Interested readers can consult Hill, Li, and Palacios, 2020; or Milke, 2016.

Effective Personal Income-Tax Rates at Various Income Levels and Family Types

1. Single unattached individuals

This section presents data on effective personal income-tax rates at various income levels for single (unattached) individuals. It includes data for three income ranges: \$100,001 to \$150,000, \$151,001 to \$250,000, and over \$250,000, as well as summary data for all earners over \$100,000. Statistics Canada's data indicates that approximately 10% of persons with employment income in Canada earn over \$100,000 per year (Statistics Canada, 2021b).

Table 1 provides various effective personal income-tax rates and rankings for unattached individuals. For unattached individuals in the \$100,001-to-\$150,000 range, the effective personal income-tax rate is 24.8% for Canada as a whole. The province with the highest effective tax rate in this category is Quebec, at 29.1%. Prince Edward Island ranks second highest, at 28.5%, followed by Nova Scotia, at 28.0%.

Table 1: Effective tax rates (%) with taxable income above \$100,000, single unattached individuals, by province, 2021

	\$100,001– \$150,000		\$150,001– \$250,000		above \$250,000		all above \$100,000	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank
Canada	24.8		30.2		39.5		30.8	
Newfoundland & Labrador	27.8	4	33.1	4	41.5	4	33.1	3
Prince Edward Island	28.5	2	34.3	2	41.5	5	33.9	1
Nova Scotia	28.0	3	32.9	5	42.8	1	33.0	4
New Brunswick	26.6	6	34.0	3	42.4	2	31.4	6
Quebec	29.1	1	35.1	1	41.7	3	33.7	2
Ontario	24.3	8	30.1	7	40.9	6	30.6	7
Manitoba	27.7	5	31.9	6	40.0	7	33.0	5
Saskatchewan	24.6	7	29.0	8	39.1	8	29.0	9
Alberta	22.8	9	27.5	10	36.9	10	28.5	10
British Columbia	22.1	10	27.8	9	37.9	9	30.4	8

Source: Authors' calculations using SPSPD/M 29.0.

and Newfoundland & Labrador, at 27.8%. New Brunswick is the most competitive Atlantic Canadian province in this category, ranking sixth highest in the country at 26.6%. British Columbia has the lowest effective rate for individuals in this income bracket at 22.1%.

In the \$150,001-to-\$250,000 range, the effective personal income-tax rate averages 30.2% across the country for unattached persons. Quebec again has the highest effective tax rate for this group, at 35.1%, followed by Prince Edward Island at 34.3%. New Brunswick ranks third highest (34.0%), followed by Newfoundland & Labrador (33.1%), and Nova Scotia (32.9%). The lowest effective tax rate in this category is Alberta, at 27.5%.

For those single (unattached) persons with taxable income over \$250,000, the effective personal income-tax rate across the country is 39.5%. Nova Scotia has the highest effective tax rate in this category at 42.8%. The province with the lowest effective tax rate in this category is again Alberta, at 36.9%. The Atlantic provinces occupy four of the top five positions in this category, with New Brunswick ranking second highest at an effective rate of 42.4%, Newfoundland & Labrador fourth, at 41.5%, and Prince Edward Island fifth, at 41.5%.

For all single (unattached) persons with an income over \$100,000, Prince Edward Island has the highest effective tax rate at 33.9%, followed by Quebec at 33.7%. Newfoundland & Labrador is third at 33.1%, Nova Scotia fourth at 33.0%, and New Brunswick sixth at 31.4%.

2. Couples with no children

For couples with no children, we again look at three different ranges of income (**table 2**). For those couples with no children with \$100,001-to-\$150,000 in income, the national effective tax rate on personal income is 16.4%. For these Canadians, Quebec is the province with the highest effective personal income-tax rate, at 19.8%; British Columbia has the lowest at 13.7%. The Atlantic provinces rank second (Nova Scotia, 19.6%), third (Newfoundland & Labrador, 19.0%), fifth (New Brunswick, 18.2%), and sixth (Prince Edward Island, 18.0%).

Moving to the \$150,001-to-\$250,000 income range, couples with no children face a national effective personal income-tax rate of 22.0%. The province with the highest effective tax rate is again Quebec at 26.4%, while British Columbia is again the lowest

Table 2: Effective tax rates (%) with taxable income above \$100,000, couple with no children, by province, 2021

	\$100,001– \$150,000		\$150,001– \$250,000		above \$250,000		all above \$100,000	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank
Canada	16.4		22.0		35.8		23.8	
Newfoundland & Labrador	19.0	3	25.6	2	36.8	3	26.2	2
Prince Edward Island	18.0	6	24.8	4	37.1	2	25.5	3
Nova Scotia	19.6	2	25.3	3	36.7	4	24.7	4
New Brunswick	18.2	5	23.4	6	35.0	7	23.3	7
Quebec	19.8	1	26.4	1	41.7	1	28.0	1
Ontario	15.4	9	21.3	8	36.1	5	23.5	6
Manitoba	19.0	4	24.6	5	35.3	6	24.2	5
Saskatchewan	16.5	7	21.6	7	30.6	10	21.2	9
Alberta	15.5	8	20.4	9	31.6	9	22.4	8
British Columbia	13.7	10	19.2	10	32.7	8	20.9	10

Source: Authors' calculations using SPSPD/M 29.0.

at 19.2%. Newfoundland & Labrador is the Atlantic province with the highest effective rate, at 25.6% (second highest in Canada), followed by Nova Scotia at 25.3% (third), Prince Edward Island at 24.8% (fourth), and New Brunswick at 23.4% (sixth).

For those couples with no children and incomes of \$250,000 and above, the national average rate is 35.8%. Quebec has the highest effective personal income-tax rate on income at this level, at 41.7%, followed by Prince Edward Island at 37.1%. Newfoundland & Labrador ranks third with an effective rate of 36.8%, while Nova Scotia ranks fourth at 36.7%, and New Brunswick seventh at 35.0%. The province with the lowest effective rate in this category is Saskatchewan, at 30.6%.

For couples with no children and income over \$100,000, Quebec⁶ and the Atlantic provinces—save for New Brunswick—again rank as the most-taxed provinces. Quebec

6. Within SPSPD/M, Quebec's tax abatement is dealt with as follows: "For Quebec residents, the amount of Quebec Tax Abatement needed to reduce federal taxes to 0 is applied (*imqtaa*) and any excess Quebec Tax Abatement amounts are refunded (see *imqtar*)".

imposes an effective personal income-tax rate of 28.0%, followed by Newfoundland & Labrador at 26.2%, Prince Edward Island at 25.5%, and Nova Scotia at 24.7%. New Brunswick fares better in this category, ranking seventh at 23.3%. Again, Quebec along with Atlantic Canada generally impose higher personal income-tax burdens than Ontario and western Canada on couples with no children earning higher incomes.

3. Couples with one child

Table 3 displays calculations of effective tax rates for couples with one child, again using three ranges of income. For this family type, those with incomes between \$100,001 and \$150,000 face a national effective personal income-tax rate of 17.2%. Quebec has the highest rate, at 20.1%. The Atlantic provinces have three of the highest four rates of the provinces in this category, with Nova Scotia ranked second (20.1%), Newfoundland & Labrador third (18.7%), and New Brunswick fourth (18.4%). Prince Edward Island has the sixth-highest effective rate, at 17.4%, while the province with lowest rate is British Columbia, at 14.3%.

For couples with one child and income in the \$150,001-to-\$250,000 range, the national effective personal income-tax rate on income is 22.2%. Prince Edward Island is the province with the highest effective personal income-tax rate, at 25.7%. Quebec ranks second, at 25.6%, Nova Scotia is third, at 25.3%, and Newfoundland & Labrador fourth, at 24.7%. New Brunswick ranks sixth, at 23.8%, while the lowest province is British Columbia, at 18.9%.

Couples with one child and income exceeding \$250,000 are estimated to face a national average effective tax rate of 34.8%. Quebec imposes the highest effective tax rate in this category, at 37.6%, while Alberta is the lowest at 29.9%. Newfoundland & Labrador ranks second, at 37.6%, followed by New Brunswick at 36.9%. Prince Edward Island (34.0%, sixth), and Nova Scotia (31.3%, eighth) are more competitive in this category.

When looking at couples with one child and income over \$100,000, Newfoundland & Labrador stands out as the Atlantic province with the highest rate, at 25.4% and only Quebec is higher at 26.5% in the entire country. The three Maritime provinces are middle of the pack in this category, with Nova Scotia ranking fifth (22.9%), New Brunswick seventh (22.5%), and Prince Edward Island eighth (22.4%). The east-west pattern is less pronounced for couples with one child. Quebec and Newfoundland & Labrador maintain fairly high personal income-tax rates compared to British Columbia and Saskatchewan, which maintain the lowest. However, most of the remaining provinces, including the Maritime provinces are clustered together in between with rates ranging from 22.4% in Prince Edward Island (ranked eighth) to Ontario at 24.6% (third).

Table 3: Effective tax rates (%) with taxable income above \$100,000, couple with one child, by province, 2021

	\$100,001– \$150,000		\$150,001– \$250,000		above \$250,000		all above \$100,000	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank
Canada	17.2		22.2		34.8		24.0	
Newfoundland & Labrador	18.7	3	24.7	4	37.6	2	25.4	2
Prince Edward Island	17.4	6	25.7	1	34.0	6	22.4	8
Nova Scotia	20.1	2	25.3	3	31.3	8	22.9	5
New Brunswick	18.4	4	23.8	6	36.9	3	22.5	7
Quebec	20.1	1	25.6	2	37.6	1	26.5	1
Ontario	16.4	7	21.5	8	35.7	5	24.6	3
Manitoba	18.2	5	24.5	5	35.9	4	23.2	4
Saskatchewan	16.2	8	21.8	7	30.5	9	20.7	9
Alberta	15.8	9	21.1	9	29.9	10	22.5	6
British Columbia	14.3	10	18.9	10	32.3	7	20.3	10

Source: Authors' calculations using SPSPD/M 29.0.

4. Couples with two children

Finally, the effective personal income-tax rates for families with two children are displayed in **table 4**, again separated by three ranges of income. For those families with income in the \$100,001-to-\$150,000 range, the province imposing the highest effective personal income-tax rate is Quebec, at 20.9%. The lowest ranking province is British Columbia, at 15.3%, while the national average is 18.2%. Nova Scotia is the Atlantic province with the highest effective personal income-tax rate, at 19.7%, second in Canada. Newfoundland & Labrador ranks fourth, at 19.4%, New Brunswick fifth, at 18.6%, and Prince Edward Island sixth, at 18.5%.

For families with two children and income in the \$150,001-to-\$250,000 range, the national average effective tax rate is 23.0%. Quebec is the province with the highest effective rate at 27.1%; British Columbia has the lowest at 20.4%. Prince Edward Island ranks second at 26.0%, with Nova Scotia third, at 25.7%, and Newfoundland & Labrador fourth at 25.1%. New Brunswick ranks sixth, at 24.3%.

Table 4: Effective tax rates (%) with taxable income above \$100,000, couple with two children, by province, 2021

	\$100,001– \$150,000		\$150,001– \$250,000		above \$250,000		all above \$100,000	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank
Canada	18.2		23.0		35.1		24.6	
Newfoundland & Labrador	19.4	4	25.1	4	35.3	5	25.3	3
Prince Edward Island	18.5	6	26.0	2	33.0	8	23.1	6
Nova Scotia	19.7	2	25.7	3	37.0	2	26.1	2
New Brunswick	18.6	5	24.3	6	33.3	7	21.9	9
Quebec	20.9	1	27.2	1	38.5	1	27.0	1
Ontario	17.6	7	22.3	7	35.4	4	24.9	4
Manitoba	19.4	3	24.4	5	36.5	3	24.8	5
Saskatchewan	16.7	9	21.1	8	30.1	10	21.1	10
Alberta	16.8	8	21.0	9	31.2	9	22.8	7
British Columbia	15.3	10	20.4	10	34.2	6	22.7	8

Source: Authors' calculations using SPSPD/M 29.0.

Families with two children and income exceeding \$250,000 face a national average effective tax rate of 35.1%. In this category, Quebec has the highest effective personal income-tax rate at 38.5%, while Saskatchewan is the lowest at 30.1%. Nova Scotia is the highest taxed Atlantic province, at 37.0% (second nationally), followed by Newfoundland & Labrador (35.3%, fifth), New Brunswick (33.3%, seventh), and Prince Edward Island (33.0%, eighth)

For families with two children and over \$100,000 in income, Quebec again ranks first at 27.0%, followed closely by Nova Scotia at 26.1%, and Newfoundland & Labrador at 25.3%. Prince Edward Island ranks sixth at 23.1%, while New Brunswick actually has the second-lowest rate in the country, at 21.9%. The east-west divide is more pronounced for couples with two children than for couples with a single child. Excluding Manitoba in western Canada and New Brunswick and, to a lesser extent, Prince Edward Island in eastern Canada, the higher personal income-tax rates exist in Quebec and eastern Canada and the lower rates in Ontario and western Canada.

Having looked at various income ranges and family types, we see some general themes emerge. In general, Quebec tends to have the highest effective personal income-tax rates in Canada, ranking first or second in every family type for earners over \$100,000. Quebec is followed by Newfoundland & Labrador which ranks second or third in each of those categories. Nova Scotia ranks fourth, fourth, sixth, and second. Prince Edward Island is more mixed, depending on the family type, ranking first, third, eighth, and sixth. New Brunswick is more competitive, ranking sixth, seventh, seventh, and ninth. The provinces on the eastern side of Canada have higher effective personal income-tax rates than those on the western side in most cases examined here.

High Effective Personal Income Tax Rates Driven by Low Thresholds

Part of the reason for Atlantic Canada's high effective personal income-tax rates is the relatively low income thresholds at which higher statutory tax rates apply. For example, it is not only that the Atlantic provinces may have higher marginal tax rates at various levels of income, but that those tax rates apply at lower levels of income. Taken together, these two dynamics result in higher effective income-tax rates.

In order to add to the data on effective income tax rates, we will review these income thresholds and applicable tax rates. **Table 5** provides information on the lowest and highest applicable income thresholds for statutory personal income taxes across provinces, which sheds light on differences between the provinces.

Nova Scotia has the lowest threshold for when the next (second) personal income-tax rate applies: \$29,590. In other words, Nova Scotia has the lowest amount of income taxed at the lowest personal income-tax rate. Prince Edward Island has the second lowest threshold at \$31,894 and Newfoundland & Labrador ranks fourth (\$38,081). New Brunswick ranks sixth of the 10 provinces for the level of income taxed at the lowest personal income-tax rate (\$43,835). For comparison, Alberta has the highest income threshold at \$131,220 for its lowest personal income-tax rate.

The second factor to consider is the applicable personal income-tax rate. The Atlantic provinces are in the middle of Canadian provinces for the statutory tax rate applied. Specifically, Newfoundland & Labrador has the lowest rate in Atlantic Canada at 8.70% (third lowest in Canada), followed by Nova Scotia at 8.79% (fourth lowest), New Brunswick at 9.68% (fifth), and Prince Edward Island at 9.80% (sixth). Quebec applies the highest rate in its lowest bracket, at 15.0%, while Ontario applies the lowest rate, at 5.05%.

Notable differences emerge, however, when looking at the range of income to which these lowest rates are applied. For example, Prince Edward Island's rate of 9.8% may appear comparable to Alberta's rate of 10.0%. Yet, in Alberta, this rate applies on the first \$131,220 of income, whereas in Prince Edward Island, it only applies on the first \$31,984 of income. In general, the Atlantic provinces apply their lowest rate to a limited range of income compared to the rest of the country.

Table 5: Lowest and highest thresholds (\$) and applicable personal income-tax rates (%), by province, 2021

	Lowest Threshold			Highest Threshold		
	Applies over	Rank	Tax rate	Applies over	Rank	Tax rate
Newfoundland & Labrador	38,081	4	8.70	190,363	7	18.30
Prince Edward Island	31,984	2	9.80	63,959	1	16.70
Nova Scotia	29,590	1	8.79	150,000	5	21.00
New Brunswick	43,835	6	9.68	162,383	6	20.30
Quebec	45,105	7	15.00	109,755	3	25.75
Ontario	45,142	8	5.05	220,000	8	13.16
Manitoba	33,723	3	10.80	72,885	2	17.40
Saskatchewan	45,677	9	10.50	130,506	4	14.50
Alberta	131,220	10	10.00	314,928	10	15.00
British Columbia	42,184	5	5.06	222,420	9	20.50

Sources: Government of Canada, 2022; Revenu Quebec, 2022.

Differences also emerge at the thresholds for the highest statutory tax rates across the country. There is a wide range of income thresholds for the top statutory rate, with Prince Edward Island applying its top personal income-tax rate at the lowest income threshold of \$63,969, while Alberta applies its top personal tax rate at the highest level of income, \$314,928. Newfoundland & Labrador (\$190,363), New Brunswick (\$162,383), and Nova Scotia (\$150,000) and have the seventh, sixth, and fifth lowest.

The Atlantic provinces apply top statutory marginal tax rates that are generally higher than other provinces. Specifically, Nova Scotia's tax rate ranks second highest, at 21.00%, New Brunswick's, third, at 20.30%; the tax rate in Newfoundland & Labrador ranks fourth, at 18.30%, and in Prince Edward Island, sixth, at 16.70%. The result is a larger share of income taxed at higher rates in Atlantic Canada. For example, a person making just \$65,000 in Prince Edward Island has already reached the province's top marginal tax rate of 16.7%. In comparison, there is no threshold at which Alberta applies a rate that high (the highest rate is 15.0% and only applies after income has reached \$314,928).

Share of High Income Earners by Province

Having established that Canadians earning high incomes in Atlantic Canada generally face some of the highest effective personal income-tax rates in the country, we now look at the numbers of high earners in the region as a share of all households (adjusted for population). This provides insight into whether the region has a lower share of high-income earners relative to the rest of the country. The main focus of this section is to compare the share of high-income earners in each province to test the extent to which it is correlated with the findings from the previous section showing that Quebec and the Atlantic provinces tend to have higher personal income-tax rates than Ontario and western Canada.

The SPSD/M is again used to estimate the number of households in different income ranges for each province as well as estimates for Canada as a whole.⁷ This study defines high earners as those individuals and families earning over \$100,000. All four Atlantic provinces have shares of households in the \$100,001-to-\$150,000 range that are below the national average (**table 6**). In fact, the four Atlantic provinces are the four lowest provinces in the country by this measure, with Nova Scotia ranking last, followed by New Brunswick, Newfoundland & Labrador, and Prince Edward Island. Put differently, the highest share in Atlantic Canada, New Brunswick (11.2%) is lower than the lowest share in western Canada, which is Manitoba (12.5%).

Similar results follow at the two highest ranges of income, \$150,001 to \$250,000 and \$250,000 and above. The three western-most provinces—British Columbia, Alberta, and Saskatchewan—plus Ontario have the highest shares of their population in both these income ranges. The Maritime provinces occupy the bottom three positions at both income ranges. Newfoundland & Labrador fares slightly better, ranking seventh and fourth at each level.

When looking at summary data, which combines all three ranges discussed above, we see similar results. Prince Edward Island has the smallest share of families with a total income above \$100,000, New Brunswick has the second lowest, and Nova Scotia third lowest among all provinces. Quebec is next, followed by Newfoundland & Labrador. These data show that the Atlantic provinces are among those having the lowest share in Canada of families with an income over \$100,000.

7. One limitation of our analysis is that it does not adjust for age differences. For example, we know that age and income are linked, so we would expect provinces with younger populations to have lower shares of those earning higher incomes. However, this type of calculation is beyond the scope of this study and, in this section, we simply present estimates of the number of these earners.

Table 6: Number (000s) and share (%) of individuals and families by taxable-income group, by province, 2021

	\$100,001– \$150,000			\$150,001– \$250,000		
	Number	Share	Rank	Number	Share	Rank
Canada	2571.2	11.8		1474.8	6.8	
Newfoundland & Labrador	32.3	10.9	8	15.6	5.3	7
Prince Edward Island	8.7	9.3	10	4.3	4.6	10
Nova Scotia	63.8	11.1	7	27.6	4.8	8
New Brunswick	49.0	11.2	6	20.6	4.7	9
Quebec	543.9	10.8	9	269.5	5.3	6
Ontario	1001.6	11.5	5	643.0	7.4	3
Manitoba	90.4	12.5	4	40.4	5.6	5
Saskatchewan	81.4	13.4	2	48.6	8.0	2
Alberta	310.9	12.6	3	210.3	8.5	1
British Columbia	389.3	13.4	1	194.9	6.7	4

	above \$250,000			all above \$100,000		
	Number	Share	Rank	Number	Share	Rank
Canada	501.9	2.3		4547.9	20.8	
Newfoundland & Labrador	6.5	2.2	4	54.4	18.4	6
Prince Edward Island	1.4	1.5	8	14.4	15.5	10
Nova Scotia	7.7	1.3	9	99.1	17.2	8
New Brunswick	5.2	1.2	10	74.8	17.1	9
Quebec	78.4	1.6	7	891.8	17.6	7
Ontario	217.1	2.5	3	1861.7	21.5	4
Manitoba	11.4	1.6	6	142.2	19.7	5
Saskatchewan	10.5	1.7	5	140.5	23.1	2
Alberta	85.0	3.4	1	606.2	24.5	1
British Columbia	78.5	2.7	2	662.7	22.8	3

Source: Authors' calculations using SPSPD/M 29.0.

Conclusion

The data presented show that the four Atlantic Canadian provinces generally impose higher effective personal income-tax rates than the Canadian average across various high-income thresholds and across various family types, including unattached individuals, couples with no children, couples with one child, and couples with two children. In other words, Atlantic Canada's personal income-tax burden is consistently above average for Canadians earning high incomes. The region also generally has, along with Quebec, the lowest share of Canadians earning above \$100,000 compared to Central and, particularly, Western Canada.

References

- Baylor, Maximilian, and Louis Beauséjour (2004). *Taxation and Economic Efficiency: Results from a Canadian CGE Model*. Working Paper 2004-10. Department of Finance. <https://publications.gc.ca/collections/collection_2009/fin/F21-8-2004-10E.pdf>, as of March 7, 2022.
- Broten, Laurel. C (2014). *Charting a Path for Growth: Nova Scotia Tax and Regulatory Review*. Province of Nova Scotia. <https://novascotia.ca/finance/docs/tr/Tax_and_Regulatory_Review_Nov_2014.pdf>, as of March 7, 2022.
- Clemens, Jason, and Niels Veldhuis, and Milagros Palacios (2007). *Tax Efficiency: Not All Taxes Are Created Equal*. Studies in Economic Prosperity. Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/TaxEfficiency.pdf>>, as of March 7, 2022.
- Dahlby, Bev, and Ergete Ferede (2009). Tax Cuts, Economic Growth, and the Marginal Cost of Public Funds for Canadian Provincial Governments. <https://www.researchgate.net/publication/228423824_Tax_Cuts_Economic_Growth_and_the_Marginal_Cost_of_Public_Funds_for_Canadian_Provincial_Governments>, as of March 7, 2022.
- Ergete Ferede (2018). *The Effects on Entrepreneurship of Increasing Provincial Top Personal Income Tax Rates in Canada*. Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/effects-of-personal-income-tax-on-entrepreneurship-in-canada.pdf>>, as of March 7, 2022.
- Fuss, Jake, and Tegan Hill (2021). *Measuring Progressivity in Canada's Tax System*. Fraser Institute. <<https://www.fraserinstitute.org/studies/measuring-progressivity-in-canadas-tax-system>>, as of March 7, 2022.
- Government of Canada (2021). Canadian Income Tax Rates for Individuals – Current and Previous Years. <<https://www.canada.ca/en/revenue-agency/services/tax/individuals/frequently-asked-questions-individuals/canadian-income-tax-rates-individuals-current-previous-years.html>>, as of March 7, 2022.
- Government of Canada (2022). *Canadian Income Tax Rates for Individuals – Current and Previous Years*. <<https://www.canada.ca/en/financial-consumer-agency/services/financial-toolkit/taxes/taxes-2/6.html>>, as of March 7, 2022.

Hill, Tegan, Nathaniel Li, and Milagros Palacios (2020). *Canada's Rising Personal Tax Rates and Falling Tax Competitiveness, 2020*. Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/canadas-rising-personal-tax-rates-and-falling-tax-competitiveness-2020.pdf>>, as of March 7, 2022.

Jorgensen, Dale W., and Kun-Young Yun (1991). The Excess Burden of Taxation in the United States. *Journal of Accounting and Finance* 6: 487–508.

Kleven, Henrik, Camille Landais, Mathilde Munoz, and Stefanie Stantcheva (2020). Taxation and Migration: Evidence and Policy Implications. *Journal of Economic Perspectives* 34, 2 (Spring): 119–142. <<https://pubs.aeaweb.org/doi/pdf/10.1257/jep.34.2.119>>, as of March 7, 2022.

McBride, William (2012). *What Is the Evidence on Personal Income Taxes and Economic Growth?* Tax Foundation. <<https://taxfoundation.org/what-evidence-taxes-and-growth/>>, as of March 7, 2022.

Milke, Mark (2016). *I'll Take New England Any Day! Tax Competitiveness: Atlantic Canada and New England Compared*. Atlantic Institute for Market Studies. <<https://www.aims.ca/wp-content/uploads/2016/03/REPORT-Tax-Study-New-England-vs.-Atlantic-Canada.pdf>>, as of March 7, 2022.

Miligan, Kevin, and Michael Smart (2015). *Provincial Taxation of High Incomes: The Effects on Progressivity and Tax Revenue*. Institute for Research on Public Policy. <<https://irpp.org/research-studies/provincial-taxation-of-high-incomes/>>, as of March 7, 2022.

Murphy, Robert, Jason Clemens, and Niels Veldhuis (2013). *The Economic Costs of Increased Marginal Tax Rates in Canada*. Fraser Institute. <<https://www.fraserinstitute.org/studies/economic-costs-of-increased-marginal-tax-rates-in-canada>>, as of March 7, 2022.

Ohanian, Lee, Andrea Raffo, and Richard Rogerson (2006). *Longterm Changes in Labor Supply and Taxes: Evidence from OECD Countries, 1956–2004*. NBER working paper 12786. National Bureau of Economic Research.

Organisation for Economic Co-Operation and Development [OECD] (2021). *Revenue Statistics 2020 – Canada*. OECD Centre for Tax Policy and Administration. <<https://www.oecd.org/tax/revenue-statistics-canada.pdf>>, as of March 7, 2022.

- Palacios, Milagros, Nathaniel Li, Jason Clemens, and Jake Fuss (2022). *Measuring the Impact of Federal Personal Income Tax Changes on Middle Income Canadian Families since 2015*. Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/measuring-impact-federal-PIT-changes-on-middle-income-families-since-2015.pdf>>, as of March 7, 2022.
- Palacios, Milagros, Jake Fuss, and Nathaniel Li (2021). *Canadians Celebrate Tax Freedom Day on May 24, 2021*. Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/tax-freedom-day-2021.pdf>>, as of March 7, 2022.
- Picard, Andre (2017). Ottawa's new tax measures unfairly target many doctors. *Globe and Mail* (August 1). <<https://www.theglobeandmail.com/opinion/ottawas-new-tax-measures-unfairly-target-many-doctors/article35843365/#:~:text=About%2060%20per%20cent%20of,independent%20contractors%2C%20not%20state%20employees>>, as of March 7, 2022.
- Revenue Quebec (2022). *Income Tax Rates*. <<https://www.revenuquebec.ca/en/citizens/income-tax-return/completing-your-income-tax-return/income-tax-rates/>>, as of March 7, 2022.
- Saez, Emmanuel (2014). Taxes and the International Mobility of Talent. *The Reporter*, No. 2 (June). National Bureau of Economic Research. <<https://www.nber.org/reporter/2014number2/taxes-and-international-mobility-talent>>, as of March 7, 2022.
- Schmidheiny, Kurt, and Michaela Slotwinski (2018). *Tax-induced Mobility: Evidence from a Foreigners' Tax Scheme in Switzerland*. University of Basel. <https://eml.berkeley.edu/~webfac/auerbach/Schmidheiny_Slotwinski_2018.pdf>, as of March 7, 2022.
- Statistics Canada (2015). *Revising Statistics Canada's Low Income Measure (LIM)*. Appendix A: Glossary. <<https://www150.statcan.gc.ca/n1/pub/75f0002m/2010004/app-ann-eng.htm>>, as of March 7, 2022.
- Statistics Canada (2021a). Table 11-10-0055-01. High Income Tax Filers in Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1110005501>>, as of March 7, 2022.
- Statistics Canada (2021b). Table 11-10-0240-01. Distribution of employment income of individuals by sex and work activity, Canada, provinces and selected census metropolitan areas. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110024001>>, as of March 7, 2022.

Whalen, Alex, and Steve Globerman (2020). *The Changing Size of Government in Canada, 2007–2018*. Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/changing-size-of-government-in-canada-2007-2018.pdf>>, as of March 7, 2022.

Whalen, Alex, Nathaniel Li, and Ben Eisen (2021). *Voting with Their Feet: Migration in Atlantic Canada*. Fraser Institute. <<https://www.fraserinstitute.org/studies/voting-with-their-feet-migration-in-atlantic-canada>>, as of March 7, 2022.

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