

Impact of Federal Income Tax Changes on Canadian Families in the Bottom 20 Percent of Earners, 2022

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SUMMARY

- Since coming into office in 2015, Prime Minister Justin Trudeau's government has made several major changes to the federal personal income tax system. This report examines how those tax changes affect Canadian families with children, focusing particularly on families who are in the bottom 20 percent of income earners.
- Among the bottom 20 percent of income-earning families with children, 384,000 (of a total 636,000) are paying more federal personal income tax following the changes. Specifically, 60 percent of families who are in the bottom 20 percent of earners are paying more—\$233 more on average.
- Families in the bottom 20 percent of earners benefitted very little from the federal government's reduction to the second lowest personal income rate. This is because most of the individuals in lower income families earn too little income to qualify for the tax reduction, which starts at incomes of \$47,630 (2019).
- Conversely, many families in this group pay more income tax because they no longer

benefit from income splitting and other tax provisions (including tax credits for children's fitness, children's art, public transit, and education and textbooks), which the federal government eliminated.

- For the 60 percent of families in the bottom 20 percent who are paying more federal personal income tax due to federal changes, the tax rate cut amounts to an average tax reduction of just \$18. By contrast, the elimination of income splitting represents an average increase of \$182, while the elimination of other tax credits amounts to an average tax increase of \$82.
- In addition, these changes adversely affected couples with children in the bottom 20 percent of income earners far more than single Canadians with children. Specifically, 75 percent of couples with children in the bottom 20 percent paid higher federal personal income taxes in 2019 due to the tax changes compared to 31 percent of single Canadians with children in that earning group. This is largely due to the elimination of the tax credit for income splitting, which single individuals do not qualify for.

Introduction

Since coming into office in 2015, Prime Minister Justin Trudeau's government has made several major changes to the federal personal income tax system.¹ One of these changes reduced the federal personal income tax that Canadian families pay, while other changes increased the income taxes that many of the same families pay. Previous studies examined the effects of the federal income tax changes. Both Lammam et al. (2017a) and Palacios et al. (2022) showed that, despite the federal government's rhetoric about cutting federal personal income taxes on the middle class, when taken as a whole, the changes resulted in the vast majority of middle-income families with children paying more federal personal income tax.

While both Lammam et al. (2017a) and Palacios et al. (2022) focused on the effect of federal changes on middle income families, that research uncovered an additional concern emanating from the federal government's income tax changes—a finding that has received little attention thus far. Specifically, many families who are in the bottom 20 percent of earners may also be paying higher federal income taxes as a result of Ottawa's tax changes. This essay measures the number and percentage of families with children in the bottom 20 percent of earners who are paying higher personal income taxes due to the tax changes introduced in 2015, and how much more they're paying as of 2019.

The first section briefly outlines the major changes to the federal income tax system that the government introduced after coming to power and explains how the impact of these changes is measured. The second section uses Statistics Canada's Social Policy Simulation Da-

¹ This bulletin is an update to Lammam, Palacios, and MacIntyre (2017b).

tabase and Model (SPSD/M) to calculate how the tax changes, when taken together, affect the amount of federal personal income tax that lower-income Canadian families pay.

How the effect of federal income tax changes is measured

The method for measuring the overall effect of federal income tax changes is similar to the approach used by Lammam et al. (2017a and 2017b) and Palacios et al. (2022). In this essay, the term "families" means families who have young children, which includes couples with children and singles with children.²

The focus of this report is the impact of federal income tax changes on families who are in the bottom 20 percent of earners. The analysis includes the effect of the cut to the second lowest federal income tax rate (from 22 to 20.5 percent) and the elimination of the following credits: income splitting for couples with young children, children's fitness tax credit, children's art tax credit, education tax credit, textbook tax credit, and the public transit tax credit.³

The analysis uses Statistics Canada's SPSPD/M to calculate the percentage of Canadian families with children who are in the bottom 20 percent of income earners that pay higher personal income taxes due to the federal govern-

² This definition corresponds with Statistics Canada's definition of a "nuclear family." According to SPSPD/M, a "nuclear family consists of a head, their spouse (if there is one), and their children under the age of 18, living together in the same dwelling"

³ The calculations also account for the new, higher top tax rate of 33 percent on incomes above \$210,371 (2019 tax year). However, the bottom 20 percent of income-earning families are not directly affected by this tax change, which means that this tax increase is not relevant to the main analysis of this paper.

ment's tax changes since 2015. The SPSD/M is a micro-analysis system that includes detailed information drawn from a number of specialized databases for more than 1 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, transfers, and other characteristics. The SPSD/M currently relies on data from a number of surveys and other sources from 2016, which is then used to forecast to 2019. The calculation specifically compares the amount of personal income tax individual families would have paid without any changes compared to what they are now expected to pay after the federal tax changes. The calculations are for the 2019 tax year.

The main difference between this report and both Lammam et al. (2017a) and Palacios (2022), which analyzed the effects of federal tax changes on middle-class families, is that the sample group for this study includes only those with taxable returns—that is, it excludes non-taxable returns.⁴ A non-taxable return means that the tax filer is not paying income tax because the value of the tax credits and deductions they claim is equal to or greater than the amount of income tax they would have owed. For example, every taxpayer receives the federal basic personal amount, which means the first \$12,069 (2019) of earned income is tax exempt. Someone making \$12,069 or less in 2019 would not have to pay any federal personal income tax. An individual making more than this may still not pay income tax if they claim or receive other tax credits. A family in which at least one tax

⁴ As was done in Lammam et al. (2017a and 2017b) and Palacios et al. (2022), families with a member over age 65 are excluded.

filer has a taxable return is included in the analysis. If none of the family members files a taxable return, they are excluded.⁵ Families that file taxable returns are the focus of this report because they are more likely to be affected by the changes than families that do not pay personal income taxes.

All families with children (and taxable returns) are divided into five income groups (or quintiles), each representing 20 percent of families with children that pay income taxes. The bottom 20 percent of income-earning families are the focus of this analysis. Families in this group recorded income of between \$1 and \$70,991.⁶

The effect of federal personal income tax changes on families in the bottom 20 percent

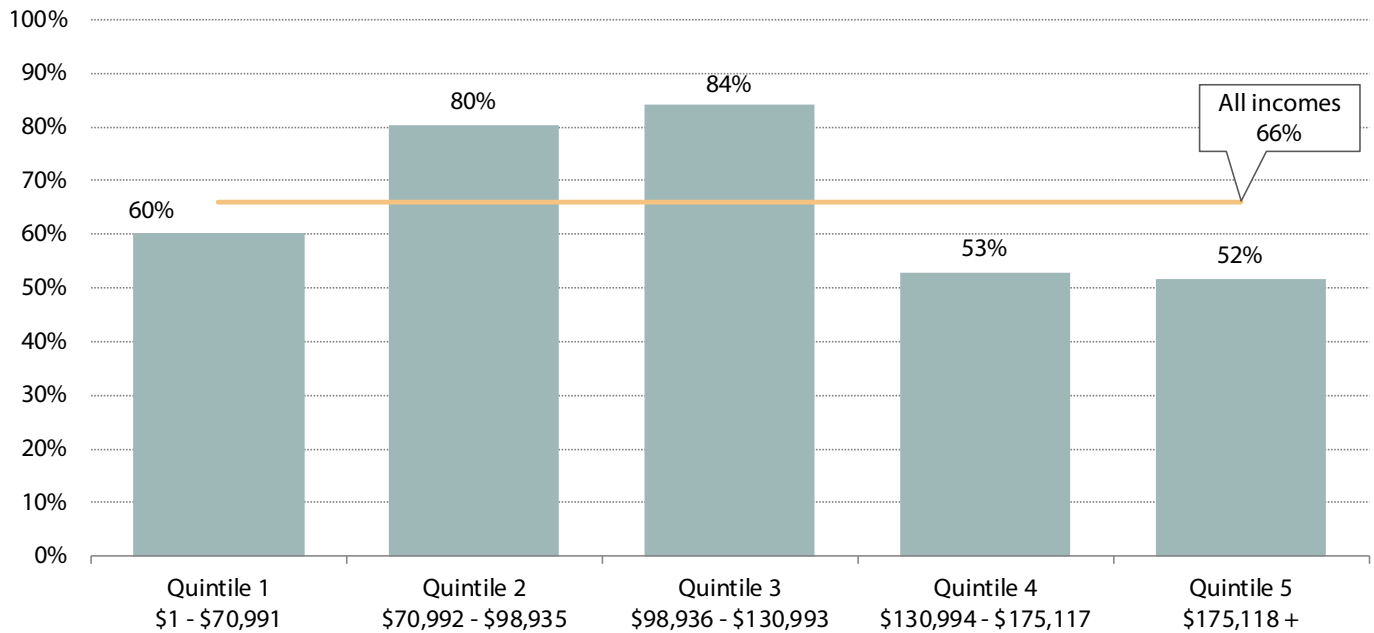
This section discusses the results, focusing on families in the bottom 20 percent (the first quintile of income earning families). Figure 1 shows the percentage of taxpaying families with children, by quintile, who are paying higher income taxes due to the federal government's tax changes.

Among the 636,000 families in the bottom 20 percent of income earners, 384,000 are paying more in federal personal income tax due to Ottawa's tax changes (see table 1). Specifically, 60 percent of families in the bottom 20 percent

⁵ Of families with children and income of \$70,991 or below, we estimate 53.0 percent filed taxable returns in 2019.

⁶ Note that due to differences in the samples used, the income ranges for each quintile differ from Palacios et al. (2022). The range for lower income families is wider than in the Palacios et al. (2022) study for the sample of taxable returns in part because the range excludes families with relatively low income that do not pay personal income taxes.

Figure 1: Percentage of Families with Children Paying Higher Personal Income Taxes



Note: The sample group includes only those filing taxable returns—that is, it excludes those filing non-taxable returns. A non-taxable return means that the tax-filer is not paying income taxes because the value of the tax credits and deductions they claim is equal to or greater than the amount of income tax they would have owed. A family in which at least one tax-filer has a taxable return is included in the analysis. If none of the family members file a taxable return, then they are excluded.

Source: Calculations by authors based on Statistics Canada’s SPSPD/M (version 28.1).

are paying higher federal personal income taxes. On average, these families are paying \$233 more federal income tax (see table 2).

By comparison, among all taxpaying families, 66 percent are paying higher federal personal income taxes. This means that families in the bottom 20 percent are almost as likely to be paying higher federal personal income taxes as the general population of taxpaying families with children.

Perhaps more striking, families in the bottom 20 percent are slightly more likely to be paying higher federal personal income taxes than families in the top 20 percent (the highest income quintile). Indeed, relative to other income

groups, a smaller percentage of upper income earning families (52 percent) are paying higher federal personal income taxes due to the tax changes implemented by Ottawa.⁷

⁷ Given that the income threshold for the top income quintile is \$175,118, many families in the top 20 percent of earners are not paying the new, higher top personal income tax rate of 33 percent, which applies to marginal income over \$210,371 (2019). Note that personal income taxes are applied to individual income and not family income. This means that even if a family’s income is over \$210,371, the family may still not be paying the top personal income tax rate if the individual members of the family have incomes below this level.

Table 1: Number and Percentage of Bottom 20 Percent of Families with Children Who Are Paying Higher Personal Income Taxes

Family type	Number of families paying higher taxes (thousands)	All families (thousands)	Percent of total paying higher taxes
All families with children: \$70,991 and below	384	636	60%
Couple with children: \$77,715 and below	424	563	75%
Single with children: \$48,392 and below	22	72	31%

Source: Calculations by authors based on Statistics Canada's SPSD/M (version 28.1).

Table 2 breaks down into its component parts the overall average increase in federal personal income tax payments for families in the bottom 20 percent of earners who are paying higher taxes. The table displays not only the average change resulting from the federal personal income tax rate reduction, but the effect of eliminating income splitting and various tax credits (children's fitness credit, children's art credit, education and textbook credits, and public transit credit) and the Quebec abatement.⁸

⁸ The Quebec abatement means that Quebecers pay less in federal taxes than other provinces. The abatement exists as part of an arrangement that allows provincial governments to opt out of certain federal-provincial programs.

For the 60 percent of families with children in the bottom 20 percent of income earners who are paying more federal personal income tax, the elimination of income splitting represents an average increase of \$182, while the elimination of other tax credits amounts to an average tax increase of \$82. Families in the bottom 20 percent benefitted very little from the reduction in the second lowest personal income rate—an average tax reduction of just \$18. This is because most of the individuals in lower income families earn too little to qualify for the tax reduction, which started at incomes of \$47,630 in 2019 (the top threshold for families in the bottom 20 percent is a family income of \$70,991).

Note that even if a family has a combined income of \$70,991, the lower tax rate will not result in a tax reduction for it if that family consists of multiple income earners each making less than \$47,630 (2019). For example, a family with an income of \$70,991 could have two income earners each making \$35,496. In this case, there will be no benefit from the tax rate reduction. On the contrary, such a family could pay more personal income tax if it is now unable to claim one or more of the eliminated tax credits.

Effect on couples versus singles with children

Given that one of the tax changes (the elimination of income splitting) only effects couples with children and not singles with children, it is informative to also consider how the federal tax changes may affect couples with children differently from single parents. The top income threshold for families with children in the bottom 20 percent consisting of couples is \$77,715; for singles it is \$48,392. Note that these thresholds are based on the distribution of income for these two types of families rather than all families with children, which is why the threshold for couples with children is higher than for all fami-

Table 2: Breakdown of the Overall Average Change for Families with Children in the Bottom 20 Percent Paying Higher Personal Income Taxes

Family type	Tax rate changes (\$)	Elimination of income splitting (\$)	Elimination of tax credits (\$)	Indirect effects from Quebec abatement* (\$)	Overall average change (\$)
All families with children: \$70,991 and below	-18	182	82	-13	233
Couple with children: \$77,715 and below	-33	296	71	-16	318
Single with children: \$48,392 and below	0	0	75	-1	74

* The Quebec abatement means that Quebecers pay less in federal taxes than do residents of other provinces. The abatement exists as part of an arrangement that allows provincial governments to opt out of certain federal-provincial programs.

Source: Calculations by authors based on Statistics Canada's SPSD/M (version 28.1).

lies with children. The threshold for singles with children is lower than the threshold for couples reflecting the fact that this type of family has only one adult as a potential income earner.

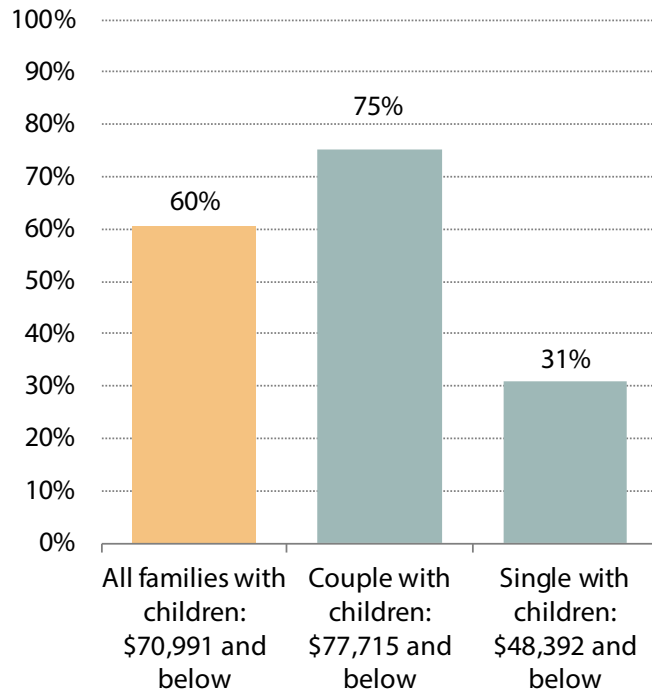
Table 1 includes the number and percentage of families in the bottom 20 percent who are paying higher income taxes by each type of family. The results are shown graphically in figure 2. Families consisting of couples with children in the bottom 20 percent are much more likely to be paying higher income taxes than those consisting of single parents with children (75 percent vs. 31 percent, respectively).

Couples with children who are paying higher income taxes are paying \$318 more on average (see table 2 and figure 3). This is higher than the average increase for all families with children (\$233) and indicates that couples with children in the bottom 20 percent are disproportion-

ately affected by the federal government's tax changes. While the average income tax increase for singles with children is lower (\$74), it still represents a decrease in the budget of many single parents with relatively low income.

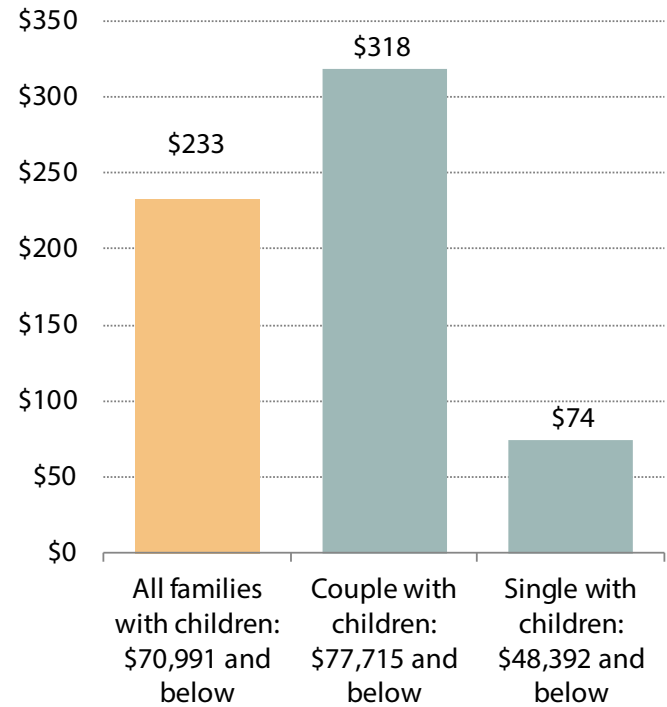
Table 2 also includes the average increase in income taxes from each component of the government's tax changes. For couples with children, the main driver of the average tax increase is the elimination of income splitting, which amounts to an average of \$296 in higher personal income taxes for these families. The average personal income tax increase due to the elimination of other tax credits is \$71 for couples with children. Couples with children benefit more from the tax rate reduction than the overall average for all families (\$33) in the bottom 20 percent, mostly due to the fact that the income range is higher for couples with children (\$77,715). Still, the average personal in-

Figure 2: Percentage of Bottom 20 Percent of Families with Children Paying Higher Personal Income Taxes, by Family Type



Source: Calculations by authors based on Statistics Canada's SPSD/M (version 28.1).

Figure 3: Average Tax Increase for Bottom 20 Percent of Families Paying Higher Personal Income Taxes, by Family Type



Source: Calculations by authors based on Statistics Canada's SPSD/M (version 28.1).

come tax reduction remains relatively small (\$33) and is more than offset by the related income tax increases.

Single parents with children in the bottom 20 percent who are paying more in taxes essentially do not benefit from the tax rate reduction. They also are not affected by the elimination of income splitting since they do not have a spouse to split income with. They do, however, pay higher federal personal income taxes because of the \$75 worth (on average) of now eliminated tax credits that they previously claimed.

Conclusion

Relatively little attention has been paid to how the federal government's personal income tax changes are affecting families who are in the bottom 20 percent of earners, with much of the attention instead going to middle income families. However, the majority of those families, who can ill afford it, are in fact paying higher federal personal income taxes as a result of the government's changes. Notably, families in the bottom 20 percent of income earners are largely not benefiting from the federal government's reduction to its second lowest personal income

tax rate. On the contrary, they are paying more in taxes due to the elimination of income splitting and other tax credits.

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