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The Effect on Canadian Families of Changes to Federal Income Tax and CPP Payroll Tax

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Summary

- Since coming into office, Prime Minister Justin Trudeau's government has repeatedly claimed to have reduced taxes for middle class Canadian families—a claim based solely on the federal government's reduction to the second lowest personal income tax rate from 22 to 20.5 percent. However, a recent study found that when all the Trudeau government's major changes to the personal income tax system are properly accounted for (including the elimination of income splitting and other tax credits), income taxes have been raised, not lowered, on the vast majority (81 percent) of middle income Canadian families.

- In addition to enacting changes to the personal income tax system, the federal government has also announced other significant tax changes that will take effect in the coming years. For instance, payroll taxes will be increased to fund an expansion of the Canada Pension Plan (CPP), with the first increase taking place in January 2019. The dramatic increase in the CPP payroll tax, which was a joint venture with the provinces but initiated largely by the federal government, will be fully implemented in 2025. This raises the prospect of even more middle income families in Canada paying higher taxes beyond what the changes to the federal income tax system would alone indicate.

- This report measures the impact of the federal government's personal income tax changes and the fully implemented CPP payroll tax increase on the amount of taxes that Canadian families will pay. (A family is defined as a parent or parents with a child or children under age 18.) It finds that once fully implemented, virtually all (98.8 percent) of middle income Canadian families with children (with incomes ranging from $77,839 to $110,201) will pay higher taxes. And they will pay, on average, $2,260 more tax each year.

- In fact, when looking at all 2.988 million families with children in Canada (excluding those in Quebec), 2.756 million, or 92.2 percent, will pay higher taxes—$2,218 more, on average, each year. Indeed, once the increase in CPP payroll taxes is fully implemented, nearly all Canadian families—regardless of where they stand in the income distribution—will pay higher taxes.

Introduction

Since coming into office, Prime Minister Justin Trudeau's government has repeatedly claimed to have reduced taxes for middle class Canadian families—a claim based solely on the federal government's reduction to the second lowest personal income tax rate from 22 to 20.5 percent. However, a recent study found that when all the Trudeau government's major changes to the personal income tax system are properly accounted for (including the elimination of income splitting and other tax credits), income taxes have been raised, not lowered, on the vast majority (81 percent) of middle income Canadian families (Lammam et al., 2017a).

In addition to enacting changes to the personal income tax system, the federal government has also announced other significant tax changes that will take effect in the coming years. For instance, payroll taxes will be increased to fund an expansion of the Canada Pension Plan (CPP), with the first increase taking place in January 2019. The dramatic increase in the CPP payroll tax, which was a joint venture with the provinces but initiated largely by the federal government,[1] will be fully implemented in 2025. This raises the prospect of even more middle income families in Canada paying higher taxes beyond what the changes to the federal income tax system would alone indicate.

This report measures the impact on Canadian families of the combination of the federal government's personal income tax changes and the fully implemented CPP payroll tax increase. The first section briefly outlines the federal government's major personal income tax changes and the looming CPP payroll tax changes. It also explains how the impact of these changes is measured. The second section uses Statistics Canada's Social Policy Simulation Database and Model (SPSD/M) to calculate the share of Canadian families with families paying more income and payroll taxes due to these changes and the extent of the tax increases.

How the effect of federal tax changes is measured

The method for measuring the overall effect of federal income tax and CPP payroll tax changes follows the approach that Lammam et al. (2017a) used. As in the previous study, the term "families" in this report includes families (couples and singles) with young children.[2] A key difference between this report and Lammam et al. (2017a) is that the earlier study focused exclusively on federal personal income taxes, while this report builds on those results by including planned changes to the CPP payroll tax.[3]

[1] While expansion of the CPP was a joint venture between the federal and provincial governments, it was largely initiated by the current federal government, which campaigned on expanding the program, along with the current Ontario government.

[2] This definition corresponds with Statistics Canada's definition of a "nuclear family." According to SPSD/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." See Lammam et al. (2017a) for the rationale for choosing this definition.

[3] Some may not view CPP contributions as a tax because the revenue is dedicated to a specific program. However, the definition of a "tax" is a *compulsory* contribution for the support of government facilities, programs, or services levied on persons, property, income, commodities, and transactions. Under this definition, mandatory CPP contributions are a tax. The general confusion regarding the "CPP contribution" versus the "CPP payroll tax" emanates from the fact that CPP payroll taxes maintain

For personal income taxes, the analysis in this report includes the cut to the second lowest federal income tax rate (from 22 to 20.5 percent) applied to incomes from $45,916 to $91,831, as well as the introduction of a new top tax rate of 33 percent applied to incomes above $202,800 (the previous top rate tax rate was 29 percent). The analysis also includes the elimination of the following tax credits: income splitting for couples with young children, children's fitness tax credit, public transit tax credit, education tax credit, and textbook tax credit. [4]

Before explaining the looming CPP payroll tax increase, it is important to note that CPP expansion was a joint venture between the federal and provincial governments. Although joint, it was initiated largely by the current federal government, which campaigned on expanding the program (see Liberal Party of Canada, 2015), along with the current Ontario government.

The payroll tax, which is split notionally between employees and employers, is being increased in two ways and the analysis accounts for both changes. First, the total (employee and employer combined) CPP payroll tax rate of 9.9 percent will increase steadily to 11.9 percent, from 2019 to 2023. Employees and employers each directly pay half of the combined rate, meaning that in 2023, employees will directly pay a rate of 5.95 percent on eligible earnings. The tax will apply to labour income over $3,500 up to the year's maximum pensionable earnings (YMPE), which increases each year. In 2017, the YMPE is $55,300, so that is the maximum amount of income subject to the CPP tax.

Second, there will be a new CPP payroll tax rate applied to income from the YMPE to 14 percent above the YMPE. This new payroll tax rate will be 8 percent, again split evenly between the employee and employer; it will be phased in from 2024 to 2025. To capture the full impact of the CPP payroll tax increase, the analysis treats them as if they are fully implemented.

The analysis uses Statistics Canada's SPSD/M to calculate the percentage of Canadian families with children that will pay higher taxes due to the federal government's personal income tax changes and the CPP payroll tax changes.[5] The

a much closer link between the taxes paid and the benefits provided than other forms of taxation. That is, CPP payroll taxes are dedicated to the CPP program and maintain a specified formula for benefit provision, which is why they are often mistakenly looked at as a forced contribution to a pension plan. The CPP is largely a pay-as-you-go system, except for the reserve built up in the Canada Pension Plan Investment Board (CPPIB). CPP payroll taxes or "contributions" do not vest to the individual and cannot be bequeathed on death (at least not fully). Indeed, Canadians who die early subsidize those who live longer. In addition, balances cannot be withdrawn in cases of hardship, financial or otherwise (i.e., health related). Critically, there is no legal obligation for the government to provide a defined amount of benefits—or any at all, for that matter.

[4] Due to the limitations of SPSD/M, some tax changes could not be included in the analysis, such as the elimination of the children's arts tax credit. However, these changes are relatively small compared to those that are included and are therefore unlikely to have a significant impact on the results of the analysis.

[5] The data and calculations used in this report come from Statistics Canada's Policy Simulation Database and Model (SPSD/M) version 23.2 unless otherwise indicated. Statistics Canada's SPSD/M is a statistically representative database of individuals in their family contexts, with enough information on each individual to compute taxes paid. Two sets of calculations were run using SPSD/M. The first set, the baseline, calculated the taxes that families within the database would pay if the included tax changes

calculations compare the amount of federal personal income tax and CPP payroll tax individual families would have paid without any changes with what they are now expected to pay after the tax changes are fully implemented. The calculations are for the 2017 tax year. The sample group consists of all tax returns but excludes Quebec because Canadians in that province do not pay CPP payroll taxes and instead pay taxes related to the Quebec Pension Plan.[6]

To examine how the impact of the tax changes varies across income groups, all families with children are divided into five income groups (or quintiles), each representing 20 percent of families with children. The income ranges for each group are displayed in table 1.[7] The third income group, with an income range from $77,839 to $110,201, is referred to as the middle income group. We refer to the second group ($50,542 to $77,838) and fourth group ($110,202 to $153,400) as the lower-middle and upper-middle income groups, respectively. Note that these income ranges are for family income, which can include the combined income of multiple earners.

Table 1: Income Range for Families with Children, by Quintiles

	Income range ($)
Quintile 1	1 - 50,541
Quintile 2	50,542 - 77,838
Quintile 3	77,839 - 110,201
Quintile 4	110,202 - 153,400
Quintile 5	153,401 +

Source: Calculations by authors based on Statistics Canada's SPSD/M (version 22.3).

The effect of federal income tax and CPP payroll tax changes on families

This section discusses the results of the analysis, with particular attention given to families in the middle income groups, since the federal government has repeatedly claimed to have reduced taxes for middle class Canadians. Table 2 displays the total number of Canadian families with children (outside of Quebec) by quintile and the number and percentage of families in each quintile that are paying higher taxes due to changes to the federal personal income tax system and the CPP payroll tax hike once fully implemented. Figure 1 presents the results graphically.

Once fully implemented, 2.756 million Canadian families with children (of a possible 2.988 million) will pay higher taxes. In other words, 92.2 percent of all Canadian families (excluding those in Quebec) will pay higher taxes. When looking specifically at middle income families, 98.8 percent, or nearly all 597,000 families in

had not been implemented. For example, the tax rates and number of income tax brackets under this first set of iterations are the same as they were in 2015, but the income ranges within the tax brackets are set at the 2017 levels. The second calculates tax payments for Canadian families with the tax changes fully implemented as they will be in 2025. The difference between the baseline and second set of calculations provides the average tax increase. For further details see Lammam et al. (2017a).

[6] Notably, the Quebec government has recently announced that it will make changes to the Quebec Pension Plan in line with the expansion of the CPP (Retraite Québec, 2017). The combined contribution rates will increase gradually from 10.8 percent to 12.8 percent starting in 2019.

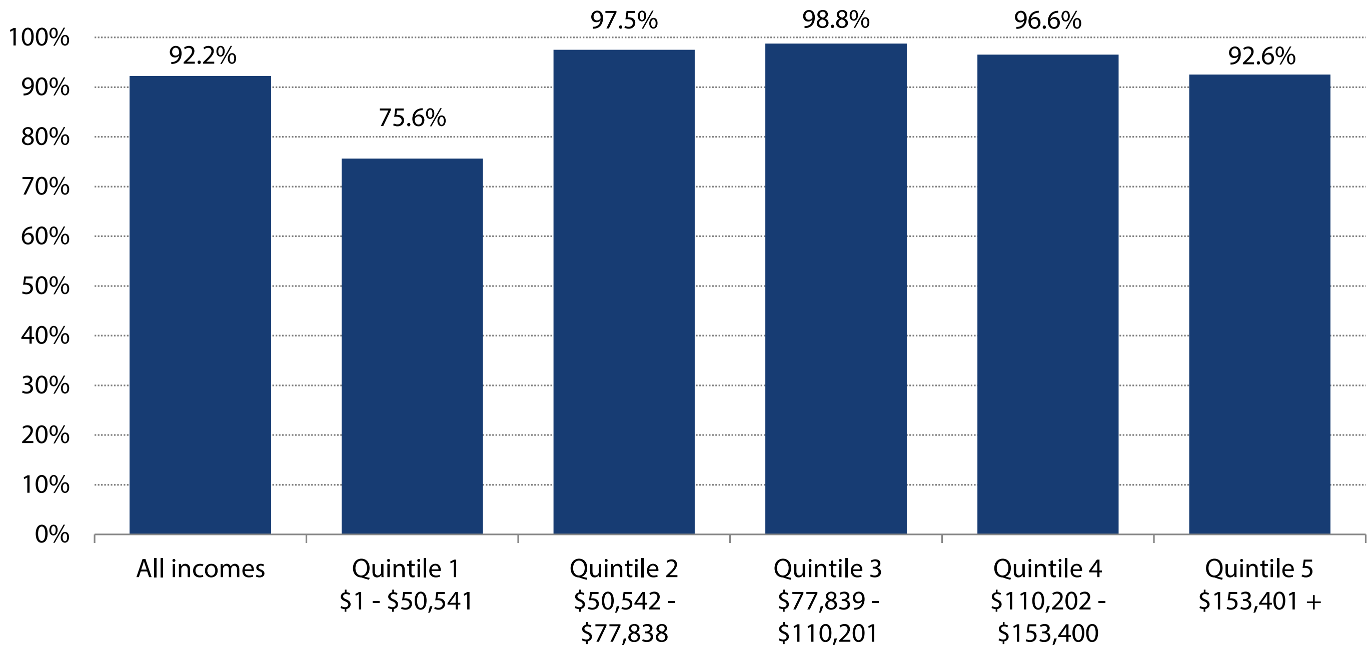
[7] Note that the income ranges in table 1 differ from those found in Lammam et al. (2017a) due to the exclusion from the sample of families in Quebec.

Table 2: Number and Percentage of Canadian Families with Children Paying Higher Taxes after Accounting for Federal Income Tax and CPP Payroll Tax Changes

Family income range ($)	Number of families paying higher taxes (‘000s)	All families (‘000s)	Percent of total paying higher taxes
Quintile 1: 1 - 50,541	450	596	75.6%
Quintile 2: 50,542 - 77,838	583	598	97.5%
Quintile 3: 77,839 - 110,201	590	597	98.8%
Quintile 4: 110,202 - 153,400	579	599	96.6%
Quintile 5: 153,401+	554	598	92.6%
All Incomes	2,756	2,988	92.2%

Source: Calculations by authors based on Statistics Canada’s SPSD/M (version 22.3).

Figure 1: Percentage of Families with Children Paying Higher Taxes after Accounting for Federal Income Tax and CPP Payroll Tax Changes



Source: Calculations by authors based on Statistics Canada’s SPSD/M (version 22.3).

Table 3: Breakdown of the Overall Average Change for Families with Children Paying Higher Taxes after Accounting for Federal Income Tax and CPP Payroll Tax Changes

Family income range ($)	Federal income tax rate changes	Elimination of income splitting, other tax credits, and indirect effects	CPP payroll tax increase (employee plus employer)	Overall average change
Quintile 1: 1 - 50,541	-31	81	388	438
Quintile 2: 50,542 - 77,838	-135	336	952	1,153
Quintile 3: 77,839 - 110,201	-421	1,001	1,680	2,260
Quintile 4: 110,202 - 153,400	-739	1,094	2,224	2,579
Quintile 5: 153,401+	603	1,116	2,654	4,373
All Incomes	-158	752	1,624	2,218

Source: Calculations by authors based on Statistics Canada's SPSD/M (version 22.3).

Notes

- The CPP payroll tax increase includes both the employee and employer contributions which are equally split.
- The federal income tax rate changes include the cut to the second lowest rate from 22 to 20.5 percent and the new higher top rate of 33 percent.
- The other eliminated tax credits include the children's fitness tax credit, the public transit tax credit, and the education and textbook tax credits.
- Indirect effects refers to the effect of the interaction between the tax changes and other credits.

this group, will pay higher taxes. A similar percentage of lower-middle (97.5 percent) and upper-middle (96.6 percent) families will pay higher taxes.

Among the 92.2 percent of all Canadian families with children that will pay higher taxes, they will, on average, pay $2,218 more after the CPP payroll tax changes are fully implemented (see table 3). Middle income families will pay slightly more—$2,260 on average. Families in the top quintile will pay the largest overall tax increase, an average of $4,373 more. The bottom quintile will pay the smallest increase, an average of $438 more.

Importantly, these figures include both the employee portion of the CPP payroll tax and the employer portion. While the employer may make contributions on behalf of employees, this contribution is part of the employee's overall compensation package.[8] In addition, empirical evidence suggests that the employer portion of payroll taxes is ultimately paid for by the employee

[8] It is likely that the employer portion of the CPP payroll tax increase will fall on employers in the first few years of the transition. After a few years, the increased employer portion of payroll taxes will likely be paid for by reductions in other compensation.

through lower wages (Ebrahimi and Vaillancourt, 2016; McKenzie and Ferede, 2017a, 2017b). Measuring the full impact of the CPP payroll tax increase on families must account for both the employee and employer portion of the tax.[9]

Table 3 provides a breakdown of the overall average change for families paying higher taxes in each quintile. The breakdown includes the federal income tax rate changes (cut to the second lowest rate from 22 to 20.5 percent and new higher top rate of 33 percent), elimination of various federal tax credits (i.e., income splitting, children's fitness tax credit, etc.), and the fully implemented CPP payroll tax increase. While families in the first four quintiles see a modest tax reduction from the cut to the second lowest federal income tax rate, it is more than completely offset by increased income taxes paid due to elimination of the various tax credits and the looming increase in payroll taxes to fund the CPP expansion. For example, families in the middle income group see an average income tax reduction due to the federal rate cut of -$421 but pay $1,001 more in income taxes due to elimination of the various tax credits. Once fully implemented, these same middle income families will pay an additional $1,680 in CPP payroll tax. When all the tax changes are accounted for, middle income families will, on average, pay $2,260 more in taxes.

Conclusion

The federal government has repeatedly claimed to have reduced taxes for middle income families. However, this claim is based solely on the cut to the second lowest federal statutory income tax rate, which just one of the many tax changes either enacted or announced. When other changes to the personal income tax system are properly accounted for, this reduction is more than offset for the majority of middle-income families, leading to an overall tax increase. Once the increase in CPP payroll taxes is fully implemented, virtually all Canadian families—regardless of where they stand in the income distribution—will pay higher taxes. The potential for higher taxes is even greater if other federal tax changes are accounted for, including the mandated equivalent of $50 per tonne carbon pricing in the provinces.

[9] However, even if the employer portion is excluded, the total average tax increase is still substantial. For example, excluding the employer portion still results in middle income families paying an average of $1,420 in higher taxes.

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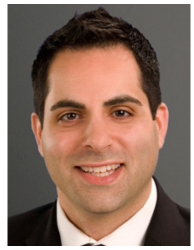

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