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Measuring the Impact of Federal Personal Income Tax Changes on Middle Income Canadian Families

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Summary

- During the 2015 federal election campaign, the Liberals pledged to cut income taxes on Canada's middle class. Since coming into office, the government has repeatedly claimed that it has delivered on this commitment. While the federal government did reduce the second lowest federal personal income tax rate, it also simultaneously introduced several other broader changes to the federal personal income tax system.

- For instance, it introduced a new, higher top income tax rate and eliminated several tax credits, which had the effect of increasing taxes on Canadian families who previously claimed those credits. In fact, the elimination of many tax credits may partially, or even completely, offset the tax rate reduction targeted at middle class families.

- This paper measures the net overall effect that the federal government's changes to the personal income tax system have had on the amount of tax that Canadian families with children pay. It finds the federal government's income tax changes have resulted in 60 percent of the 3.88 million families with children covered in this paper (representing 13.9 million individuals), paying more in taxes. The average tax increase amounts to $1,151 each year.

- Among middle income families—the group of families the federal government claims to want to help—81 percent are paying more in taxes as a result of the federal income tax changes. The average income tax increase for this group of middle income families is $840.

- For the subset of middle income families consisting of couples with children, an even greater share (89 percent) pays higher income taxes ($919 on average).

Introduction

During the 2015 federal election campaign, the Liberal Party pledged to cut income taxes on Canada's middle class (Liberal Party of Canada, 2015). Since coming into office, the government has repeatedly claimed that it has delivered on this commitment. For instance, in the government's first budget in 2016, Finance Minister Bill Morneau proclaimed: "the government cut taxes for middle class Canadians everywhere" (Canada, Department of Finance, 2016a). In fact, the 2016 federal budget was filled with statements about a new tax cut for the middle class, as was the subsequent 2017 budget, entitled Building a Strong Middle Class.

In reality, it is not clear whether the federal government has in fact reduced federal income taxes for middle income families. While the government did reduce the second lowest federal personal income tax rate from 22.0 to 20.5 percent, which currently applies to individual income between $45,916 and $91,831, it also simultaneously introduced several additional broader changes to the federal personal income tax system. For instance, it introduced a new, higher top income tax rate and eliminated several tax credits, which had the effect of increasing taxes on Canadian families who previously claimed such credits. In fact, the elimination of many tax credits may partially, or even completely, offset the tax rate reduction targeted at middle class families.

This report measures the net overall impact of the personal income tax changes introduced by the federal government on Canada's 3.88 million families with children (representing 13.9 million individuals). Because the government has explicitly committed to cutting income taxes, this report does not measure the effect of other announced tax changes or changes to federal transfers.[1] The first section outlines the major changes to the federal income tax system that the government introduced after coming into power. It also defines "middle income families" and explains why they are the focus of analysis. The second section uses Statistics Canada's Social Policy Simulation Database and Model (SPSD/M) to calculate how the tax changes, when taken together, affect the amount of federal income tax that middle income Canadian families pay.

How the impact of federal income tax changes is measured

Since it came to power in October 2015, the federal government has announced a number of significant tax changes that affect how much Canadians pay in personal income tax. For instance, the first piece of legislation the government introduced made two changes to federal

[1] The federal government has specifically claimed to have reduced income taxes for middle class Canadian families, which is why this report focuses only on changes to personal income taxes. The federal government has also announced a number of other tax increases outside of the personal income tax system, such as mandating the equivalent of $50 per tonne carbon pricing and increasing payroll taxes to fund expansion of the Canada Pension Plan (CPP), both of which will significantly affect the total amount of tax that families pay. These other tax changes are not covered in this report, nor are changes to government transfers including the new Canada Child Benefit (CCB) program, which partly consolidated previous child benefit transfers. Confusion regarding what constitutes a change in taxes versus transfers may arise from the fact that many transfer programs are administered through the income tax system. For example, the Canada Child Benefit (CCB) and the Working Income Tax Benefit (WITB) are both classified as transfers by the federal Department of Finance (Canada, Department of Finance, 2017a).

personal income tax rates. Specifically, it 1) cut the second lowest tax rate and 2) introduced a new higher top tax rate. The government continues to tout these highly publicized changes in its communications with the public. However, the government has made other less publicized changes to the personal income tax system.

To assess how the federal government's changes to the personal income tax system affect the amount of tax that Canadians pay, it is necessary to collectively measure the overall impact of the changes rather than consider each change in isolation. While the cut to the second lowest personal income tax rate did reduce taxes for some Canadians, focusing on that tax change alone misses the other tax changes that have increased taxes on many of the same Canadians. A holistic approach that measures all the tax changes enacted by the government is needed to provide a complete measure of whether Canadian families are paying more or less in federal income taxes.

This paper measures the net overall impact of seven major changes to the federal income tax system on the income taxes paid by 3.88 million Canadian families with children (representing 13.9 million individuals). The analysis includes the two highly publicized changes to federal income tax rates as well as the elimination of the following credits: income splitting for couples with young children, children's fitness tax credit, education tax credit, textbook tax credit, and the public transit tax credit.[2] Appendix A gives a brief description of the tax changes included in the calculations as well as those that are excluded due to limitations of the model used.[3] There are good economic reasons to eliminate ineffective tax credits, but without concurrent reductions in tax rates, their removal results in many Canadians paying a higher tax bill.[4]

The analysis uses Statistics Canada's SPSD/M to calculate the percentage of Canadian families with children that pays higher personal income taxes due to the federal government's

[2] For perspective, 54 percent of the 3.88 million families with children covered in this report would have claimed a tax benefit from income splitting had it existed in 2017. Approximately 39 percent of families would have claimed the children's fitness tax credit, 10 percent would have claimed the education tax credit, 10 percent would have claimed the tuition credit, and 8 percent would have claimed the transit tax credit. These estimates were derived from SPSD/M.

[3] Unfortunately, the latest version of SPSD/M does not include the children's arts tax credit in the model and therefore the impact of eliminating this tax credit is not included in the calculations in the next section. See appendix A.

[4] There is, however, a valid economic argument for income splitting for couples with young children. This tax credit was designed to at least partially correct a distortion in the tax system. The distortion is that households with similar incomes can face very different income tax bills depending on who earns the income. If a household has two earners at, say, $40,000 each, it would ultimately pay lower combined income taxes than a one-earner household with the same amount of income ($80,000). In principle, households with similar incomes should face similar tax burdens. The distortion between dual-income households and those where most income is earned by one spouse is due to Canada's progressive personal income tax system—tax rates increase significantly as income increases. Since income tax rates apply to individual earnings rather than family income, single-earner families are taxed at higher rates than dual-income families with the same family income. By allowing households to move income from one spouse facing higher rates to the other spouse, income splitting is one way to help fix this distortion.

tax changes.[5] The calculation compares the amount of personal income tax individual families would have paid had the federal tax changes not been enacted to what they do pay under the existing system. If the difference is greater than zero, the family's tax bill has increased. The calculations are for 2017 and the sample includes all tax returns.[6] Due to limitations of SPSD/M, some tax changes could not be included in the analysis. However, these changes are relatively small compared to those that are included and are therefore unlikely to have a significant impact on the results. (See appendix A for a description of the included and excluded tax changes.)

Defining middle income families

While personal income taxes are levied on individuals rather than families, this paper measures the overall impact of the changes on a family's collective income tax bill (ie., the sum of taxes each individual in the family pays). It focuses on households with children, rather than households without, because when discussing "families" and policies affecting families, the federal government has generally referred to couples with children or single parents.[7] For this reason, in this paper "families" are defined as couples or singles with children under the age of 18, though there are a number of other ways to define a family unit.[8]

This paper pays particular attention to middle income families because the federal government has repeatedly referred to its tax changes as a tax cut for middle class families, although it has not clearly defined what constitutes a middle class family. By referring to the reduction in the second lowest personal income tax rate, the government has implied that it considers individual Canadians who earn between $45,916 and $91,831 as constituting, or at least being

[5] The data and calculations used in this report come from Statistics Canada's Social 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 tax changes in appendix table 1 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 under the current system with the tax changes fully implemented. The difference between the baseline and the second set of calculations provides the average tax increase.

[6] Families with a member over age 65 are excluded. This sample group is used throughout the report.

[7] Federal budget documents contain many examples of this. For example, the 2016 budget federal stated that "When middle class families are secure in their jobs, they have the ability to invest in the education of their children and save for their retirement" (Canada, Department of Finance, 2016b). In addition, the 2016 budget presents two fictitious families headed by "David" and "Neera"; both families include children. In the 2016 budget speech, Finance Minister Bill Morneau said, "I want you to imagine an ordinary middle class Canadian family. Two parents with two kids in university" (Canada, Department of Finance, 2016a). Moreover, the 2017 federal budget stated that: "Middle class Canadians embrace the change that came along with progress because they could see the benefits for their families—new, well-paying jobs, stronger communities, and greater opportunities for their children" (Canada, Department of Finance, 2017b).

[8] 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."

Table 1: Income range for families with children by quintiles

	Income range ($)
Quintile 1	1 - 51,698
Quintile 2	51,699 - 77,088
Quintile 3	77,089 - 107,624
Quintile 4	107,625 - 150,384
Quintile 5	150,385 +

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

part of, the middle class.[9] Typically, analysts define middle class income relative to the overall income distribution, where some boundary is set around the mid-point. In this paper, to assess the tax impact on middle income families, we divided Canadian families into five income groups (or quintiles), each representing 20 percent of families with children. Table 1 shows the income ranges for each income group. In keeping with commonly used definitions of the middle class (Cross and Sheikh, 2015), we refer to the third quintile as the middle income group, which has an income range of $77,089 to $107,624. We refer to the second group ($51,699 to $77,088) and fourth group ($107,625 to $150,384) 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.[10]

The impact of federal personal income tax changes on Canadian families

Given that the federal government has introduced tax measures that both decrease and increase the amount of personal income tax that individuals pay, it is not clear whether the government has in fact reduced income taxes, on net, for middle income families, as it has repeatedly claimed. This section calculates the net overall impact of the federal government's personal income tax changes and estimates the proportion of Canadian families that are, on net, paying more in personal income tax.

Impact on middle income families

Table 2 displays the number and percentage of families with children in each income group who are paying more in personal income tax as a result of the federal government's tax changes. Figure 1 illustrates the percentage of families with children paying higher personal income taxes for each quintile.

Overall, 60 percent (or nearly two-thirds) of all Canadian families with children (ie., 2.35 million out of 3.88 million families) are paying more income tax due to the tax changes the federal government has made over the past couple of

[9] Critically, this definition, which is based on individual income and not family income, bares little relationship to where the middle of the individual income distribution is. In 2015, the latest year of available data, the median total income (before tax) of individual Canadians over the age of 15 was $32,800 (Statistics Canada, 2016). Even with subsequent income growth, many individual Canadians in the middle of the income distribution do not benefit from the rate reduction to the second lowest personal tax bracket.

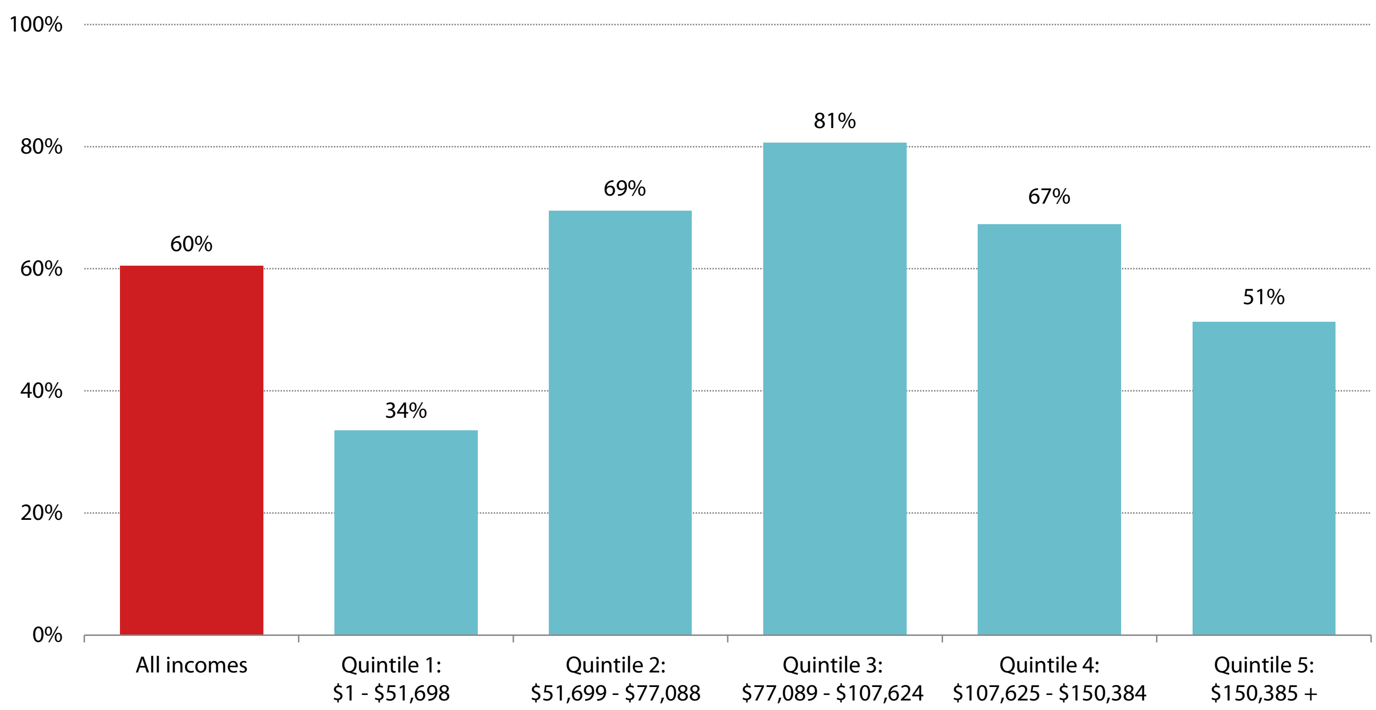
[10] Income earners can include not just employed parents, but also employed children under the age of 18, with income earners defined as someone who has employment or self-employment income. According to SPSD/M, most Canadian families with children (56 percent) consist of two income earners. Nearly a third of families have one income earner (31 percent). A relatively small portion of families have more than two earners (7 percent).

Table 2: Number and percentage of Canadian families with children paying higher personal income taxes

Family income range ($)	Number of families paying higher taxes ('000s)	All families ('000s)	Percent of total paying higher taxes
Quintile 1: 1 - 51,698	260	775	34%
Quintile 2: 51,699 - 77,088	540	777	69%
Quintile 3: 77,089 - 107,624	627	777	81%
Quintile 4: 107,625 - 150,384	523	777	67%
Quintile 5: 150,385 +	400	778	51%
All Incomes	**2,350**	**3,884**	**60%**

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

Figure 1: Percentage of families with children paying higher personal income taxes



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

Table 3: Average change in personal income tax payments for families with children

Family income range ($)	Average change in tax payments ($) Families paying higher taxes	Families not paying higher taxes	All families
Quintile 1: 1 - 51,698	163	-4	52
Quintile 2: 51,699 - 77,088	382	-22	258
Quintile 3: 77,089 - 107,624	840	-170	644
Quintile 4: 107,625 - 150,384	938	-333	523
Quintile 5: 150,385 +	3,601	-658	1,531
All Incomes	**1,151**	**-238**	**602**

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

years (see the red bar in figure 1). For the families who are paying more income tax, the average annual increase is $1,151. The remaining 40 percent of families are either paying the same amount of tax or less. Their average annual tax reduction is -$238.

The greatest percentage of families with children paying more in personal income tax is found in the middle income groups. In fact, the federal government's tax changes have resulted in more than four out of five (81 percent) of Canadian families in the middle income group paying higher income taxes. Just over two-thirds of Canadian families in the lower-middle (69 percent) and upper-middle (67 percent) income groups are paying more in personal income tax. Contrary to the federal government's claims, the overwhelming majority of middle income families are paying more in personal income tax as a result of the personal income tax changes.[11]

Table 3 shows the dollar value of the change in personal income tax payments for Canadian families in each quintile. It displays the aver-

[11] In table 2 and figure 1, the lowest (or first) income quintile has the smallest share of families paying more in personal income tax (34 percent). However, it is important to remember that many lower income Canadians do not, on net, pay any personal income tax because the value of the tax credits they claim is equal to or greater than the amount of tax they would have owed without those credits. For example, every taxpayer receives the federal basic personal amount, which means the first $11,635 of earned income is tax free, so someone making $11,635 or less would not have to pay any personal income tax. An individual making more than this may still not pay income tax if they claim or receive other tax credits. In 2014, for example, 85 percent of individual tax filers with income below $20,000 did not pay personal income tax (CRA, 2017a). Thus, many of the families in the first quintile in table 3 and figure 1 do not pay personal income tax and therefore are not affected by the federal government's tax changes. An assessment of the impact of the tax changes on low income families should focus narrowly on just those families who do pay income tax. However, such an analysis is beyond the scope of this paper.

Table 4: Breakdown of the overall average change for families with children paying higher personal income taxes

Family income range ($)	Tax rate changes	Elimination of income splitting	Elimination of tax credits	Indirect effects	Overall average change
Quintile 1: 1 - 51,698	-4	43	129	-5	163
Quintile 2: 51,699 - 77,088	-53	308	141	-14	382
Quintile 3: 77,089 - 107,624	-228	949	147	-28	840
Quintile 4: 107,625 - 150,384	-488	1,271	184	-29	938
Quintile 5: 150,385 +	1,961	1,556	175	-91	3,601
All Incomes	**152**	**876**	**157**	**-34**	**1,151**

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

Note: Indirect effects include the effects from the Quebec Abatement and the indirect effect from other tax credits

age change in the amount of income tax paid by the majority of families that are paying more tax, the minority of families that are paying the same or less tax, and the overall average for all families in each quintile.

The average income tax increase for families in the middle income groups ranges from $382 for those in the lower-middle income group to $938 for those in the upper-middle income group. Families in the middle income group (quintile three) pay on average $840 more in income tax. Families in the highest income group (quintile five) have seen their income tax increase by far the most ($3,601). This significant increase is driven partly by the fact that some individual earners in this group face the higher top personal income tax rate (on income over $202,800) in addition to the other tax changes.

For those families with children who do pay more in income tax (60 percent of them), the average increase is $1,151. Notably, the average income tax decrease (-$238) for the 40 percent of families with children who are either paying the same or less tax is not nearly enough to offset the average tax increase that the other 60 percent are paying. The average overall change in personal income tax paid by all families with children, of all income levels, is a $602 increase.

Table 4 breaks the average increase in overall tax payments down into its component parts. For families paying higher overall taxes in each income group, the table displays not only the average tax change resulting from the personal income tax rate changes, but the effect of eliminating various tax credits (children's fitness credit, education and textbook credits, and public transit credit) and income splitting. The table also shows the average tax change caused by indirect effects.[12]

[12] The main driver of indirect effects is the Quebec abatement, which reduces the amount of federal tax that Quebecers pay.

Consider the first component (the tax rate changes). The federal government's changes to personal income tax rates result in lower average tax payments for all families with children except those in the highest income group, who—due to the new, higher top tax rate of 33 percent—pay, on average, $1,961 more in personal income tax. Due to the reduction in the second lowest personal income tax rate, families in the other income groups see their average tax payment decrease. The average reduction ranges from -$4 for families in the lowest income group to -$488 for those in the upper-middle income group. Families in the middle income group (quintile three) see their taxes decrease an average of -$228, while families in the lower-middle income group experience an average decrease of -$53.

However, for the families experiencing an average decrease in their income tax, this reduction is completely offset by the average tax increases for other components, namely, the elimination of income splitting and other tax credits. The elimination of income splitting for couples with young children is the main driver of the increase in overall personal income taxes. Alone, it translates into an average tax increase of $949 for families in the middle income group, which more than offsets the -$228 reduction from the tax rate change. Eliminating income splitting has a similar effect on families in the lower-middle, upper-middle, and lowest income groups.[13]

Table 5: Income range for couples with children and singles with children by quintile

	Couples ($)	Singles ($)
Quintile 1	1 - 63,580	1 - 29,910
Quintile 2	63,581 - 90,743	29,911 - 42,668
Quintile 3	90,744 - 120,653	42,669 - 54,880
Quintile 4	120,654 - 160,001	54,881 - 77,462
Quintile 5	160,002 +	77,463 +

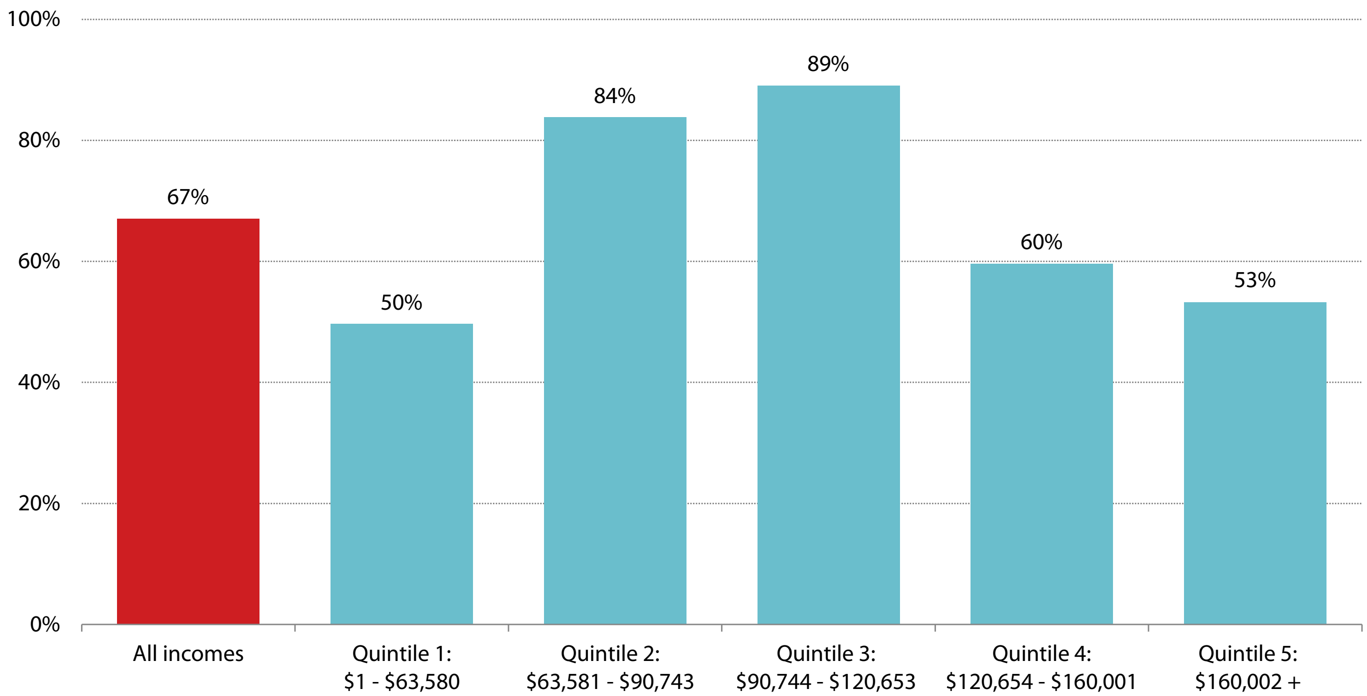
Source: Calculations by authors based on Statistics Canada's SPSD/M (version 22.3).

The elimination of other tax credits contributes to the higher overall income tax that these families pay. This component of the federal government's tax changes led to an average tax increase of $147 for those middle income families who found themselves paying higher taxes overall. It had the effect of increasing the average income tax payable by $129 to $184 for families in other income groups.[14] While eliminating ineffective tax credits does reduce the complexity of the tax system, if there are no concurrent offsetting reductions in general income tax rates, such eliminations simply result

[13] Families in the top income group experienced the greatest tax increase (in dollar terms) when income splitting was eliminated. However, as a percentage of income, this change caused families in the middle income group to bear the greatest tax increase. The average income for families in the middle income group in table 4 is $93,003; the $949 tax increase brought about when income splitting was removed represents 1.02 percent of average family income. For families in the highest income group in table 4, elimination of income splitting represents 0.53 percent of average income ($295,517).

[14] Interestingly, the average income tax increase resulting from the elimination of these other credits is similar across income groups, implying that the impact of their elimination is greater (relative to income) for lower and middle income families (ie., it is regressive).

Figure 2: Percentage of couples with children paying higher personal income taxes



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

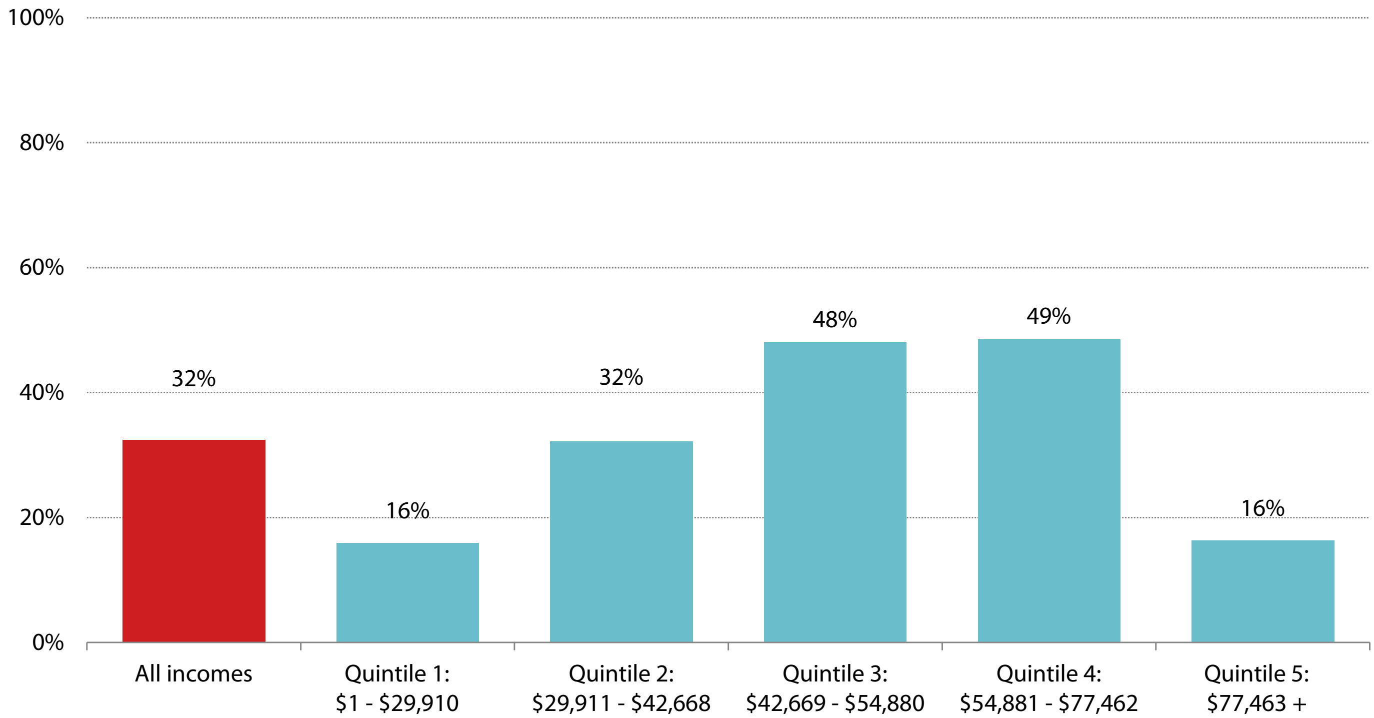
in an increase in the average amount of tax that Canadians who claimed the credits pay.

Impact on couples versus singles with children

The fact that table 4 shows the elimination of income splitting as the main driver of the tax increases on the majority of Canadian families raises an important question. How do the results differ for couples with children versus single parents with children? Unlike many couples with children under the age of 18, single parents did not receive any tax benefits from income splitting because there was no spouse with whom to make notional transfers. To investigate this question, all families with children were split into the two groups. Couples with children (under the age of 18) represent 81 percent of the total number of Canadian families; the remaining 19 percent are single parents with young children. Each family type is divided into five equal income groups (quintiles). Table 5 displays the income ranges for both family types. Note that the income ranges for singles with children are lower, reflecting the fact that this family type contains only one adult as a potential income earner.

Figure 2 shows the percentage of families consisting of couples with children, by income group, who are paying higher personal income taxes due to the federal government's changes. Among those in the middle income group, nearly nine of 10 (89 percent) are paying higher

Figure 3: Percentage of singles with children paying higher personal income taxes



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

overall income taxes. Eighty-four percent of the lower-middle group and 60 percent of the upper-middle group are paying higher personal income taxes. More generally, 67 percent of all couples with children are paying more income tax because of the federal government's tax changes. This compares to 60 percent of all families with children. Indeed, couples with children are particularly hard hit by the federal government's tax changes. Table B1 in appendix B gives a breakdown of what is driving the overall tax increases.

While singles with children are not as affected by the federal government's income tax changes as couples with children, there is still a significant share of middle income single parents with children under age 18 who are paying higher taxes. Figure 3 presents the results for singles with children by quintile. Nearly half of the middle and upper-middle income groups (48 and 49 percent respectively) are paying more personal income tax due to the tax changes. This is despite the fact that most of the families in these two income groups benefit partially from the reduction in the tax rate that applies to incomes from $45,916 to $91,831 (see table 6). Importantly, families in the two lowest quintiles do not benefit at all from the tax rate reduction because their incomes are below the $45,916 threshold—yet many lost tax savings when the various tax credits were eliminated. In fact, the percentage of families in these income groups paying more overall income tax is somewhat understated because many do not pay income taxes to begin with. Table B2 in ap-

Table 6: Federal personal income tax brackets and rates for 2017

Income range ($)	Marginal tax rate
0 - 45,916	15.0%
45,916 - 91,831	20.5%
91,831 - 142,353	26.0%
142,353 - 202,800	29.0%
Over 202,800	33.0%

Source: CRA (2017b).

Note: The income range is based on taxable income, which is the amount of an individual's income that is subject to personal income taxes.

pendix B provides a breakdown of the overall tax increases.

Conclusion

The federal government has repeatedly claimed that it has cut income taxes for middle class Canadian families. This claim rests solely on the government's reduction from 22 percent to 20.5 percent of the second lowest personal income tax rate. The reality, however, is that the federal government has enacted other changes to the personal income tax system that have increased the amount of income tax that Canadian families pay. Those changes include the elimination of income splitting and other tax credits. When taken together, 2.35 million Canadian families with children (60 percent of the total 3.88 million such families) are paying higher income taxes due to the federal government's income tax changes—$1,151 more on average. While the government's tax cutting claim focuses on middle class families, the overwhelming majority of middle income families with children (81 percent) are actually paying more income tax ($840 more, on average). For the subset of middle income families consisting of couples with children, an even greater share (89 percent) pays higher income taxes. For many families, the tax increases enacted by the federal government have more than wiped out the potential gains received from the reduction to the second lowest personal income tax rate.

Appendix A: The federal government's major changes to the personal income tax system

This appendix briefly itemizes the federal personal income tax changes that represent $50 million in revenue or more.[15] Table A1 summarizes the tax changes that are included in the analysis and calculations. Due to the limitations of Statistics Canada's Social Policy Simulation Database and Model, not all of the changes enacted by the federal government to personal income taxes are included in the analysis. Table A2 summarizes the excluded tax changes that represent $50 million or more in revenue. The total absolute cost of the tax changes in tables A1 and A2 is $7.2 billion, of which approximately 94 percent is covered in the analysis and calculation. This estimate is based on the authors' calculations using data from Canada, Department of Finance (2016b, 2017b, and 2017c).

[15] Since coming into office, the federal government has also proposed or enacted several major tax changes not related to personal income taxes. For example, CPP payroll taxes are set to increase from 2019 to 2025, the equivalent of a $50 per tonne carbon pricing will be imposed on provinces by 2022, and alcohol and tobacco excise taxes have been raised. While these tax changes are important, evaluating their impact on Canadians is beyond the scope of this paper.

Table A1: Federal personal income tax changes included in calculations

Tax change	Description
Reduction in the second lowest personal income tax rate	In 2016, the second lowest federal rate was reduced from 22.0 percent to 20.5 percent. As of 2017, the new 20.5 percent tax rate applies to taxable individual income earned from $45,916 to $91,831.
A new, higher top personal income tax rate	In 2016, a new, higher top tax rate of 33 percent was introduced. As of 2017, this rate applies to income above $202,800. Previously, taxpayers faced a top federal marginal tax rate of 29.0 percent.
Elimination of income splitting	This tax credit, eliminated in 2016, allowed couples with children under the age of 18 to notionally split part of their income to reduce their tax bill. The maximum tax benefit was $2,000.
Elimination of children's fitness tax credit	This tax credit allowed parents to claim expenses for qualifying programs of physical activities for a child under the age of 16. In 2015, the maximum tax benefit was $150 per child. This was reduced to $75 per child in 2016 and eliminated in 2017.
Elimination of public transit tax credit	The value of the public transit tax credit was equal to 15 percent of the cost of purchasing an eligible public transit pass. This tax credit was eliminated in 2017.
Elimination of education and textbook tax credits	This tax credit, eliminated in 2017, allowed students enrolled in a qualifying educational program to claim up to $400 per month that the student was enrolled in a full-time course of studies and $120 per month for part-time enrolment. As for the textbook amount, a related tax credit, the maximum amount claimed was $65 per month for full-time enrolment and $20 per month for part-time enrolment.

Sources: Canada, Department of Finance (2016b, 2017b, and 2017c)

Note: Only changes that represent $50 million in annual federal revenue are included in this list.

Table A2: Major federal personal income tax changes that could not be included due to limitations of SPSD/M

Tax change	Description
Elimination of children's art tax credit	This tax credit allowed parents to reduce the amount of taxes that they paid by claiming expenses for qualifying programs of artistic, cultural, recreational, or developmental activities. In 2015, the maximum tax benefit was $75 per child. This was reduced to $37.50 per child in 2016 and eliminated in 2017.
Reduction in the maximum annual contribution to TFSAs	TSFAs allow Canadians to shelter the income that they earn from savings from taxation. The federal government reduced the maximum amount Canadians can contribute to their Tax-Free Savings Accounts (TSFAs) each year from $10,000 in 2015 to $5,500 in 2016. This represents a tax increase on the earnings from savings.
Restoring the labour-sponsored venture capital corporations tax credit	Canadians can claim a tax credit worth 15 percent of a contribution (up to $5,000) made to a labour-sponsored venture capital corporation, which is a form of mutual fund that is sponsored by a labour organization. This tax credit was in the process of being phased-out, starting in 2015, but was fully restored in 2016.
Expansion of northern residents deduction	This tax credit allows Canadians in northern regions to deduct a certain amount of taxable income for every day of residence in a northern zone. In 2016, the maximum daily deduction increased from $16.50 to $22.00.
Consolidation of caregiver credits	The Canada Caregiver Credit consolidates and replaces three pre-existing tax credits: infirm dependent credit, the caregiver credit, and the family caregiver tax credit. The new tax credit provides a maximum benefit of $6,883 for Canadians that support an eligible infirm relative as a dependent.

Sources: Canada, Department of Finance (2016b, 2017b, and 2017c).

Notes:
Only changes that represent $50 million in annual revenue are included in this list.

There is a strong economic rationale for phasing out the labour-sponsored venture capital corporations credit, as research finds it displaces more effective private venture capital funding and lowers the level of overall capital available to Canadian entrepreneurs (Cumming et al., 2007).

Appendix B: Breakdown of the overall average change for couples and singles with children paying higher personal income taxes

Table B1: Breakdown of the overall average change for couples with children paying higher personal income taxes

Family income range ($)	Tax rate changes	Elimination of income splitting	Elimination of tax credits	Indirect effects	Overall average change
Quintile 1: 1 - 63,580	-15	146	109	-7	233
Quintile 2: 63,581 - 90,743	-119	643	136	-22	638
Quintile 3: 90,744 - 120,653	-316	1,124	144	-33	919
Quintile 4: 120,654 - 160,001	-565	1,344	208	-26	961
Quintile 5: 160,002 - Max	2,275	1,609	165	-103	3,946
All Incomes	**145**	**975**	**151**	**-36**	**1,235**

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

Note: Indirect effects include the effects from the Quebec Abatement and the indirect effect from other tax credits.

Table B2: Breakdown of the overall average change for singles with children paying higher personal income taxes

Family income range ($)	Tax rate changes	Elimination of income splitting	Elimination of tax credits	Indirect effects	Overall average change
Quintile 1: 1 - 29,910	0	0	70	0	70
Quintile 2: 29,911 - 42,668	0	0	126	0	126
Quintile 3: 42,669 - 54,880	-1	0	189	-13	175
Quintile 4: 54,881 - 77,462	-53	0	262	-9	200
Quintile 5: 77,463 - Max	2,310	0	357	-35	2,632
All Incomes	**215**	**0**	**204**	**-10**	**409**

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

Note: Indirect effects include the effects from the Quebec Abatement and the indirect effect from other tax credits.

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