



**OUT OF  
BALANCE:  
Saskatchewan  
2017-2018  
Budget**

## **About the Author**

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# Introduction

## Eroding Tax Fairness in the Budget

Saskatchewan's 2017-2018 budget significantly increases taxes and fees for many Saskatchewan families and cuts public services, citing these measures as a means to deal with a projected budget deficit of \$685 million.<sup>1</sup> There has been significant public backlash against many of the spending cuts proposed by the Sask Party government, which has led the government to rescind some of their plans to cut services.<sup>2</sup> However, there has been relatively little discussion on the impact the proposed tax changes will have on Saskatchewan families and individuals across the income spectrum.

Trevor Tombe and Blake Shaffer addressed the impact of the government's changes in the Maclean's magazine article *Saskatchewan swallows the fiscal pill Alberta refuses*.<sup>3</sup> This report expands on their analysis of the impact of Saskatchewan's tax changes on Saskatchewan families. We provide estimates for the impact of several of the tax changes for 2018 and 2020 for both individuals and families.

The government says that the proposed tax changes will "ensur[e] that Saskatchewan's taxes remain fair to all residents."<sup>4</sup> However, the tax changes proposed by the government disproportionately affect those who are least able to pay. To put it another way, the *tax incidence* arising from the government's proposed changes takes a larger chunk of the incomes of low- and middle-income people, relative to high-income people. The tax changes also disproportionately have a negative impact on women, who are more likely to have lower incomes. Meanwhile, Saskatchewan's highest-income earners face very little change in the taxes they pay, relative to how much they earn. Some of Saskatchewan's high-income earners may even enjoy a tax cut in the coming years.

As CUPE put forward in the report *Debunking the Deficit: How Saskatchewan can get back on track without cuts or austerity*,<sup>5</sup> addressing the deficit through austerity measures, like raising taxes, cutting public services, and giving preferential tax treatment to the rich, is not the best solution to the government's current fiscal situation.

To analyze and understand the impact of the Sask Party government's tax proposals on the people of Saskatchewan, we examine how changes to certain taxes and tax programs affect individuals and families across different income groups.<sup>6</sup> We also show how each of these tax changes affect women compared to men.

Our analysis provides the following key findings:

- The proposed tax changes disproportionately harm people who make lower incomes. Meanwhile, many high-income families may get a tax cut.
- Enhancements to the Low-Income Tax Credit (LITC) do not completely correct for the inequitable effects of the government's tax changes.
- If the Sask Party government's tax changes are fully implemented, the typical family that earns between \$17,800 and \$24,100 will see a tax increase of almost the same magnitude as the tax break we expect families with incomes over \$186,700 will receive.
- 74.4% of people who make \$119,000 are men, yet 62.2% of people with incomes less than \$11,100 are women. Since the tax changes disproportionately burden low- and middle-income people, they also disproportionately affect women.

# Overview

## Tax Changes in the Sask. Budget

The 2017-2018 budget includes several tax changes that directly apply to individuals and households.

One of the most substantial changes is the increase to the Provincial Sales Tax (PST). As of March 23, 2017, the PST rate increased from 5% to 6%, which is expected to raise approximately \$242 million in government revenue annually.<sup>7</sup> The government also extended the PST so that insurance premiums and goods such as snack foods, children's clothing, and restaurant meals will now be taxed.<sup>8</sup> Expanding the base of the PST will likely increase government revenues by \$647.1 million.<sup>9</sup>

Liquor and tobacco taxes also increased as of April 1 and March 23, 2017, respectively. In the case of liquor, wholesale markups will increase by between 6.8% and 4% depending on the type of alcohol. The tobacco tax will increase from 25¢ to 27¢ per cigarette.

Sales and commodity taxes such as the PST and tobacco and liquor taxes are disproportionately borne by low- and middle-income people. These types of taxes are generally regressive taxes. All people in Saskatchewan will pay more tax due to increases in the PST, tobacco, and liquor taxes, but lower and middle incomes will pay proportionately more tax as a share of their incomes. High income people may pay more tax in absolute terms, because they tend to spend more, but people with lower incomes spend a greater proportion of their income on these taxed goods relative to high-income people. Thus, increases to sales taxes hit low- and middle-income individuals the hardest.<sup>10</sup>

Another form of taxation that is generally regressive is property taxes,<sup>11</sup> and Budget 2017-2018 has led to an increase in property taxes for Saskatchewan families. The provincial government has cut revenue-sharing grants with municipalities by 5.1% and revoked grants to the municipalities in-lieu-of property taxes. As a result, a number of Saskatchewan municipalities have increased property taxes to make up for the funding shortfall.<sup>12</sup> In effect, the provincial government has offloaded revenue-earning responsibility to municipalities whose main taxation tool is property taxes. By offloading taxation to municipalities, the provincial government has increased the tax burden of low- and middle-income families disproportionately, relative to high-income families.

The 2017-2018 budget also reduces provincial income taxes across the board every year between now and 2020. However, as of 2018 the tax brackets will no longer be indexed to inflation. Cancelling indexation means that as incomes grow over time, the amount of income tax paid by individuals will increase.<sup>13</sup> Hence, the 2017-2018 Saskatchewan budget continually increases personal income taxes with one hand—by cancelling indexation—and then cuts them slightly each year until 2020 with the other hand.

In the following section, we explore how income tax rates are affected over time due to changes in both the indexation of the tax brackets and the tax rates themselves. In sum, we find that in 2018 and 2020, the typical tax payer will pay less in income taxes; the effect of cutting income tax rates offsets the effective increase in income taxes due to cancelling indexation of the tax brackets.

The table below summarizes the changes to Saskatchewan's marginal income tax changes.

**Table 1: Marginal tax rates and tax brackets in Budget 2017-2020 by calendar year<sup>14</sup>**

| New Brackets          | 2017 Rates | 2018 Rates | 2019 Rates | 2020 Rates |
|-----------------------|------------|------------|------------|------------|
| \$0 to \$45,225       | 10.75%     | 10.5%      | 10.25%     | 10%        |
| \$45,225 to \$129,214 | 12.75%     | 12.5%      | 12.25%     | 12%        |
| \$129,214 onward      | 14.75%     | 14.5%      | 14.25%     | 14%        |

It is also important to note that unlike PST, tobacco, and liquor taxes, income taxes are *progressive*. As a person earns more income, they pay a higher tax rate. That is, the proportion of income paid in income taxes is greater for high-income people than for lower income people. Therefore, income tax cuts tend to favour those with higher incomes.

The budget also proposes to reduce the Labour-sponsored Venture Capital Tax Credit (the "venture capital credit") in 2018.<sup>15</sup> Reducing this credit will increase the amount of taxes some people, generally high-income people, will pay. However, our analysis shows that the tax breaks high-income people gain from a reduction in income taxes greatly offset any losses from changes to the venture capital credit.

Furthermore, the government plans to scale back tax credits for post-secondary tuition and education expenses. While the government is not entirely cancelling the program, students will no longer be granted these credits. Those who have accumulated credits will still be able to claim them to reduce their taxes once they graduate and start earning incomes. Cutting these tax credits will likely be detrimental to higher income individuals. Like in the case of the venture capital credit, these education credits are typically used by people who earn relatively high incomes.<sup>16</sup>

When taken all together, the tax changes proposed by the Sask Party government are regressive. Although higher income people will lose access to some tax breaks, like the venture capital credit, they benefit significantly from the reduction in income tax rates (since the cuts from reducing income tax rates more than offset the effective increase in taxes from cancelling indexation of tax brackets). And while everyone will pay more sales tax, low-and middle-income people will see the amount of tax they pay increase by a greater degree compared to high-income people. Overall, low-and middle-income people will pay a greater proportion of their income in taxes as compared to Saskatchewan's highest income people.

To ostensibly offset tax increases that fall disproportionately on low- and middle-income people, the Sask Party government has increased the low-income tax credit. This program is designed to provide relief to modest-income families, which are hardest hit by increases to the PST. Specifically, adults and children will receive an additional \$100 and \$40 each, respectively. The government has also increased the "clawback rate" of the credit from 2% to 2.75%. This change will target benefits to the poorest families and result in less support reaching those in the middle of the income distribution.

**There are many tax changes proposed by the government that will impact individuals and their families. However, for this report, we focus on the impact of changes to the PST, income taxes, the venture capital credit, and the low-income tax credit.**

# Analysis

## Impact on Individuals

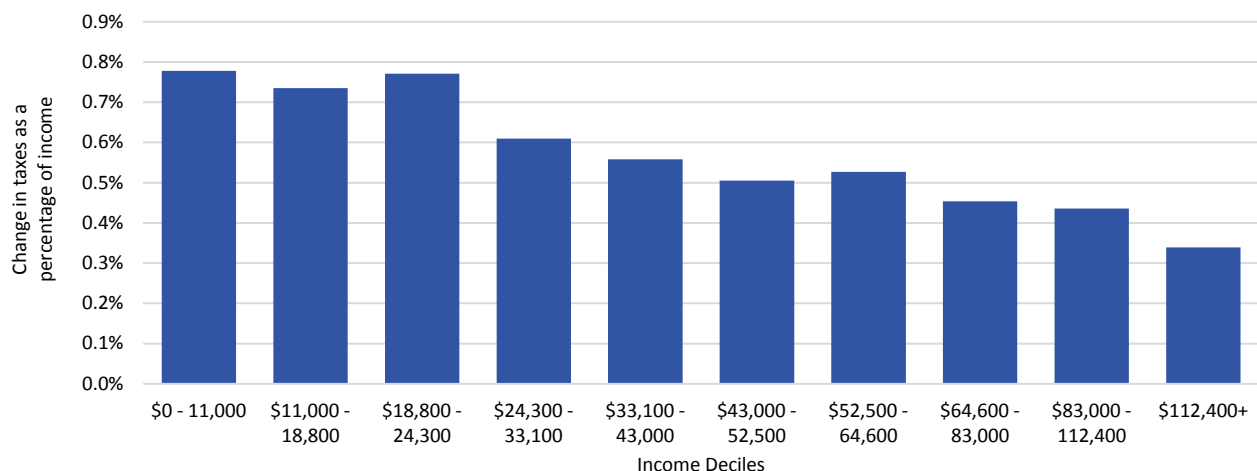
Similar to the approach taken by Tombe and Shaffer in their Maclean's article, we estimate the individual and overall impact of changes to income taxes, the PST, and the venture capital tax credit.<sup>17</sup>

We estimate the impact of the government's proposed tax changes for two years: 2018 and 2020. As discussed in the previous section, the Saskatchewan government has proposed decreases in income taxes every year from 2017 to 2020. By 2020, all tax changes will have been fully implemented. Therefore, we provide a "snap-shot" of the estimated change in taxes paid by individuals in 2018 and in 2020. Our data reflect the difference in the tax we expect individuals or families to pay in 2018 and 2020 compared to the tax they would have paid in those same two years had there been no changes. We present our tax projections as a percentage of income to demonstrate how taxes change relative to a person's ability to pay more tax.

Chart 1 shows the impact of the government's tax changes on individuals by income decile. Each bar represents one-tenth of the Saskatchewan population that has income, organized from lowest income to highest income. The chart shows that individuals who make over \$112,400 will be least impacted by the government's tax changes, compared to all other people in Saskatchewan. People who make less than \$24,300 a year will see the biggest change in the amount of tax they pay as a percent of their income. Overall, as a person's income increases, the impact of the government's tax changes decreases.

In terms of dollars and cents, the increase in taxes paid by individuals may not seem significant. However, it is critical to view these changes relative to the income of the person paying. For example, a person who makes over \$112,400 in 2018 will typically pay approximately \$500 more in taxes, whereas a person who earns between \$33,100 and \$43,000 will typically pay \$200 more. However, as Chart 1 shows, the tax increase faced by the typical

**Chart 1: Median change in tax as a percentage of income (income taxes, PST, and the venture capital credit), individuals who make income, 2018.**



person who earns between \$33,100 and \$43,000, as a proportion of income, is notably greater than the tax increase experienced by the typical person who earns more than \$112,400.

Our estimates for the 2020 tax year show an even starker image of the inequity of the Sask Party government's proposed changes. Chart 2 demonstrates the impact of the 2017-2018 budget's tax changes when they are fully implemented, in 2020.

We estimate that in 2020 the typical person who earns less than \$35,000 will likely see their taxes go up. Indeed, those with the lowest incomes in the province – who make less than \$25,600 – will see the greatest increase in the taxes they pay. In contrast, people who earn more than \$68,100 are likely to see a tax cut due to the government's tax changes. People who earn between \$35,000 and \$68,100 will see very little change in the overall taxes they pay.

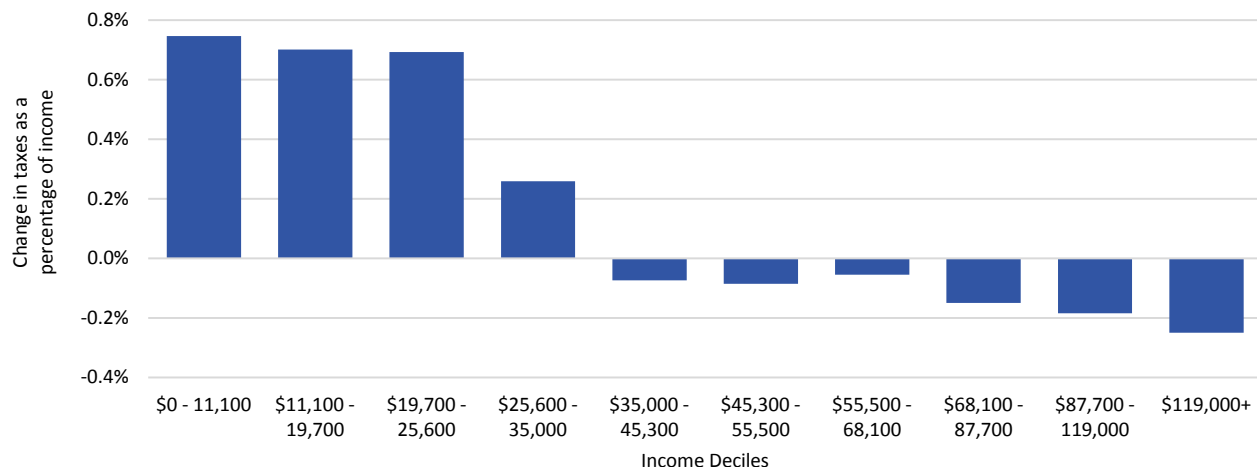
Saskatchewan's biggest winners from the tax changes of 2020 are people who will make over \$119,000. The benefits of the tax changes to the top 10% of earners is even more stark when we consider the incomes of some of Saskatchewan's highest earners.<sup>18</sup> For example, the executive of Potash Corp received \$3.9 million in total compensation in 2016, of which \$3 million was

realized earnings. If he were to earn the same income in 2020, he would enjoy a break on his income taxes of about \$30,000.

It is worth noting that changes to the education expense and tuition credits, which we omitted from this analysis, would negatively impact high-income earners (for more information see the appendix). However, including these credits would not change the fact that the tax changes, once fully implemented in 2020, are fundamentally regressive. Thus, if we were to include the changes to the province's education and tuition credits in Chart 2, we would see that the tax changes, as a whole, would be regressive, but less so.

However, the estimates presented in Chart 2 also do not convey the impact of several other tax changes put forward in the budget. Firstly, these do not include the impact of the increases to tobacco and liquor taxes or increases in property taxes as a response to the province's funding cuts to municipalities. However, we know that these forms of taxation are regressive. For instance, Statistics Canada's Survey of Household Spending<sup>19</sup> shows that spending on tobacco and alcohol by Saskatchewan's lowest household income quintile represents about twice the share of total household spending as that for the highest income quintile.

**Chart 2: Median change in tax as a percentage of income (income taxes, PST, and the venture capital credit) as a percentage of income, individuals, 2020.**



The same survey shows a similar trend regarding property and school taxes for owned living quarters.

Furthermore, the tax benefits estimated here for higher income groups don't show the full picture. Specifically, we do not consider the impact of cuts in corporate income taxes. As of July 1, 2019, corporation income tax will be reduced by one percentage point to become the lowest corporate tax rate in the country. High-income earners are far more likely to benefit more from this corporate income tax cut than others along the income distribution.<sup>20</sup> For example, high-income people are far more likely to own Canadian corporations. Indeed, many high-income earners set up "Canadian-controlled private corporations" as a strategy to pay lower tax rates.<sup>21</sup> Thus, the reduction of Saskatchewan's corporate income tax disproportionately favours high-income people in the province.<sup>22</sup>

It is important to note that Charts 1 and 2 underestimate the impact of some regressive taxes put forward in Budget 2017-2018 and likely underestimate some additional tax breaks for Saskatchewan's highest income earners. While we have omitted the impact of changes to the education expense and tuition credits, we know that these changes would likely increase the amount of tax paid by higher income people. However, when

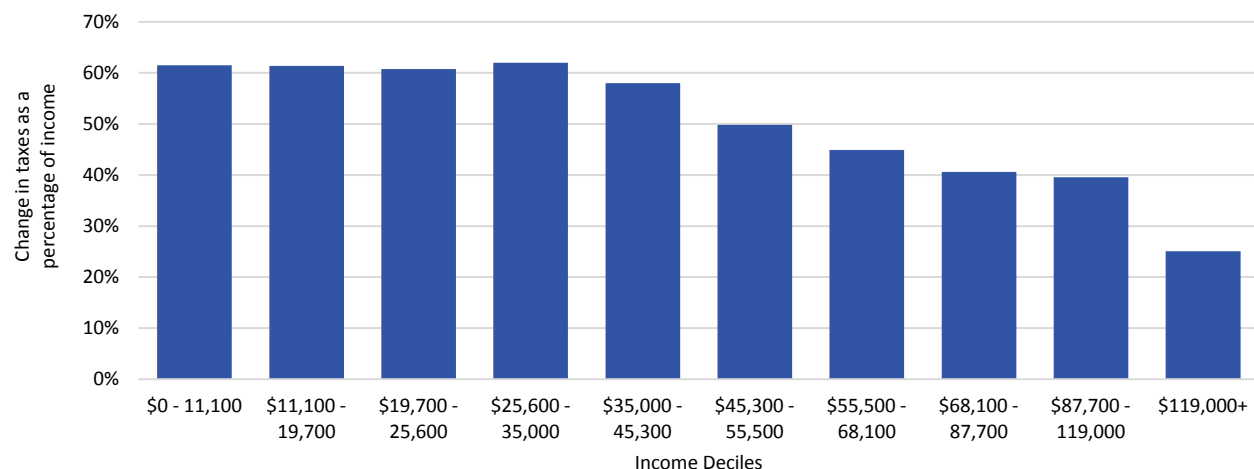
we view all of these tax changes together, they are indeed regressive.

## Impact of Tax Changes on Women

The tax changes put forward in the 2017-2018 budget also have significant implications in terms of gender. As Chart 2 shows, there are significantly more women in the lower-end of the income distribution than men. Based on the fact that the province's tax changes impact low-income earners more, it follows that these changes also negatively impact women more than men.

We expect that in 2020 (when all the tax changes are expected to be fully implemented) 62.2% of all people who make less than \$11,100 will be women. In contrast, 74.4% of people who earn more than \$119,000 will be men. In fact, the majority of people who have incomes in excess of \$45,300 would be men. For context, in 2014 the median incomes for men and women in Saskatchewan were \$45,830 and \$29,850, respectively.<sup>23</sup> Based on the analysis previously presented, women are more likely to see a greater proportion of their income go toward taxes as a result of the tax changes included in the 2017-2018 budget.

**Chart 3: Percentage of women in each income decile, individuals with income, 2020**





## Impact by Family – Low-Income Tax Credit Changes

The Saskatchewan government acknowledged the negative impact of its tax increases on low-income families and decided to enhance the low-income tax credit to ostensibly offset the impact. While enhancements to the low-income tax credit will help some of Saskatchewan’s least well-off families, it does not completely negate the regressive nature of the tax changes proposed by the government.

As of July 2017, the government will provide an additional \$100 annually for the adult and spousal components of the credit and an additional \$40 per child for up to two children. The government will also increase the “clawback rate” for the program, however, which means that the program will be more directly targeted to Saskatchewan’s lowest-income families.

We present the impact of changes to the low-income tax credit by family, as this credit is allocated to families and not to individuals within a family. Table 2 outlines the typical benefit families cross 10 income percentiles<sup>24</sup> can expect to receive due to increases in the low-income tax credit.

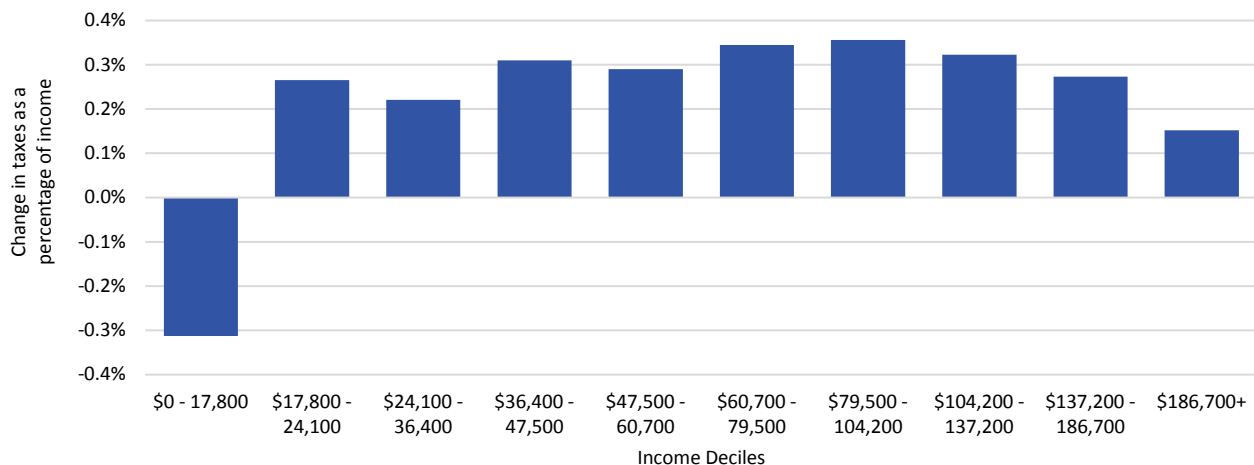
**Table 2: Increase in nuclear family income by income decile from increase to the low-income tax credit, 2018**

| Nuclear family income deciles | Median increase in family benefits |
|-------------------------------|------------------------------------|
| \$0 - 16,500                  | \$100                              |
| \$16,500 - 22,800             | \$100                              |
| \$22,800 - 34,400             | \$100                              |
| \$34,400 - 44,900             | \$89                               |
| \$44,900 - 57,700             | \$31                               |
| \$57,700 - 75,100             | 0                                  |
| \$75,100 - 98,700             | 0                                  |
| \$98,700 - 129,900            | 0                                  |
| \$129,900 - 176,400           | 0                                  |
| \$176,400+                    | 0                                  |

According to our estimates, most families with incomes greater than \$57,700 will not receive any additional benefit from the low-income tax credit. Families with incomes between \$44,900 and \$57,700 would typically receive only an additional \$31.

For context, Chart 4 shows estimates of the impact of the tax changes for nuclear families in 2018, including the impact of the LITC enhancements.

**Chart 4: Median change in tax as a percentage of income (LITC, income taxes, PST, and the venture capital credit), nuclear families with income, 2018**

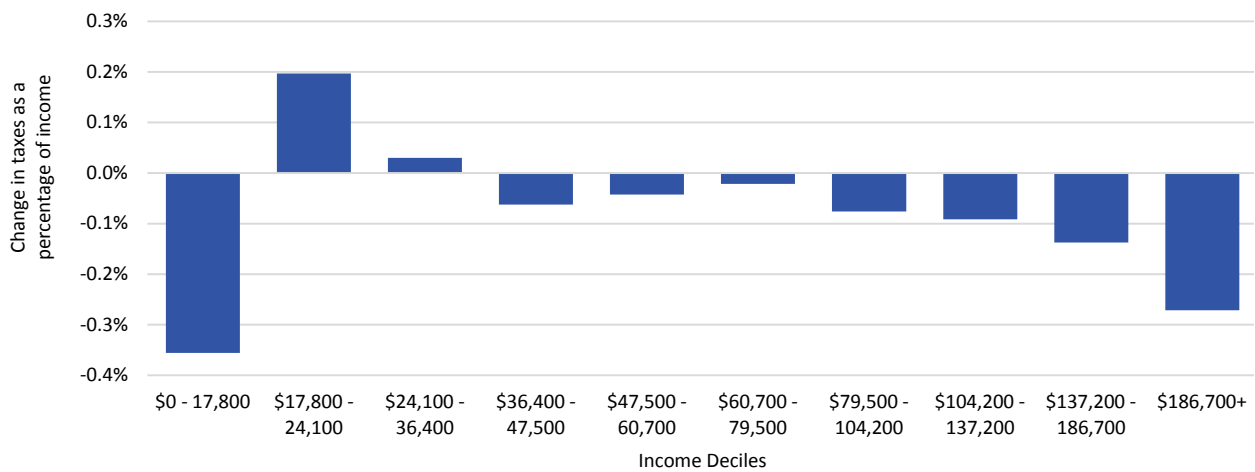


For Saskatchewan's lowest-income families, the increase in the LITC could offset the tax increases that these families face. However, the typical family that has more than \$16,500 in income will still see an increase in the taxes they pay.

However, when the government's changes to income tax rates are fully implemented, many families, particularly high-income families, stand to benefit from cuts to income taxes. Chart 5 demonstrates this point.

To put the data in Chart 5 in context, the tax cut, as a percentage of income, for people in the top decile is nearly double that of the neighbouring decile—the ninth. The tax cut enjoyed by high-income families is even more stark when contrasted with the change in taxes paid by families who earn less than \$79,500. We estimate that if the Sask Party government's tax changes are fully implemented, the typical family that earns between \$17,800 and \$24,100 will see a tax increase, as a percentage of income, of almost the same magnitude as the tax cut we expect families over the \$186,700 threshold will experience.

**Chart 5: Median change in tax as a percentage of income (LITC, income taxes, PST, and the venture capital credit), nuclear families with income, 2020.**



**Again, it is important to emphasize that this analysis does not include the impact of other regressive taxes that Saskatchewan families will be paying, such as higher taxes on tobacco and liquor, insurance premiums, and property taxes. It also does not include the impact of changes to post-secondary tax credits.**

# Conclusion

When taken together, the tax changes put forward in the 2017-2018 Saskatchewan budget are regressive. The tax changes will be disproportionately borne by the people who are least in a position to pay. People with lower incomes will pay a greater proportion of their incomes in taxes, relative to those who have the highest incomes in the province. This finding conflicts with the budget's claim of fairness.

The enhancements to the low-income tax credit will, to some extent, counteract the increased burden faced by Saskatchewan's lowest income families brought about by the tax changes. However, enhancement to the credit do not completely correct for the inequitable effects of the tax changes. Despite increases to the low-income tax credit, Saskatchewan's highest income families will pay significantly less additional tax, as a percentage of income, than most other families in the province. Indeed, many high-income families may see an overall tax break in 2020, when the province's income tax changes are fully implemented.

The inequity of the tax changes proposed by the Sask Party government is even more striking when we view its impact by gender. Women are significantly under-represented in the high end of the income distribution and make up the majority of people who are in the lower-half of the income spectrum. Since the tax changes of the Sask Party government are regressive, it follows that these changes will more negatively impact women.

Beyond the impacts explored in this study, the government's proposed tax changes may have further negative consequences. For example, charging PST on insurance premiums may put

pressure on employers to cut benefit costs or download these additional costs to employees.

As the study *Debunking the Deficit: How Saskatchewan can get back on track without cuts or austerity* argued, there are ways the Saskatchewan government can manage its deficit without resorting to austerity. If, instead of austerity measures, the government were to focus its efforts on making the tax system fairer, diversifying its revenue streams, spending more wisely, and growing the economy, Saskatchewan can manage its current deficit without putting an unnecessary financial burden on those who are least able to take it on.

Overall, the analysis we present shows the regressive nature of only the tax changes put forward in the 2017-2018 budget. However, when we consider together both the tax changes and cost cutting measures in the provincial budget, the overall impact is likely even more regressive.

By cutting municipal funding, municipalities are compelled to increase property taxes, which are generally a regressive form of taxation. Cuts to public services such as health care will also be detrimental and will likely affect low-income households the most.<sup>25</sup> The proposed pay cuts for workers across the entire public sector, who make up about 20% of the Saskatchewan population and most of whom are women, will not only decrease service levels for critical public services but also negatively affect the entire economy of Saskatchewan. A more comprehensive distributional and economic impact analysis of the budget, which considers the aforementioned factors, is likely to show that the budget is even more regressive than our analysis indicates and even more damaging for the economy.

# Appendix

## Breakdown by Tax Type

**Table 1A: Change in Taxes by Income Category, Individuals with Income, 2018.**

| Income Categories  | Tax Change – Income Tax |           | Tax Change – Education Credit |          | Tax Change – Venture Capital Credit |         | Tax Change – All Changes (No Education) |          |
|--------------------|-------------------------|-----------|-------------------------------|----------|-------------------------------------|---------|---|----------|
|                    | Median                  | Mean      | Median                        | Mean     | Median                              | Mean    | Median                                  | Mean     |
| \$0 - 11,000       | –                       | -\$4.16   | –                             | \$2.76   | –                                   | –       | \$39.00                                 | \$61.84  |
| \$11,000 - 18,800  | –                       | -\$2.40   | –                             | \$0.96   | –                                   | –       | \$107.00                                | \$138.70 |
| \$18,800 - 24,300  | –                       | -\$12.42  | –                             | \$15.04  | –                                   | –       | \$159.00                                | \$190.59 |
| \$24,300 - 33,100  | -\$65.00                | -\$47.75  | \$41.00                       | \$47.41  | –                                   | \$0.05  | \$178.00                                | \$201.45 |
| \$33,100 - 43,000  | -\$93.00                | -\$76.51  | \$66.00                       | \$83.63  | –                                   | \$0.02  | \$209.00                                | \$242.79 |
| \$43,000 - 52,500  | -\$108.00               | -\$93.94  | \$87.00                       | \$87.75  | –                                   | \$2.16  | \$244.00                                | \$258.59 |
| \$52,500 - 64,600  | -\$120.00               | -\$99.69  | \$104.00                      | \$93.72  | –                                   | \$3.28  | \$308.00                                | \$372.83 |
| \$64,600 - 83,000  | -\$150.00               | -\$167.90 | \$135.00                      | \$173.67 | –                                   | \$6.64  | \$335.00                                | \$351.52 |
| \$83,000 - 112,400 | -\$199.00               | -\$201.93 | \$184.00                      | \$193.40 | –                                   | \$7.95  | \$422.00                                | \$470.87 |
| \$112,400+         | -\$277.00               | -\$356.91 | \$280.00                      | \$384.86 | –                                   | \$16.15 | \$514.00                                | \$563.02 |

**Table 2A: Change in Taxes as a Percentage of Income by Income Category, Individuals with Income, 2018.**

| Income Categories  | Tax Change – Income Tax as a % of Income |        | Tax Change – PST as a % of Income |       | Tax Change – Venture Capital Credit as a % of income |       | Tax Change – All Changes (No Education) as a % of income |        | Tax Change – Education Credit as a % of income |       |
|--------------------|--|--------|-----------------------------------|-------|--|-------|--|--------|--|-------|
|                    | Median                                   | Mean   | Median                            | Mean  | Median   | Mean  | Median   | Mean   | Median   | Mean  |
| \$0 - 11,000       | 0.00%                                    | -0.11% | 0.80%                             | 2.45% | 0.00%  | 0.00% | 0.84%  | -1.31% | 0.00%  | 0.03% |
| \$11,000 - 18,800  | 0.00%                                    | -0.01% | 0.75%                             | 0.96% | 0.00%  | 0.00% | 0.85%  | 1.40%  | 0.00%  | 0.01% |
| \$18,800 - 24,300  | 0.00%                                    | -0.06% | 0.85%                             | 0.98% | 0.00%  | 0.00% | 0.89%  | 1.05%  | 0.00%  | 0.07% |
| \$24,300 - 33,100  | -0.23%                                   | -0.16% | 0.86%                             | 0.96% | 0.00%  | 0.00% | 0.75%  | 0.90%  | 0.15%  | 0.16% |
| \$33,100 - 43,000  | -0.25%                                   | -0.20% | 0.84%                             | 0.94% | 0.00%  | 0.00% | 0.71%  | 0.85%  | 0.18%  | 0.22% |
| \$43,000 - 52,500  | -0.22%                                   | -0.20% | 0.84%                             | 0.88% | 0.00%  | 0.00% | 0.67%  | 0.74%  | 0.18%  | 0.19% |
| \$52,500 - 64,600  | -0.21%                                   | -0.17% | 0.85%                             | 0.93% | 0.00%  | 0.01% | 0.70%  | 0.89%  | 0.18%  | 0.16% |
| \$64,600 - 83,000  | -0.21%                                   | -0.23% | 0.78%                             | 0.85% | 0.00%  | 0.01% | 0.62%  | 0.66%  | 0.19%  | 0.24% |
| \$83,000 - 112,400 | -0.21%                                   | -0.21% | 0.82%                             | 0.87% | 0.00%  | 0.01% | 0.63%  | 0.71%  | 0.19%  | 0.20% |
| \$112,400+         | -0.20%                                   | -0.19% | 0.72%                             | 0.73% | 0.00%  | 0.01% | 0.49%  | 0.55%  | 0.20%  | 0.20% |

The education and tuition credit figures presented in the table assume that all credits currently held would be void. However, the budget does not void credits already held by graduates. The figures in the table demonstrate that these credits favour high-income individuals.

Furthermore, the number of people affected by changes to the education expense and tuition tax credit changes is relatively small. According to SPSPD/M data, if the program were to be completely removed in 2018, 34% of individuals with incomes would be affected. For context, in 2011-2012, 53,379 people enrolled in post-secondary institutions in Saskatchewan (CANSIM 477-0019), and there were 10,446 graduates in 2014 (CANSIM 477-0020), which represent approximately 4.9% and 0.95% of the provincial population, respectively, for that period.<sup>26</sup> Overall, the number of people likely to be affected by changes to the education and tuition tax credits is very small. The limitations in modelling the changes in addition to the fact that only a small number of people would be affected is our justification for not including changes to education tax credits in our main analysis.

However, even when we include the full amount of the education credit for the 2018 and 2020 simulations, our overall conclusion would not change. The tax changes put forward by the government puts a greater tax burden on individuals who are not at the top of the income spectrum.

**Table 3A: Change in Taxes as a Percentage of Income by Income Category, Individuals with Income, 2020.**

| Income Categories  | Tax Change – Income Tax as a % of Income |        | Tax Change – All Changes (No Education) as a % of Income |        |
|--------------------|--|--------|--|--------|
|                    | Median                                   | Mean   | Median   | Mean   |
| \$0 - 11,100       | 0.00%                                    | -0.22% | 0.75%  | 2.27%  |
| \$11,1400 - 19,700 | 0.00%                                    | -0.02% | 0.70%  | 0.88%  |
| \$19,700 - 25,600  | 0.00%                                    | -0.17% | 0.69%  | 0.74%  |
| \$25,600 - 35,000  | -0.69%                                   | -0.52% | 0.26%  | 0.29%  |
| \$35,000 - 45,300  | -0.86%                                   | -0.69% | -0.07%   | 0.06%  |
| \$45,300 - 55,500  | -0.79%                                   | -0.70% | -0.09%   | 0.00%  |
| \$55,500 - 68,100  | -0.76%                                   | -0.74% | -0.06%   | 0.02%  |
| \$68,100 - 87,6700 | -0.78%                                   | -0.75% | -0.15%   | -0.08% |
| \$87,700 - 119,000 | -0.80%                                   | -0.79% | -0.18%   | -0.13% |
| \$119,000+         | -0.76%                                   | -0.74% | -0.25%   | -0.21% |

**Table 4A: Change in Taxes by Income Category, Nuclear Families with Income, 2018.**

| Rounded Categories  | Tax Change – LITC |       | Tax Change – All Tax Changes and LITC |         | Tax Change – LITC |        | Tax Change – All Changes (No Education) and LITC as a % of Income |       |
|---------------------|-------------------|-------|---------------------------------------|---------|-------------------|--------|---|-------|
|                     | Median            | Mean  | Median                                | Mean    | Median            | Mean   | Median  | Mean  |
| \$0 - 16,500        | \$100             | \$107 | \$ 32                                 | \$ 11   | -1.30%            | -5.93% | -0.31%  | -3.3% |
| \$16,500 - 22,800   | \$100             | \$105 | -\$ 50                                | -\$ 83  | -0.48%            | -0.53% | 0.27%   | 0.4%  |
| \$22,800 - 34,400   | \$100             | \$126 | -\$ 65                                | -\$100  | -0.39%            | -0.44% | 0.22%   | 0.4%  |
| \$34,400 - 44,900   | \$ 89             | \$110 | -\$124                                | -\$127  | -0.24%            | -0.28% | 0.31%   | 0.3%  |
| \$44,900 - 57,700   | \$ 31             | \$ 63 | -\$151                                | -\$193  | -0.06%            | -0.13% | 0.29%   | 0.4%  |
| \$57,700 - 75,100   | \$ –              | \$ 31 | -\$237                                | -\$330  | 0.00%             | -0.05% | 0.35%   | 0.5%  |
| \$75,100 - 98,700   | \$ –              | \$ 5  | -\$301                                | -\$356  | 0.00%             | -0.01% | 0.36%   | 0.4%  |
| \$98,700 - 129,900  | \$ –              | \$ 2  | -\$363                                | -\$369  | 0.00%             | 0.00%  | 0.32%   | 0.3%  |
| \$129,900 - 176,400 | \$ –              | \$ 0  | -\$417                                | -\$466  | 0.00%             | 0.00%  | 0.27%   | 0.3%  |
| \$176,400+          | \$ –              | \$ –  | -\$311                                | -\$ 276 | 0.00%             | 0.00%  | 0.15%   | 0.2%  |

The figures in the column “Mean Tax Change – Low-income Tax Credit” suggest that some families that earn between \$75,100 and \$129,900 benefit from increases in the low-income tax credit. This result arises because for families in these categories that obtain the credit, their net family income, the measure used to establish eligibility for the LITC, is significantly less than the income measure we use to establish the income categories. These observations are outliers.

**Table 5A: Change in Taxes as a Percentage of Income by Income Category, Nuclear Families with Income, 2020.**

| Income Categories   | Tax Change --<br>All Tax Changes and LITC |         | Tax Change – All Changes<br>(No Education) and LITC<br>as a % of Income |        |
|---------------------|---|---------|---|--------|
|                     | Median                                    | Mean    | Median  | Mean   |
| \$0 - 17,800        | -\$ 41                                    | -\$ 21  | -0.36%  | -3.58% |
| \$17,800 - 24,100   | \$ 41                                     | \$ 67   | 0.20%   | 0.30%  |
| \$24,100 - 36,400   | \$ 9                                      | \$ 22   | 0.03%   | 0.09%  |
| \$36,400 - 47,500   | -\$ 24                                    | -\$ 5   | -0.06%  | -0.01% |
| \$47,500 - 60,700   | -\$ 23                                    | \$ 19   | -0.04%  | 0.03%  |
| \$60,700 - 79,500   | -\$ 16                                    | \$ 86   | -0.02%  | 0.13%  |
| \$79,500 - 104,200  | -\$ 79                                    | -\$ 6   | -0.08%  | -0.01% |
| \$104,200 - 137,200 | -\$119                                    | -\$112  | -0.09%  | -0.10% |
| \$137,200 - 186,700 | -\$208                                    | -\$164  | -0.14%  | -0.10% |
| \$186,700+          | -\$629                                    | -\$ 928 | -0.27%  | -0.23% |

# Endnotes

- 1 See 2017-2018 Saskatchewan Budget, page 7.
- 2 For example, see <http://www.cbc.ca/news/canada/saskatchewan/sask-libraries-budget-reversal-1.4082965>.
- 3 See: <http://www.macleans.ca/economy/economicanalysis/saskatchewan-swallows-the-fiscal-pill-alberta-refuses/>.
- 4 2017-2018 Saskatchewan Budget, page 50.
- 5 See, [https://sk.cupe.ca/files/2017/03/Brief\\_Saskatchewan\\_Back\\_on\\_Track\\_2017\\_03\\_07.pdf](https://sk.cupe.ca/files/2017/03/Brief_Saskatchewan_Back_on_Track_2017_03_07.pdf)
- 6 We conduct our analysis using the Statistics Canada Social Policy Simulation Database and Model (SPSD/M) version 22.3. The assumptions and calculations underlying the simulation results were prepared by the author and the responsibility for the use and interpretation of these data is entirely that of the author.  
  
To calculate income deciles and evaluate the impact of taxes, we use the sum of market income, transfer income, and taxable RRSP withdrawals.
- 7 Revenue/Tax Backgrounder 2017-2018. <http://www.finance.gov.sk.ca/budget17-18/BG-FinanceRevenueTax2017-18.pdf>.
- 8 The government has also expanded the PST so that the value of a vehicle trade-in allowance is no longer deductible, and contracts for repairs, renovations, and improvements of real property are now taxable. We have not included the impact of including in PST the trade-in value of vehicles or repairs, renovations, and improvements to real property due to limitations in the SPSPD/M model. These omissions mean that the impact of the PST changes we estimate are an underestimation.  
  
It is also worth noting that the elements not included in the PST are likely most relevant to middle- and high-income families. For example, based on data from CANSIM table 203-0022, average spending on vehicles as a percentage of average income, by income quintile, was greatest for households in the third and fourth quintiles (see <http://www5.statcan.gc.ca/cansim/a47>).
- 9 Revenue/Tax Backgrounder 2017-2018. <http://www.finance.gov.sk.ca/budget17-18/BG-FinanceRevenueTax2017-18.pdf>.
- 10 For example, See Marc Lee, "Eroding Tax Fairness; Tax Incidence in Canada," Canadian Centre for Policy Alternatives, 1990-2005. 2007.
- 11 Ibid.
- 12 See, <http://www.cbc.ca/news/canada/saskatchewan/regina-city-council-april-18-1.4074661> and <http://www.cbc.ca/news/canada/saskatoon/saskatoon-property-taxes-on-the-rise-1.4084781>.
- 13 Specifically, cancelling indexation would increase income taxes for most taxpayers. However, taxes would likely increase more for higher income people.
- 14 Bill 69 *An Act to amend the Income Tax Act, 2000*. <http://docs.legassembly.sk.ca/legdocs/Bills/28L1S/Bill28-69.pdf>.
- 15 The credit provides a tax break to people who invest money in Saskatchewan-based small and medium-sized businesses through labour-sponsored investment funds. The changes include reducing the amount that can be claimed under the credit by \$250, and reducing the contribution rate from 20% to 15%. Credits such as the venture capital credit tend to benefit high-income people the most because they typically have the funds to take advantage of these credits. For example, see David Macdonald, "Out of the Shadows," *Canadian Centre for Policy Alternatives*, 2016.
- 16 See the appendix for more information.
- 17 We exclude the impact of changes to the post-secondary tuition and education expenses from our main analysis due to limitations in the SPSPD/M model and given that a relatively small proportion of people have access to these credits (see the appendix for details). Information in the appendix shows that if the government were to completely cancel these education credits, higher-income individuals would be most affected. However, the data provided in the appendix is hypothetical as those with credits can be carried forward to future years. Even in the worst-case scenario where all credits were voided, the tax changes in the Budget would still be regressive. For more information on these credits, see Schedule SK(S11): <http://www.cra-arc.gc.ca/E/pbg/tf/5008-s11/5008-s11-16e.pdf>. Furthermore, we estimate the impact of changes to the PST on the individual level by allocating PST payments to family members according to their income. For more information see SPSPD/M Help Guide.
- 18 Page 61, *Notice of Annual Meeting of Shareholders and Management Proxy Circular*, Potash Corporation of Saskatchewan Inc. [http://www.potashcorp.com/media/POT\\_2017\\_Proxy\\_Circular.pdf](http://www.potashcorp.com/media/POT_2017_Proxy_Circular.pdf)
- 19 CANSIM 203-0022 (retrieved June 12, 2017 <http://www5.statcan.gc.ca/cansim/a26>).
- 20 For example, see <https://www.treasury.gov/resource-center/tax-policy/tax-analysis/Documents/TP-5.pdf>. See the following for a review of the literature: Block, Sheila and Shillington, Richard. "Incidence of Taxes in Ontario in 1991", *Taxation and the Distribution of Income*. Ed. Allan Maslove. University of Toronto Press, 1994.
- 21 Wolfson, Michael; Veall, Mike; Brooks, Neil; and Murphy, Brian. "Piercing the Veil: Private Corporation and the Income of the Affluent." *Canadian Tax Journal*. 64:1, 1-30. 2016.
- 22 As well, incomes of people in the highest deciles are often under-reported. While SPSPD/M does make some corrections for this issue, the data used in the program does have limitations. For more information, see SPSPD/M Database Creation Guide, "High Income Adjustment".
- 23 CANSIM table 111-0008 (last retrieved June 13, 2017 at <http://www5.statcan.gc.ca/cansim/a26>).
- 24 To calculate income deciles and evaluate the impact of taxes, we use the sum of market income, transfer income, and taxable RRSP withdrawals.
- 25 For more detail on the usage of public services across the income spectrum, see Mackenzie, Hugh and Shillington, Richard "Canada's Quiet Bargain" Canadian Centre for Policy Alternatives. 2009.
- 26 For population figures, see: <http://www.stats.gov.sk.ca/pop/stats/population/APR2015.pdf>.

