

What have four Conservative budgets done to personal income taxes?

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1.0 Introduction

Since the Conservatives won the federal election of 2006 and formed government, Finance Minister Jim Flaherty has delivered four budgets. While the constraints of a minority Government and strategic incremental politics have limited changes to tax policy, the accumulated weight of four budgets may reveal interesting patterns and some sense of direction. In this paper, I analyze the impact of the budget changes of the 2006 through 2009 budgets on the distribution of personal income tax burdens across Canadians. The analysis studies tax burdens by income group, as well as by marital status, the presence of children, and whether there are seniors present.

Before embarking on the distributional analysis, I begin with the aggregate trends in personal income tax collection at the federal level. In Figure 1, I take an annual series of federal personal income tax revenue and divide it by the personal income series taken from the national accounts.¹ The tax revenue data is on a fiscal year basis while the national accounts are based on calendar years. However, the resulting series should be informative for picking out any trend breaks in the share of personal income taken by the federal government in taxes. For context, I show the years from 2000-2005 under the Liberal Governments of Prime Ministers Chretien and Martin, as well as the 2006-2008 data for the Conservative Government of Prime Minister Harper. Data for the fiscal year ending in 2009 is not yet available.

The series shows a surprising lack of movement. Actual personal income tax revenue grew in nominal terms by 20.5 percent from 98.4 billion in 2005 to 118.6 billion in 2008. However, personal income grew by almost the same percentage, leaving the

¹ Personal income in the national accounts comprises income received by Canadian residents, whether from factor income or government transfers.

share of personal income taken by federal taxes at about 9.5 percent. This suggests that whatever changes have been made, they have been proportional in aggregate. So, up to 2008, there was no change in aggregate fiscal policy through personal income taxation.

Even if personal income taxes remained proportionally similar between 2005 and 2008, a shift in other forms of taxation could lead to important changes in the tax mix. In particular, many economists and commentators have discussed the implications of cutting the Goods and Services Tax from seven percent to five percent. To this end, Figure 2 examines the share of federal tax revenue coming from different sources. I categorize the revenue sources into personal income taxes, corporate income taxes, consumption taxes, and other taxes.²

Total federal revenue in 2005 was 212.2 billion, rising 18 percent to 250.8 billion in 2008. The share of this revenue brought in by the personal income tax increased slightly from 46.3 to 47.3 percent, but this remained in the range seen from 2000 to 2004. There was a sizeable drop from 22.3 percent to 19.6 percent in consumption taxes, as sales tax revenue stayed flat in nominal terms owing to the cut in the Goods and Services Tax rate from seven to five percent. Corporate income tax revenue jumped two percentage points, owing more to buoyant corporate profits than policy changes. Overall, Figure 2 reveals little sign of a substantial shift in the tax mix at the federal level.

This preliminary analysis of aggregate trends suggests little change to either the overall share of activity captured by the personal income tax system or to the mix of revenue sources. In the rest of the paper, I focus on the distribution of tax burdens across

² Consumption taxes include general sales taxes (the Goods and Services Tax), alcoholic beverages and tobacco taxes, amusement taxes, gasoline and motor fuel taxes, remitted gaming profits, custom duties, and other consumption taxes. Other taxes include health and drug insurance premiums, property and related taxes, contributions to social security plans, natural resource taxes and licenses, interest and investment income, fines, penalties, and other revenue. The data come from CANSIM matrix 3850002

Canadians to see if tax policy over the last four budgets has changed. The next section provides a listing and brief description of all changes to the federal personal income tax over the last four budgets. Following that, I provide evidence from simulations on how these changes have affected tax burdens.

2.0 Personal Income Tax Changes

A defining feature of tax policy under the Conservative Government has been incrementalism. In contrast to past party platforms that featured marquee personal income tax cuts, the Conservative policy proposals prior to the federal election of 2006 encompassed a bundle of small, targeted tax changes. While the continued incrementalism since the 2006 election might be ascribed to the minority Parliament, it is worth noting that this incrementalism had its birth in strategic decisions made before the Conservatives knew they would be in a minority situation. In this section, I provide details on all federal personal income tax changes over the 2005 to 2009 period. I exclude the important dividend tax credit changes announced in 2005 by the Liberal Government but implemented in 2006, since this was not a decision made by the Conservatives.

2.1 Rates and Brackets

There have been no changes to the rate structure, except for a 0.25 percent blip in the bottom tax rate from 15 to 15.25 percent in 2006 which was reversed in the following year.³ The thresholds for the four tax brackets were adjusted for inflation between 2005

³ The previous Liberal Government announced in the 2005 Fall Fiscal Update a cut in the bottom rate from 16 percent to 15 percent retroactive to January 1, 2005. This change, however, was not legislated before the fall of the Liberal Government. The new Conservative Government recognized the change for 2005 and the

and 2008 but otherwise remained the same. The 2009 Budget announced larger-than-inflation increases in the thresholds for the second and third brackets, but tax rates were left unchanged. These developments are summarized in Table 1.

2.2 Non-refundable tax credits

The bulk of the tax changes that have been implemented are adjustments to non-refundable tax credits. The dollar value of these tax credits is determined by multiplying the bottom tax rate by the credit amount. So, a \$500 credit lowers the tax liability in 2009 by 15 percent of \$500, or \$75. However, the tax liability cannot fall below zero. Below, I list these changes and describe each briefly:

- Canada employment amount: Credit of \$250 in 2006, then \$1000 in 2007 for earned income.
- Children's fitness amount: Credit of \$500 for children's sports expenditures, starting in 2007.
- Textbook amount: An extra \$65 (fulltime) or \$20 (part-time) added to the monthly education amount. No need to show textbook expenditures.
- Public transit amount: credit for monthly transit passes introduced in 2007.
- Dependant children: credit of \$2,000 per child age 18 and under.
- Pension income amount: increase of \$1000 to a level of \$2,000 for qualified pension income in 2006.
- Age amount: Increased from \$3,979 in 2005 to \$5,066 in 2006, then to \$6,408 in 2009.
- Basic amount: increased from \$8,839 to \$9,600 in 2007, then \$10,320 in 2009
- Spousal amount: increased from \$7,505 to \$9,600 in 2007, then \$10,320 in 2009.

2.3 Other changes

There have been two substantial changes to income-tax based transfers. First, the Universal Child Care Benefit was introduced in July 2006, paying \$100 per month for each child under the age of six. This benefit is taxable income for the lower-income

first half of 2006, but set the rate at 15.5 percent for the last 6 months of 2006, making the 2006 rate effectively 15.25 percent. This was set back to 15 percent for 2007 in the 2007 Budget.

spouse, but is not included as net income for the purposes of determining entitlement to refundable tax credits such as the Canada Child Tax Benefit.⁴ The other innovation to benefits is the implementation of the Working Income Tax Benefit, which provides an earned income supplement for those with earned income greater than \$3,000. This benefit is implemented as a refundable tax credit on the tax form, although ‘pre-payment’ of the benefit can be made. The 2009 Budget proposed an expansion of the size of this benefit to \$925 for singles and \$1,680 for couples. The Working Income Tax Benefit is clawed back for those with net income (adjusted for the Universal Child Care Benefit) greater than 10,500 for singles and 14,500 for couples.

Finally, there are two changes to the definition of income. Since 2007, it became possible to elect to split certain types of pension income between spouses. This includes income from Registered Retirement Income Funds, Registered Pension Plans, and Registered Retirement Savings Plans. In some cases, this is restricted to partners age 65 or more. The second income definition change relates to scholarship income received by students. Starting in 2006, scholarship income became excludable, undoing another piece of the 1972 reform that implemented a Carter Commission-inspired comprehensive income definition.

2.4 Assessment

The most salient change to the system is the multitude of non-refundable tax credits. From a tax policy perspective, non-refundable tax credits cost revenue but do not lower marginal tax rates, meaning they do not embody the normal efficiency-equity tradeoff. A lowering of marginal tax rates brings the benefit of more work, savings, and investment

⁴ Specifically, line 236 Net Income has the Universal Child Care Benefit subtracted before determination of entitlement for refundable tax credits.

at the potential cost of less redistribution. In contrast, the non-refundable tax credits do not change marginal tax rates but they do affect the distribution of tax burdens—and the redistribution depends critically on characteristics observable by the tax authority or on particular and seemingly arbitrary spending decisions. To the extent that these characteristics and spending patterns are reflective of some notion of ability to pay, one could attempt to justify them through traditional appeals to equity. However, even with this justification accepted, the administrative and compliance costs of extending small tax credits make the argument in their favour more difficult.

Another argument put forward in favour of targeted tax credits focuses on the after-tax price change for expenditure items eligible for a credit. If there were a negative externality to be corrected and the federal government credit moved the price in the right direction, the diminishing of the externality would improve efficiency. For example, if one thought that children were not getting the right amount of exercise or that public transit was not being used efficiently, then lowering the after-tax price of these activities could improve the economy. More research is needed to learn about the relevant elasticities before these arguments can be fully assessed.

3.0 Who has benefited?

In this section I present results from simulations of the tax system over the period from 2000 to 2009. I use the Canadian Tax and Credit Simulator package (Milligan 2009), which delivers tax liabilities and transfer entitlements for simulated individuals of different characteristics. I take the actual tax parameters for years up to 2008, and the announced parameters for the 2009 year. In the simulations, I focus on a taxpayer living

in British Columbia, although repeating the exercise for other provinces makes little difference. In order to maintain the focus on federal tax changes, I ‘freeze’ the British Columbia income tax system at its 2005 levels, increasing credit amounts and thresholds only by the inflation factor used in British Columbia and keeping all rates at the 2005 values.

Many of the tax changes described above are illuminated little by simulation—if you have earned income you are better off by \$150 dollars. (\$1000 credit times 15 percent credit rate) The same applies for students, public transit users, and parents with children in sports. However, I pick out two groups that might benefit from further analysis—families with children and seniors. Below I present simulations for these two groups to see how changes in tax policy have affected their tax burdens. I also show how burdens have changed across income levels.

3.1 By Income levels

I begin with an exhibit of the overall changes in tax burden across income groups. Figure 3 shows the average tax rate, net of refundable tax credits and including Canada Pension Plan and Employment Insurance payroll taxes, for a single individual with no children in different years. Each line traces the progression of the average tax rate for a given year across earned income levels from 0 to 150,000. These income levels are set in 2005 dollars, and adjusted for inflation for the other years, meaning that inflation alone won’t shift the average tax rates if the tax system were perfectly indexed to inflation. The simulations take increments of \$100, accounting for the lack of complete smoothness of

the lines. The Figure shows the years 2005, 2007, and 2009, with 2000 also shown for context. I assume no special expenditures such as public transit or special status such as being a student.

The results show a strong difference between the 2000 average tax rates and the other three years, which are clustered together. This difference is driven by the tax rate and bracket changes implemented by the Liberals in 2001. This clearly had a large impact on the average tax rate across the income distribution, especially at higher income levels. At \$25,000, the average tax rate drops between 2000 and 2005 from 23.3 percent to 20.7 percent, while at \$100,000 it drops from 37.5 percent to 31.1 percent.

From 2005 to 2009, however, the average tax rates under the Conservative Government show very little change. The slight increase in tax bracket thresholds in 2009 slightly lower the average tax rate compared to 2007 at higher income levels, but this is barely perceptible. The increase in the basic amount from \$8,648 in 2005 to \$10,320 in 2009 improves the bottom line of a taxable filer by \$250.80. In addition, the Canada Employment Amount delivers another \$150. However, the impact of these magnitudes on average tax rates fades quickly as one moves up the income scale.

3.2 By family composition

Several of the changes to tax policy have an impact that differs by family composition. Those with children benefit from the new \$2,000 non-refundable tax credit for children age 18 or less. This delivers a tax break of \$300 per child. In addition, the Universal Child Care Benefit is paid to families with children under age 6, and it is taxed on the return of the lower-earning spouse. This means that parents not employed outside the home pay no tax on this income, while families with two working parents will face

taxes on their payments. Finally, increases to the spousal amount from \$7344 in 2005 to \$10,320 in 2009 provide a more substantial \$446 boost to families with one parent not working outside the home.⁵

To investigate the impact of these changes on families, I simulate the tax burden of families of four different types. I look at a single childless individual, a single parent of two children, a married couple with two children and one parent at home, and a married couple with two children and both parents working. In all cases, I assume the children are ages three and eight, meaning one gets the Universal Child Care Benefit and the other does not. When there is no parent at home, I assume childcare costs for the three year old of \$750 per month that are eligible for the Child Care Expense Deduction. To keep things simple, I look only at an average worker (earning \$41,100, which is the Year's Maximum Pensionable Earnings from the Canada Pension Plan system). When both parents are working, I assign this earned income to both spouses. This level of income means that the Working Income Tax Benefit is not at play.

Figure 4 shows the results. I graph the after-tax income level for each family type for the years 2005 to 2009, normalized to 100 for 2005. The single childless person sees very little change in after-tax income, consistent with what was seen in Figure 3 earlier. When two children are added, however, the family gains more than five percent by 2007 and 6.4 percent by 2009. This amounts to an inflation-adjusted drop of \$1,323 in the tax liability, which is 12 percent of the 2005 tax burden. Next, I add a stay-at-home parent. The increase in after-tax income is comparable to what was seen for the single parent.

⁵ The Working Income Tax Benefit also can have a large (up to \$1,680) impact on families with children who happen to be in the income range (\$3,000 to \$25,700 in 2009 for two-parent families) However, because it is a refundable tax credit it does not have an impact on the rest of the personal income tax system so I leave it out of this analysis.

Finally, I add a two working-parent family. In the Figure, this family is graphed by one parent's income rather than the total of both, making the lines harder to compare to others. Still, it is clear that the gain in after-tax income for the two-parent working family isn't as high. This arises because of the higher tax rate on the Universal Child Care Benefit and the fact that the two working parent family doesn't benefit from the spousal amount expansion.

3.3 Seniors

A number of tax changes affected seniors directly. The age amount went from \$3,976 in 2005 to \$6,408 in 2009, decreasing the tax burden by \$364. Also, for those with pension income, the pension income amount increased by \$1,000, meaning a difference in tax burdens of \$150. Finally, pension income splitting benefits couples with pension income.

To simulate the impact on seniors, I set up senior families with Canada Pension Plan and Old Age Security income, plus some Registered Retirement Savings Plan income. For the Canada Pension Plan, I assume both spouses receive the maximum pension. Old Age Security income is also assumed to come at its maximum level. Finally, I assume Registered Retirement Savings Plan income is \$2,500 per person in the couple.

Figure 5 displays the results. For comparison, I include a single childless non-senior, similar to the single childless individual in Figure 3. The other two lines are for a single senior and a married senior. The gains for the seniors are relatively small, as the gain from the age amount and pension amount are not large.

A more material gain is possible through the income splitting provision introduced in 2007. Under this provision, qualified pension income can be split between

the two spouses in the couple. Figure 6 shows the average tax rate for a senior couple with the same income profile described above, but with an increasing amount of pension income as one moves from left to right in the graph. The years 2006 and 2007 are shown, being the last year before income splitting and the first year after.

There is an evident substantial difference between the average tax rate in the two years. The gap reaches 4 percentage points at \$50,000 of pension income. At \$100,000 of pension income the inflation-adjusted tax difference is \$8,112, which is 20.2 percent of the total tax burden. This represents a substantial saving to the couple. However, to put this in context, only 65.9 percent of senior couples in the 2005 Survey of Labour and Income Dynamics have any pension income. The 75th percentile is \$18,500, the 95th percentile is \$47,500, and the 99th percentile is \$80,000. This suggests that most of the benefit of this tax change will accrue to the small proportion of seniors with substantial pension income.

4.0 Conclusions

This paper has studied the overall impact of changes in tax policy over the four Conservative budgets from 2006 to 2009. While there was almost no change in the proportion of personal income taken as taxes or in the share of personal income tax in revenue, there were some significant changes in the distribution of the tax burden. The largest identifiable beneficiaries of the Conservative income tax policy have been families with children, and specifically those with a stay at home parent. In addition, I found a large benefit for seniors with substantial pension income due to the introduction of pension income splitting in 2007. So, these simulations suggest that the biggest

winners from the first four Conservative budgets have been families with children and seniors with substantial pension income.

References

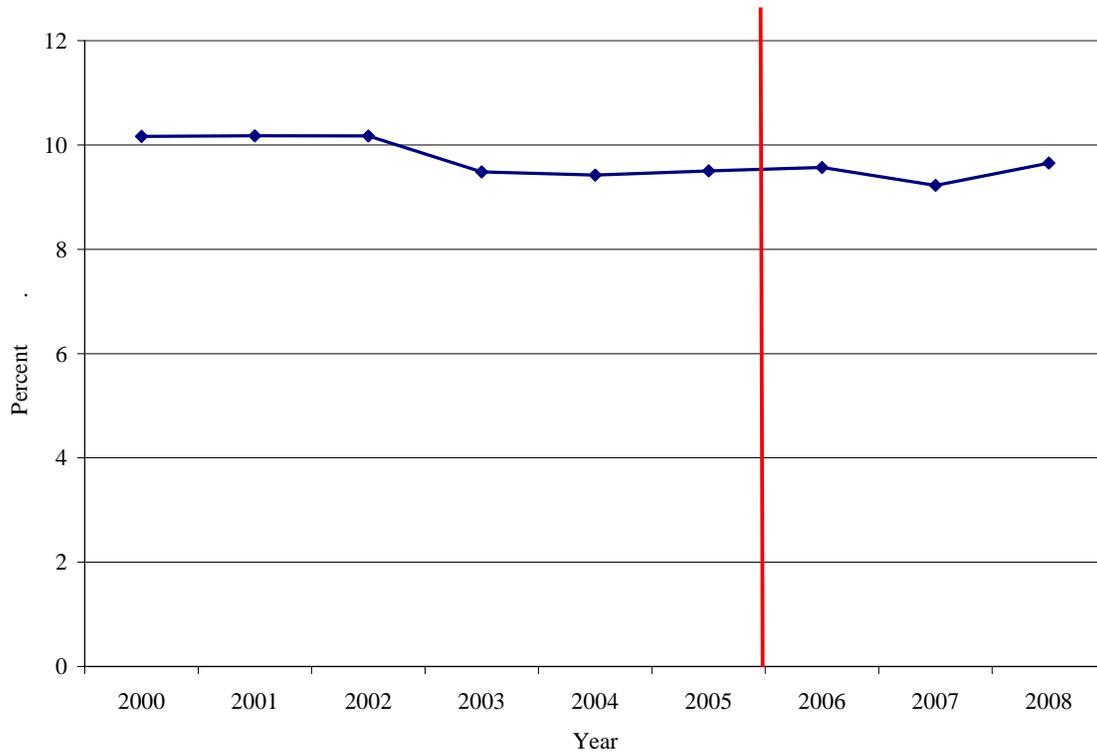
Milligan, Kevin (2009), *Canadian Tax and Credit Simulator*. Database, software and documentation, Version 2009-1.

Table 1: Tax Brackets and Rates 2005-2009

	rate	thresholds				
		2005	2006	2007	2008	2009
1st bracket	15/15.25/15	0	0	0	0	0
2nd bracket	22	35,595	36,378	37,178	37,885	40,726
3rd bracket	26	71,190	72,756	74,357	75,769	81,452
4th bracket	29	115,739	118,285	120,887	123,184	126,264

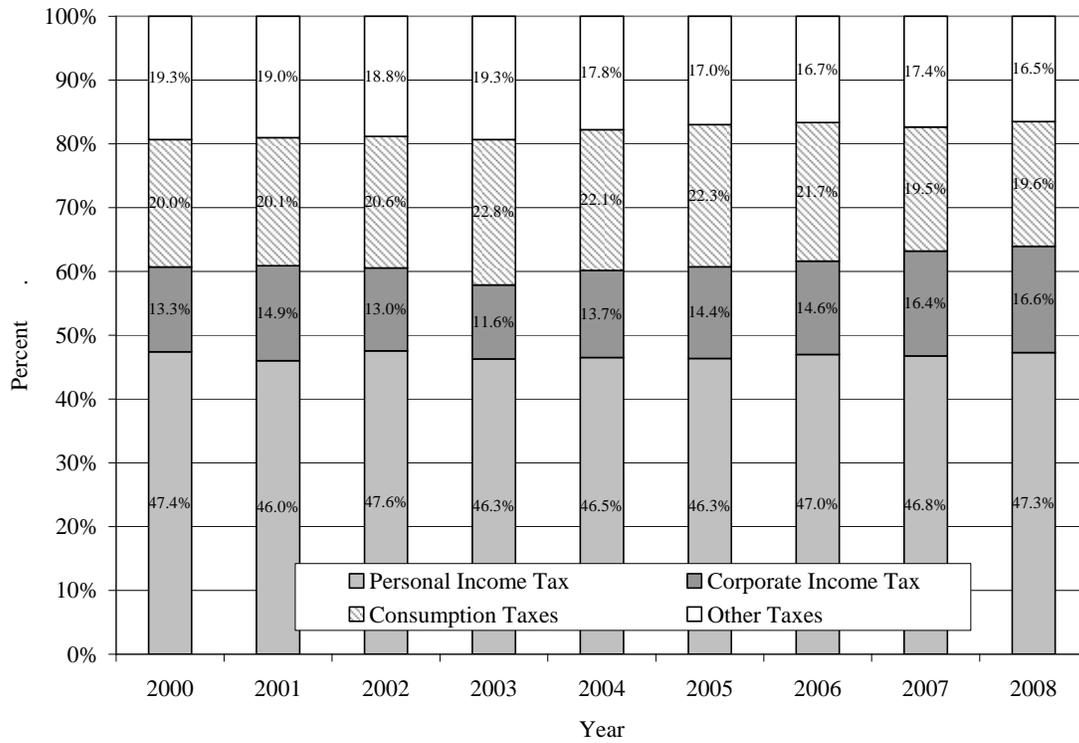
Source: Canada Revenue Agency tax forms, various years.

Figure 1: Personal Income Tax as a Percentage of Personal Income



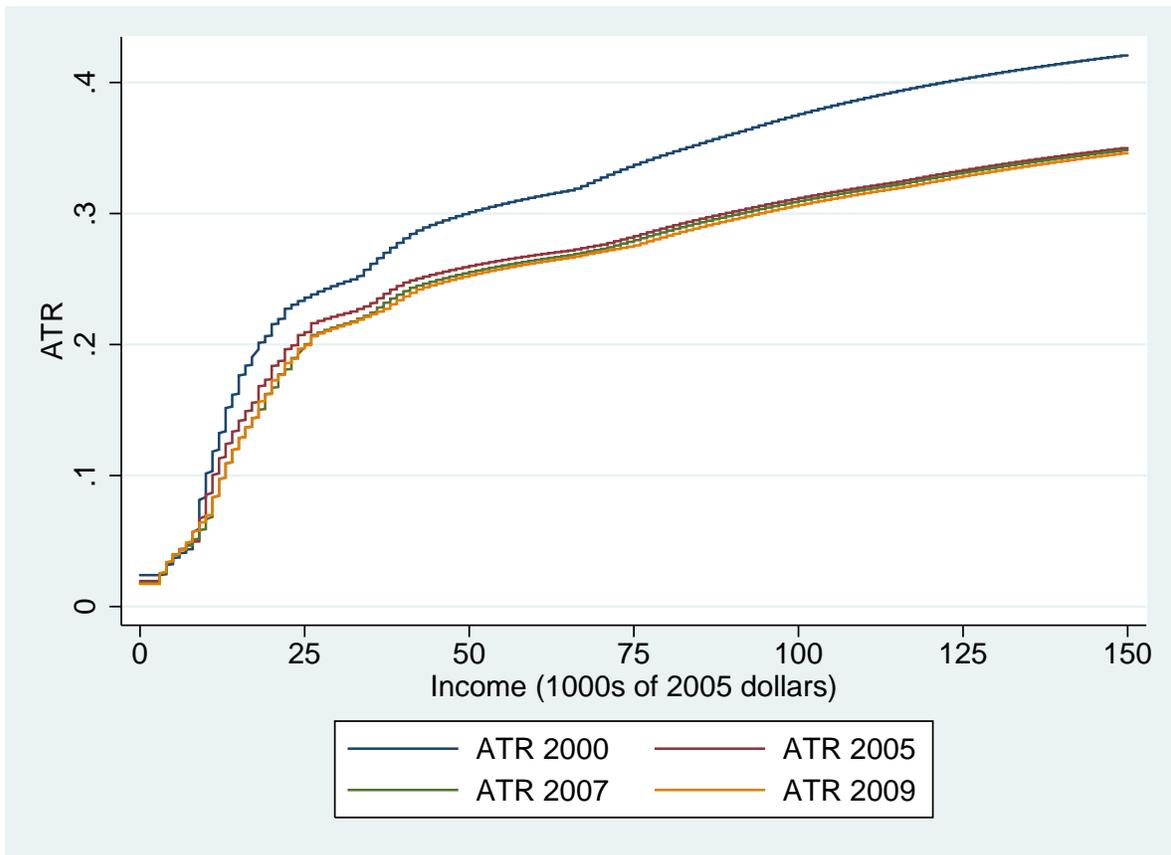
Source: Personal Income Tax is on a fiscal year basis, and is taken from CANSIM v156116. Personal Income is on a calendar year basis, and is taken from CANSIM v691801.

Figure 2: Changes in the Federal Tax Mix



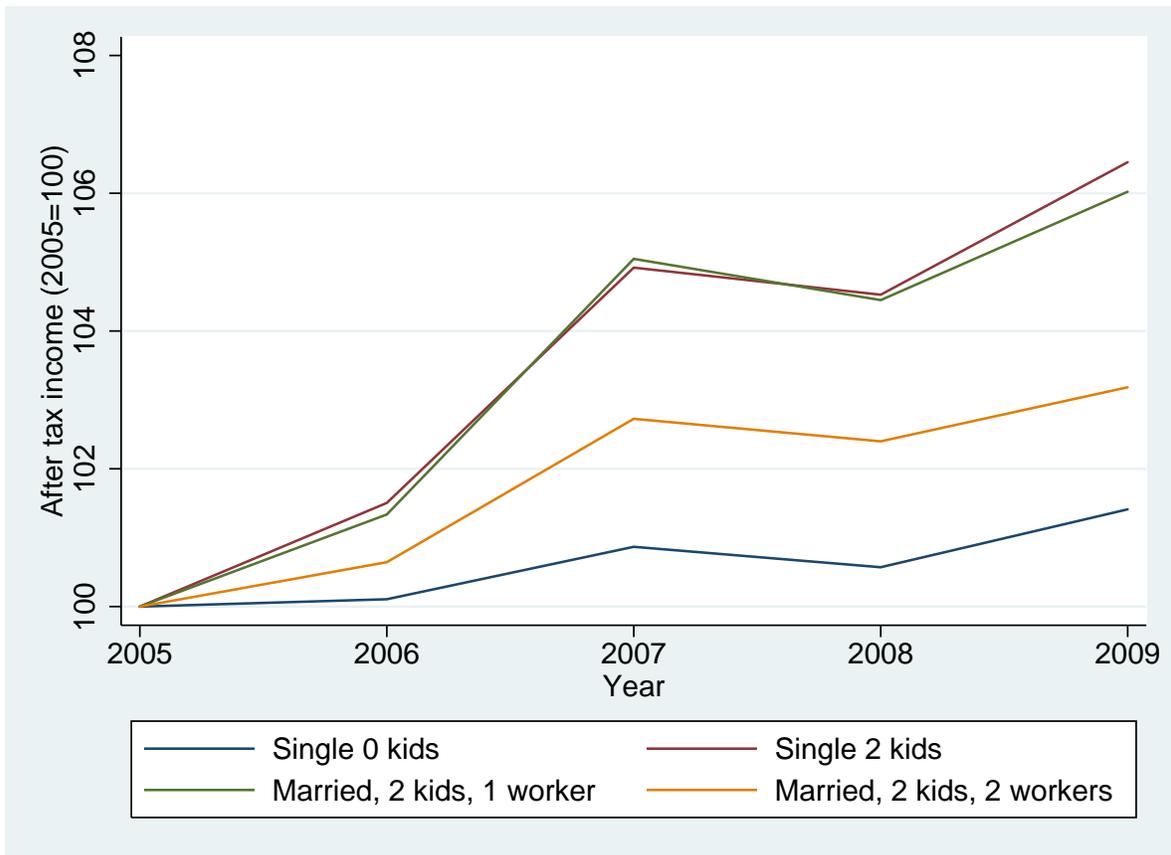
Source: CANSIM Matrix 3850002.

Figure 3: Average Tax Rates Across Incomes



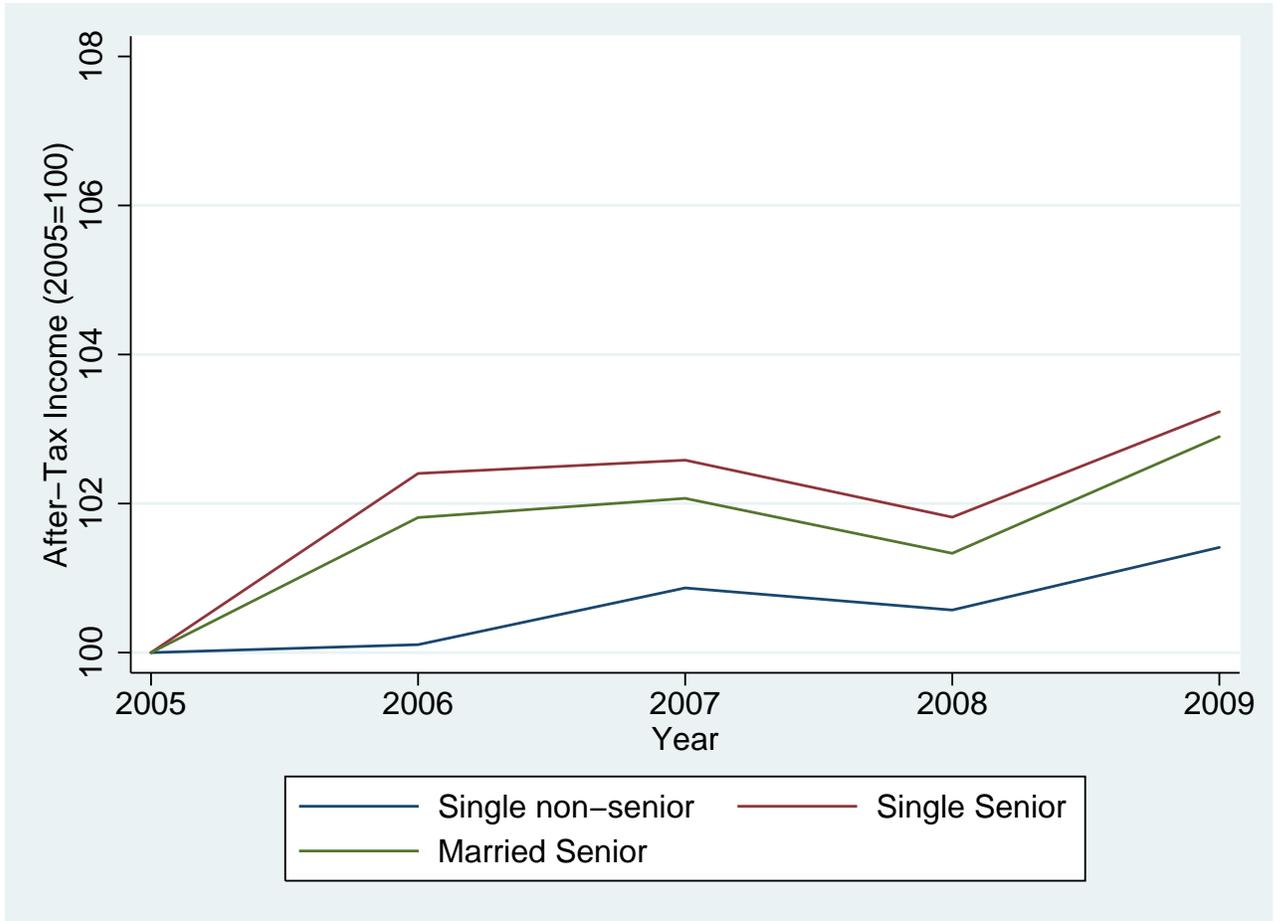
Source: Calculations made with Canadian Tax and Credit Simulator

Figure 4: Disposable Incomes Across Family Types



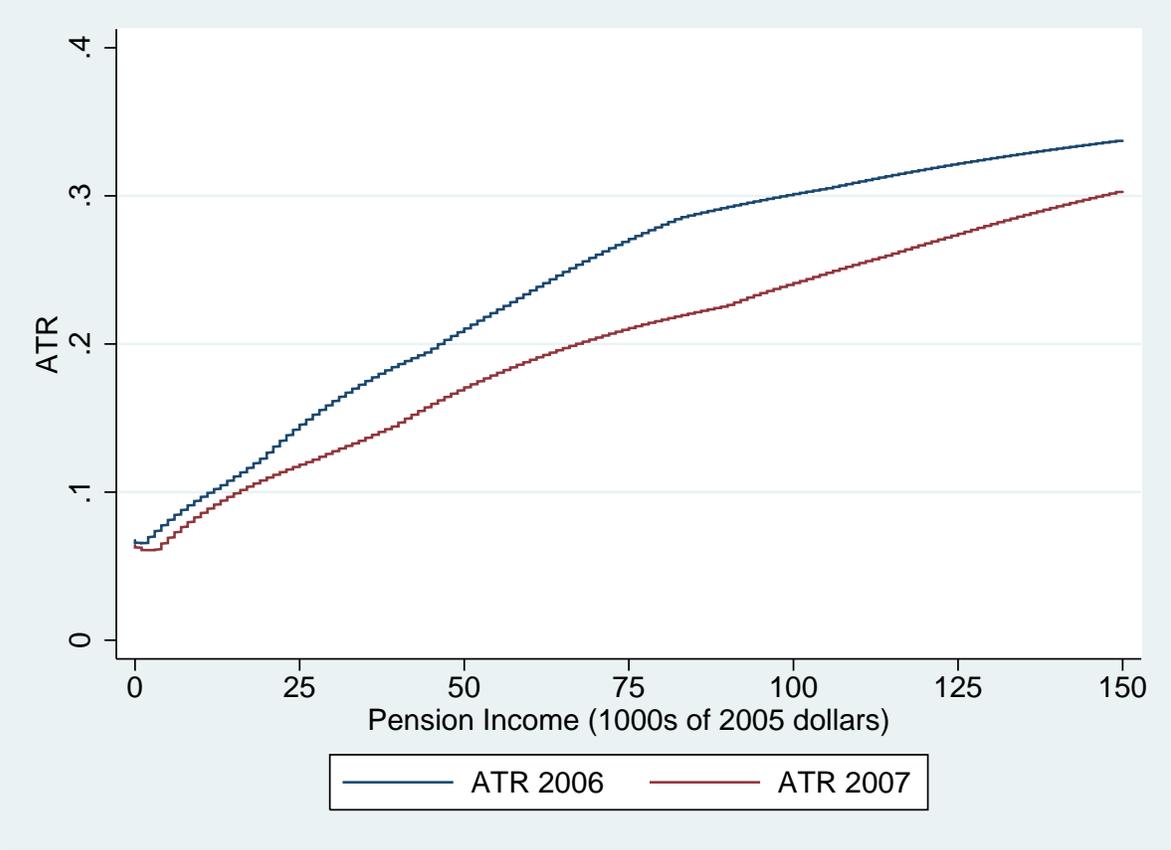
Source: Calculations made with Canadian Tax and Credit Simulator

Figure 5: Disposable Incomes for Seniors



Source: Calculations made with Canadian Tax and Credit Simulator

Figure 6: Average Tax Rates when Income Splitting



Source: Calculations made with Canadian Tax and Credit Simulator