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BUREAU DU DIRECTEUR PARLEMENTAIRE DU BUDGET

Fiscal and Economic Impacts of Curtailing the Planned Tax Cut for Small Businesses

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The mandate of the Parliamentary Budget Officer (PBO) is to provide independent analysis to Parliament on the state of the nation's finances, the Government's estimates and trends in the Canadian economy; and, upon request from a committee or parliamentarian, to estimate the financial cost of any proposal for matters over which Parliament has jurisdiction.

In response to a request by the Member of Parliament for Carleton, the Honourable Pierre Poilievre, the PBO has prepared estimates of the fiscal and economic impacts of the *Budget 2016* decision to maintain the small business tax rate and corresponding effective dividend tax rate at 10.5 per cent. The rate had been legislated to gradually decrease to 9 per cent under *Budget 2015*.

This report was prepared by the staff of the Parliamentary Budget Officer. Duncan MacDonald and Tim Scholz wrote the report. Chris Matier contributed to the analysis. Jason Jacques, Mark Mahabir and other PBO staff provided comments. Patricia Brown and Jocelyne Scrim assisted with the preparation of the report for publication. Please contact pbo-dpb@parl.gc.ca for further information.

Jean-Denis Fréchette
Parliamentary Budget Officer

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Executive Summary

A Member of Parliament requested the PBO to provide an analysis of the *Budget 2016* decision to maintain the small business tax rate at 10.5 per cent, as well as the corresponding changes to the dividend gross-up and tax credit for individuals. The rate had been legislated to decrease annually by 0.5 percentage point intervals to 9 per cent by 2019, as announced in *Budget 2015*.

PBO estimates that the Budget 2016 decision to defer reductions in the small business tax rate will reduce federal revenues by $45 million in 2016-17, and increase revenues by $155 million in 2017-18 rising to $815 million in 2020-21 (Summary Table 1). The initial reduction in revenues reflects timing differences in the tax reference years related to the filing deadlines for personal and corporate income tax returns.

Summary Table 1 Fiscal impact of changes to small business tax rate

$ millions	2016-17	2017-18	2018-19	2019-20	2020-21	Total
CIT revenues	-	380	815	1,270	1,320	3,780
PIT revenues	-45	-225	-370	-485	-505	-1,630
Net fiscal impact	**-45**	**155**	**445**	**785**	**815**	**2,150**

Source: Parliamentary Budget Officer.

Note: Totals may not add up due to rounding.

PBO estimates that by 2020-21, *Budget 2016* changes to the small business tax rate will reduce real GDP by $300 million (0.015 per cent) and the level of employment by about 1,240 jobs created or maintained (Summary Table 2).

Summary Table 2 Economic impact of changes to the small business tax rate

	2016-17	2017-18	2018-19	2019-20	2020-21
Real GDP impact ($ millions)	-	-30	-110	-220	-300
Employment	-	-70	-330	-780	-1,240

Source: Parliamentary Budget Officer.

Note: Values are presented as jobs created or maintained, unless specified.

1. Context

In 2016, Canadian-controlled private corporations (CCPCs) can benefit from a reduced tax rate of 10.5 per cent on up to $500,000 of active business income, compared to the general tax rate of 15 per cent. Eligibility for this deduction is gradually phased out for firms with taxable capital over $10 million and is eliminated for firms with taxable capital over $15 million.[1] According to Finance Canada's *2016 Tax Expenditures and Evaluation Report*, about 700,000 CCPCs benefited from the preferential rate.

The *Budget 2015 Implementation Act* legislated a scheduled annual reduction in the small business tax rate of 0.5 percentage points each year, effective January 1, 2016, to 9.0 per cent by 2019. *Budget 2016* has proposed to cancel this reduction, thereby maintaining the small business tax rate at its 2016 level of 10.5 per cent (Table 1-1).

Table 1-1 Small business tax rate

%	2015	2016	2017	2018	2019
Budget 2015	11.0	10.5	10.0	9.5	9.0
Budget 2016	11.0	10.5	10.5	10.5	10.5

Sources: *Budget 2015* and *Budget 2016*.

A key purpose of the corporate income tax system is to serve as a withholding tax on corporate shareholders, so that tax-exempt earnings cannot be retained indefinitely within the firm until withdrawal when a taxpayer faces a lower marginal tax rate, such as in retirement, or when there is a legislated future tax rate reduction.[2] Since dividends are taxed at the personal rate, the incidence of changes to the small business tax rate is primarily on retained earnings.

Moreover, the corporate income tax system is integrated with the personal income tax system to avoid the double taxation of income. Therefore changes to the small business tax rate require a change in the personal income tax system to ensure that income is only taxed once and to ensure that the overall level of taxation of income earned by a shareholder is equivalent to the level of taxation of other forms of income earned by the shareholder.[3]

Concurrent with the proposed changes to the taxation of small businesses, *Budget 2016* proposed to adjust the personal income tax system by maintaining the dividend gross-up factor at 17 per cent, and the effective rate of the dividend tax credit (DTC) at 10.5 per cent (Table 1-2).[4]

Table 1-2 **Gross up values and Dividend Tax Credit effective rates**

Budget 2015, %	**2015**	**2016**	**2017**	**2018**	**2019**
Small business tax rate	11.0	10.5	10.0	9.5	9.0
Gross-up	18.0	17.0	17.0	16.0	15.0
DTC	11.0	10.5	10.0	9.5	9.0

Budget 2016, %	**2015**	**2016**	**2017**	**2018**	**2019**
Small business tax rate	11.0	10.5	10.5	10.5	10.5
Gross-up	18.0	17.0	17.0	17.0	17.0
DTC	11.0	10.5	10.5	10.5	10.5

Sources: Parliamentary Budget Officer, *Budget 2015* and *Budget 2016*.

These complementary changes to the small business tax rate and the DTC have an offsetting fiscal impact. Increasing the small business rate increases income tax revenues, but raising the DTC reduces income tax revenues.

2. Revenue Impact

PBO used its corporate tax microsimulation model[5] to derive an one-period cost estimate of *Budget 2016* changes to the small business tax rate. This estimate was projected over a five-year horizon using PBO's estimated path of small business profits. Details on the methodology are included in Appendix A.

PBO projects that keeping the small business tax rate at its current value of 10.5 per cent will increase federal revenues by $380 million in 2016-17, rising to $1.3 billion in 2020-21 (Table 2-1). PBO projects the net impact of changes to the DTC will reduce federal revenues by $45 million in 2016-17, increasing to $505 million in 2020-21 (Table 2-1).

Overall, PBO estimates that the *Budget 2016* changes to the small business tax rate will reduce annual federal revenues by $45 million in 2016-17, but increase revenues by $155 million in 2017-18 rising to $815 million in 2020-21 (Table 2-1). The revenue impact in the first two years reflects timing differences in the tax reference years related to the filing deadlines for personal and corporate income tax returns with the Canada Revenue Agency.

In particular, the impacts of the higher than anticipated DTC rate are assumed to accrue to shareholders in fiscal year 2016-17 while the impacts of a higher tax rate on small business earnings accrue when they file their returns for the relevant fiscal year, which is likely to fall in 2017-18. [6]

Table 2-1

Fiscal impact of *Budget 2016* changes to the small business tax rate and DTC

$ millions	2016-17	2017-18	2018-19	2019-20	2020-21	Total
CIT revenues	-	380	815	1,270	1,320	3,780
Adjustment to DTC	-45	-225	-370	-485	-505	-1,630
Net fiscal impact	**-45**	**155**	**445**	**785**	**815**	**2,150**

Source: Parliamentary Budget Officer.

Note: Numbers may not add up to total due to rounding.

In comparison, Finance Canada estimates that these measures will reduce net revenues by $50 million in 2016-17, and increase revenues by $125 in 2017-18 rising to $825 million in 2020-21 (Table 2-2).[7] PBO estimates differ from those of Finance Canada primarily owing to economic assumptions.[8]

Table 2-2

Finance Canada estimates of the fiscal impact of *Budget 2016* changes to the small business tax rate and DTC

$ millions	2016-17	2017-18	2018-19	2019-20	2020-21	Total
CIT revenues	-	360	865	1,290	1,375	3,890
Adjustment to DTC	-50	-235	-390	-520	-550	-1,745
Net fiscal impact	**-50**	**125**	**475**	**770**	**825**	**2,145**

Sources: *Budget 2016* and Finance Canada.

Note: Numbers may not add up to total due to rounding.

3. Economic Impact

PBO uses its macroeconomic and fiscal model to estimate the impact of the *Budget 2016* changes to the small business tax rate on the level of real GDP and employment. Appendix A-5 discusses the methodology for this analysis.

As a result of *Budget 2016* measures, small businesses will face a future tax rate that is higher than anticipated, resulting in a lower than expected level of retained earnings. PBO assumes that this will impact real GDP and employment in Canada primarily through lower business investment.

PBO estimates that by 2020-21, the changes to the small business tax rate will reduce real GDP by $300 million or 0.015 per cent and the level of employment by 1,240 workers (Table 3-1).

At the request of a Member of Parliament, PBO has included an alternative measure, the total impact in person-years, which is the summation of the annual change in full-time equivalent workers. PBO estimates that Budget 2016 changes to the small business tax rate will result in a reduction of 3,600 person-years of employment over the period from 2016-17 to 2020-21 (Table 3-1 and Table A-5.2).

Table 3-1 Economic impact of *Budget 2016* Changes to the small business tax rate

	2016-17	2017-18	2018-19	2019-20	2020-21
Real GDP impact ($millions)	-	-30	-110	-220	-300
Employment	-	-70	-330	-780	-1,240
Full-time equivalents	-	-120	-520	-1,170	-1,790
Cumulative person-years	-	-120	-640	-1,810	-3,600

Sources: Parliamentary Budget Officer.

Note: Values are presented as jobs created or maintained, unless specified.

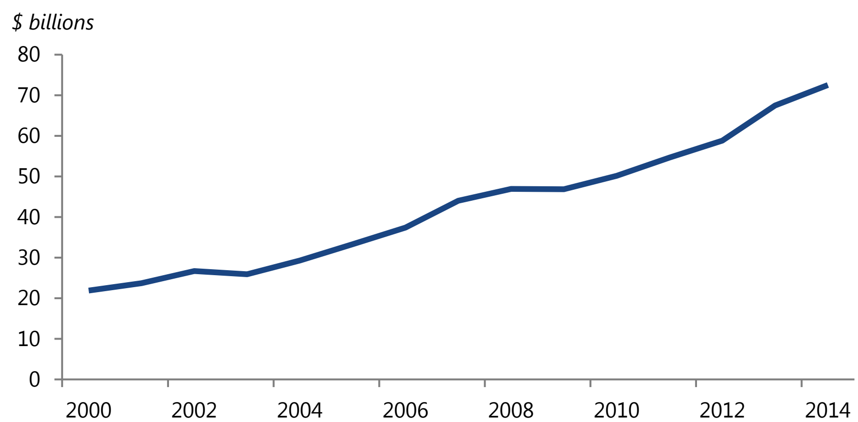
Appendix A: Methodology

A.1 Small business tax base

PBO considers the small business tax base as the sum of taxable income that is eligible for the small business deduction. PBO's cost estimate uses the small business tax base drawn from confidential T2 tax returns. Figure A-1 shows an approximation[9] of the small business tax base using publicly-available corporate tax aggregates for 2000 to 2014.[10]

Figure A-1

Approximation of taxable income eligible for the small business deduction



Sources: Parliamentary Budget Officer and Statistics Canada.

PBO assumes that the small business tax base grows at the rate of corporate profits (before-tax) from 2015 to 2021.[11]

A.2 Dividend tax credit

The dividend tax credit (DTC) provides a partial integration between the corporate and personal income tax systems. The impact of freezing the DTC at an effective rate of 10.5 per cent was estimated using Statistics Canada's Social Policy Simulation Database and Model version 22.1 (SPSD/M), a microsimulation model.[12]

Within SPSD/M, investment income is derived from the Sample T1 Family File (T1FF Sample) for high-income earners, and imputed using a combination of the Survey of Labour and Income Dynamics (SLID) and the T1FF Sample for other tax filers.[13,14] These amounts are then projected forward to 2021 using economic assumptions provided by PBO.

A.3 *Budget 2016* compliance measures

PBO's cost estimate takes account of *Budget 2016* compliance measures to reduce the use of corporate structures that multiply access to or avoid the business or taxable capital limits. *Budget 2016* estimates that compliance measures that directly impact the small business deduction will increase federal revenues by $70 million in 2017-18.[15]

Cost estimates provided in this report do not directly include an independent revenue impact of these compliance measures. However, implicitly, these measures do affect the aggregate income base eligible for the small business deduction.

PBO uses the estimated impact of these compliance measures, which results in shrinking the small business tax base.

A.4 Business limit and behavioural response

The business limit is the maximum amount of a CCPCs taxable income which is eligible for the small business deduction. This limit has been regularly increased through successive Budgets over the last decade (Table A-4). The justification for these increases has been to provide additional tax relief for small businesses.[16]

Table A-4 Changes to business limit

$ thousands	2003	2004	2005	2007	2009
Business limit	225	250	300	400	500

Sources: Budgets 2004, 2006 and 2009.

Recent literature has found evidence in Canada that the preferential tax rate for small businesses has an effect on their behaviour. In particular, the preferential rate and nominal limits combine to increase the marginal effective tax rate on investment and disincentivize growth.[17]

PBO's microsimulation model assumes that small businesses use available deferred tax assets such as losses and investment tax credits to reduce tax payable under the higher rate profile over 2017 and beyond.

PBO's microsimulation model does not include any other behaviour adjustments. However, PBO's cost estimate incorporates the impact of the Budget 2016 measures on the corporate tax base through its macroeconomic model.

A.5 Economic impact

PBO uses its own macroeconomic and fiscal model to estimate the impact of *Budget 2016* changes to the small business tax rate on real GDP and employment. This analysis draws on the fiscal multipliers produced in the PBO report "Budget 2016: Key Issues for Parliamentarians"[18], but over a longer time horizon.

PBO considers *Budget 2016* changes to the small business tax rate as a corporate tax measure. Moreover, in PBO's view, although these measures affect the personal income of small business owners, these individuals are more likely to be higher-income (Wolfson & Legree, 2015)[19] and therefore a lower multiplier is assumed to be reasonable.

> "Tax cuts are likely to boost purchases more for lower-income households than for higher-income households. That difference arises, at least in part, because lower-income households typically consume a higher fraction of their income and because they are less able to borrow money to finance their desired consumption. "
>
> -Congressional Budget Office (2015)

PBO estimates of the fiscal multiplier of corporate income tax measures over time are shown in Table A-5.1. . By comparison, Budget 2016 multipliers for corporate tax measures were 0.0 in 2016-17 and 0.1 in 2017-18.[20] PBO's macroeconomic and fiscal model does not distinguish between small and large corporations.

The impact of corporate tax measures on real GDP increases over time as firm's investment decisions react gradually to a change in their user cost of capital.

Table A-5.1 Fiscal multipliers for corporate tax measures

	2016-17	2017-18	2018-19	2019-20	2020-21
Corporate tax measures	0.1	0.3	0.4	0.5	0.5

Source: Parliamentary Budget Officer.

PBO's preferred metric to assess how policy changes affect the labour market is the change in the level of employment. However, there are other relevant variables such as hours worked and the unemployment rate.

At the request of a Member of Parliament, PBO has included an alternative measure, the total impact in person-years, which is the summation of the annual change in full-time equivalent workers. The employment impact expressed in person-years is calculated using the annual change in total hours worked in the economy.

Person-years can differ from changes in the level of employment because it includes workers for which there is a change in the number of hours worked but not employment status. PBO assumes that one FTE works 1,820 hours per year which translates to 35 hours per week.

Table A-5.2 provides estimates of the labour market impact of *Budget 2016* changes to the small business tax rate.

Table A-5.2 Labour market impact of *Budget 2016* changes to the small business tax rate

	2016-17	2017-18	2018-19	2019-20	2020-21
Employment	-	-70	-330	-780	-1,240
Full-time equivalents (FTE)	-	-120	-520	-1,170	-1,790
Cumulative person-years	-	-120	-640	-1,810	-3,600

Source: Parliamentary Budget Officer.

Note: Values are presented as jobs created or maintained.

References

Congressional Budget Office (2015). The Fiscal Multiplier and Economic Policy Analysis in the United States: Working Paper 2015-02. Retrieved from: https://www.cbo.gov/publication/49925

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Notes

1. See: http://www.cra-arc.gc.ca/E/pub/tg/t4012/t4012-06-e.html
2. The rationale behind using corporate taxes in this manner is the administrative difficulty of taxing the personal income of non-residents.
3. This concept is known as "integration."
4. Dividends tend to be paid out of a firm's after tax income. A gross up factor is a term for increasing an investor's dividend back to its pre-tax value. Therefore a gross up factor of 17 refers to multiplying the dividend by 1.17.
5. A technical report on PBO's corporate tax model is forthcoming. The model uses base administrative data collected from corporations by the Canada Revenue Agency (CRA) accessed through Statistics Canada's Canadian Centre for Data Development and Economic Research program.
6. The tax payable of a CCPC that has taxable income below the small business limit is due within 3 months of the corporation's fiscal-year end. Due to the fact that corporations must file a return with the Canada Revenue Agency not more than 6 months after the corporation's fiscal-year end, a corporation will estimate its tax payable at the balance due date and will in some cases pay the balance of tax owing at the time that the return is filed. Canadian-controlled private corporations with taxable income below the small business deduction limit may pay tax in quarterly installments. The most common method is for the first quarterly payment to be ¼ of the corporation's installment base for the second preceding year and for the next 3 quarters to be 1/3 of the corporation's installment base for the immediately preceding taxation year. A corporation may also switch methods during a fiscal year.
7. See Small Business Tax Rate in Table 1: http://www.budget.gc.ca/2016/docs/tm-mf/si-rs-en.html
8. For example, PBO projections for real GDP growth are higher than Budget 2016 for years 2016 and 2017 and lower for years 2018-2020.
9. The base is computed by dividing the annual total small business deduction by the deduction rate in the corresponding tax reference year.
10. This calculation uses aggregate tax data from CANSIM 180-0003 and T2 Corporate Income Tax Return schedules from 2000-2014.
11. Corporate before-tax profits are provided by PBO's macroeconomic and fiscal model.
12. Statistics Canada – The Social Policy Simulation Database and Model (SPSD/M). Available from: http://www.statcan.gc.ca/eng/microsimulation/spsdm/spsdm

13. Statistics Canada – Annual Income Estimates for Census Families and Individuals (T1 Family File). Available from: http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=4105
14. Statistics Canada – Survey of Labour and Income Dynamics (SLID). Available from: http://www.statcan.gc.ca/eng/survey/household/slid/income
15. See Small Business Tax Rate in Table 1: http://www.budget.gc.ca/2016/docs/tm-mf/si-rs-en.html
16. See: http://www.fin.gc.ca/budget06/bp/bpa3a-eng.asp and http://www.budget.gc.ca/2009/plan/bpa5a-eng.html
17. See Dachis and Lester (2015) for a review of the literature and discussion of Canadian evidence on this issue.
18. See: http://www.pbo-dpb.gc.ca/en/blog/news/BUD2016KEY
19. Wolfson and Legree (2015) use a linkage between corporate and personal tax returns to study the prevalence of higher income individuals among small business owners. Their results show that ownership of CCPCs is concentrated in upper income groups.
20. See Table A2.1: http://www.budget.gc.ca/2016/docs/plan/anx2-en.html#_Toc446106884