OFFICE OF THE PARLIAMENTARY BUDGET OFFICER
BUREAU DU DIRECTEUR PARLEMENTAIRE DU BUDGET

Legislative Costing Note

This is an independent cost estimate of a budgetary measure contained in the federal government's Fall Economic Statement 2020 (FES 2020). A list of the PBO's cost estimates of components of the FES 2020 can be viewed on its website.

Publication Date:	2021-01-14
Short Title:	Change in the tax treatment of employee stock options
Description:	Applying an annual limit of $200,000 on the amount of employee stock options qualifying for the 50% stock option deduction. The limit will be based on the fair market value of the shares at the time the options are granted. Stock options granted in excess of the $200,000 threshold will be considered ineligible, meaning that the entire benefit realized from the exercise of ineligible options by the employee will now be considered taxable income.[1] For stock options that are considered ineligible, the employer will now be entitled to a tax deduction equal to the total benefit realized by the exercise of these options by the employee. Canadian-controlled private corporations (CCPCs) and corporations with revenues of $500 million or less will not be subject to the new rules. This measure will be introduced on 1 July 2021. Only options granted after that date will be subject to the new rules.

Data Sources:

Variable	Source
Number of individuals claiming deduction and average deduction claimed	Canada Revenue Agency (CRA)
Microdata on individuals who exercised stock options	Capital IQ[2]
Economic and demographic projections	PBO
Proportion of individuals receiving ordinary dividends	SPSM 28.0[3]

Estimation and Projection Method: Based on IQ Capital data, we estimated an average return for the market price of the shares underlying employee stock options from the time the options are granted to the time they

[1] For more details on this measure, see:
Fall Economic Statement 2020 at https://www.budget.gc.ca/fes-eea/2020/report-rapport/toc-tdm-en.html and the Finance Canada backgrounder issued in June 2019: https://www.canada.ca/en/department-finance/news/2019/06/backgrounder-proposed-changes-to-the-tax-treatment-of-employee-stock-options.html.

[2] The statements, findings, results, conclusions, views and opinions contained and expressed herein are based in part on data obtained with the permission of S&P Global Market Intelligence (all rights reserved) and are not those of S&P Global Market Intelligence or any of its affiliates or subsidiaries.

[3] This analysis is based in part on Statistics Canada's Social Policy Simulation Database and Model (SPSD/M). The assumptions and calculations underlying the results of the SPSD/M simulation were prepared by the Office of the Parliamentary Budget Officer (PBO), which is solely responsible for the use and interpretation of these data.

are exercised. Based on this average return, we estimated the number of individuals for whom the fair market value (FMV) of the stock options at the time they were granted was greater than $200,000, as well as the average deduction claimed by these individuals.

Then, based on SPSM 28.0 and Capital IQ data, we estimated the proportion of individuals working for CCPCs or corporations with revenues below $500 million. This allowed us to estimate the number of individuals who would have received stock options that would be considered ineligible under the new rules, and the average benefit realized by exercising these options.

We multiplied this estimated average benefit by 50% and then by 33%, the effective rate of the highest tax bracket, to estimate the additional personal income tax that could be collected. However, this additional tax will be partially offset by a reduction in corporate income tax, as corporations will now benefit from an offsetting income deduction equal to the benefit realized from the exercise of ineligible stock options.

Behavioural effects were factored in. We assume that the increases in after-tax corporate profits resulting from this policy will be fully paid out in the form of salaries to partially offset the employees' corresponding loss of after-tax income. This salary increase will be taxable at the highest marginal rate.

Lastly, we used Capital IQ to estimate the distribution of the number of years between the time stock options are granted and the time they are exercised. While we estimate that on average individuals take between four and five years to exercise their options, some take only one year while others can take up to 11.

We estimate that the revenues generated by this new measure will gradually increase over the next few years and will not be fully realized until 2032–33. We estimate that they will then amount to $144 million.

Sources of Uncertainty: Since the $200,000 threshold applies in the year the options are granted and we only observe deductions claimed in the year the options are exercised, our assumptions for the average return and the number of individuals who will be affected by this measure are necessarily uncertain. In addition, our estimates of the proportion of individuals working for CCPCs or corporations with revenues of less than $500 million are derived from external sources and not from CRA administrative data. Lastly, it is difficult to accurately estimate the behavioural response to this new measure.

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Cost of proposed measure

$ millions	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Total cost	-	-	-1	-6	-15	-30

Supplementary information

$ millions		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Cost	The benefit from exercising certain stock options no longer qualifies for the 50% deduction.	-	-	-6	-28	-72	-141
Cost recovery	The benefit from exercising certain stock options may be deducted from corporate taxable income.	-	-	5	22	57	112
Total cost after recovery		-	-	-1	-6	-15	-30

Notes

· PBO estimates that the revenues generated by this measure will gradually increase over the next few years, reaching $144 million in 2032–33, the year in which we estimate that the new rules will be fully implemented.

· Estimates are presented on an accruals basis as would appear in the budget and public accounts.

· Positive numbers subtract from the budgetary balance, negative numbers contribute to the budget balance.

· "-" = PBO does not expect a financial cost.