



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

Legislative Costing Note

Publication date:	2020-12-15								
Short title:	Canada Emergency Wage Subsidy (CEWS) – March 2020 to June 2021								
Description:	<p>Providing a wage subsidy to employers with reduced revenues due to COVID.</p> <p>The subsidy is available for wages paid in sixteen 4-week periods from 15 March 2020 to June 2021. The subsidy rate for March 2021 is assumed to also apply for the April to June 2021 periods. Consistent with the magnitude of the Department of Finance’s estimates, it is assumed that for April to June of 2021, revenues will be compared to a reasonably constant baseline unaffected by COVID-19.</p> <p>The revenue decline required for eligibility is 15% for March, and 30% for April, May and June 2020. For July onwards, employers are eligible for the subsidy if in a period they have any revenue decline. The revenue decline is measured relative to either the average of January/February 2020 or the corresponding month in the previous year.</p> <p>The subsidy rate that an employer will receive depends on the extent of the employer’s revenue losses in the corresponding calendar month. The employee remuneration eligible for subsidies is capped at \$1,129 per week. For Periods 1 to 4, the subsidy is 75% of wages up to the lesser of the weekly cap and wages actually paid. For new employees, the subsidy is 75% of wages paid up to the cap.</p> <p>For employees on leave with pay, employers can also recover 100% of employer-paid contributions to Employment Insurance, the Canada Pension Plan, the Quebec Pension Plan, and the Quebec Parental Insurance Plan.</p> <p>Eligible employers include individuals, taxable corporations, partnerships, non-profit institutions and registered charities; public bodies are not eligible.</p>								
Operating line(s):	Direct Program Expenditures - Canada Emergency Wage Subsidy								
Data sources:	<table><thead><tr><th><u>Variable</u></th><th><u>Source</u></th></tr></thead><tbody><tr><td>Baseline employment by industry</td><td>Statistics Canada, Table 14-10-0202-01 Employment by industry, annual</td></tr><tr><td>Baseline wages by industry</td><td>Statistics Canada. Table 14-10-0204-01 Average weekly earnings by industry, annual</td></tr><tr><td>GDP projections by industry and persons on leave with pay</td><td>PBO Economic Model (as of Oct 2020)</td></tr></tbody></table>	<u>Variable</u>	<u>Source</u>	Baseline employment by industry	Statistics Canada, Table 14-10-0202-01 Employment by industry, annual	Baseline wages by industry	Statistics Canada. Table 14-10-0204-01 Average weekly earnings by industry, annual	GDP projections by industry and persons on leave with pay	PBO Economic Model (as of Oct 2020)
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Baseline employment by industry	Statistics Canada, Table 14-10-0202-01 Employment by industry, annual								
Baseline wages by industry	Statistics Canada. Table 14-10-0204-01 Average weekly earnings by industry, annual								
GDP projections by industry and persons on leave with pay	PBO Economic Model (as of Oct 2020)								

GDP by industry	Statistics Canada, Table: 36-10-0434-01 Gross domestic product (GDP) at basic prices, by industry, monthly (up to September 2020)
Retail revenues by industry	Statistics Canada, Table: 20-10-0008-01 Retail trade sales by province and territory (up to September 2020)
Wholesale revenues by industry	Statistics Canada, Table: 20-10-0074-01 Wholesale trade (up to September 2020)
Manufacturing revenues by industry	Statistics Canada, Table: 16-10-0047-01 Manufacturers' sales, inventories, orders and inventory to sales ratios, by industry (up to September 2020)
Air Transport revenues	Statistics Canada, Table: 23-10-0079-01 Operating and financial statistics for major Canadian airlines, monthly (up to September 2020)
Payroll tax contributions applicable to employees on leave with pay	PBO Economic Model (as of Oct 2020)
Value of CEWS claims by Period by week of submission	Canada Revenue Agency, Claims to date - Canada Emergency Wage Subsidy
Value of CEWS claims and number of employees supported by industry	Canada Revenue Agency, Response to PBO IR0496

Estimation and projection method:

Overall, the distribution of revenue declines by industry was estimated using survey data on sales and the PBO economic model. Wages eligible for subsidy were estimated based on administrative data and labour market projections. Finally, the distribution of revenue decline, wages eligible for subsidy, and subsidy rate were used to calculate subsidies for each industry.

Distribution of revenue declines

For subsectors where monthly sales or revenue data are available (specifically retail, wholesale, manufacturing and air transport), a linear model was fit to the relationship between each industry groups' revenue shocks¹ and the corresponding subsector GDP shocks in the PBO economic model. Using the fitted relationship, future revenue changes relative to September for each industry group were projected based on changes in the GDP shocks in the broader sector. Using the revenue and GDP data for these industry groups from April to September of 2020, the general relation between revenue and GDP shocks arising from COVID-19 was established.

For industries without monthly sales or revenue data, an industry group GDP projection was created by indexing the September GDP shock for each industry group to projected changes in the sector GDP shocks relative to September. The

¹ "Shock" refers to the difference between each month and the same month in the prior year.

relation between revenue and GDP shocks as a result of COVID was then applied to convert these GDP shocks to revenue shocks.

A custom tabulation of the distribution of April to June revenue losses in retail, wholesale, and manufacturing industry groups was used to estimate the distribution for all industries.

Calculation of wages eligible for subsidy

For each industry group and for each period, employment was distributed in proportion to the share of businesses in each revenue loss bracket, while employment losses were distributed in proportion to the share of total revenue losses in each revenue loss bracket.

The average wage eligible for subsidies was calculated for each industry based on average subsidies per employee from the operational data on the first four periods.

The subsidies were independently estimated for March to June based on a projection from the number of employees supported by claim period, by week of submission. This projection assumes a continuing exponential decline in new claims submitted each week, as observed to date in the operational data. The resulting estimates were used to confirm the validity of the model.

The applicable corporate income tax rate was applied to the amount of the subsidy paid in relation to baseline wages to estimate the incremental corporate income tax revenues.

Sources of Uncertainty:

The revenue shocks used for this estimate are based on sales data, which does not capture revenues from other sources. Despite a good fit, the linear models of the relationships between revenue and GDP shocks may not fully capture some dynamics such as pent-up demand. This cost estimate relies on the GDP projection in the PBO’s October economic model and is affected by the sources of uncertainty inherent in that model, including the assumptions regarding the impacts of COVID-19. The revenue shock distribution understates the variability which occurs in a particular month due to aggregation.

This estimate assumes all incremental corporate tax revenues are realized in 2020-21, while the actual revenues arising from mitigating current corporate losses may be realized in subsequent tax years.

Cost of proposed measure

\$ millions	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Total cost	74,024	12,011	-	-	-	-

Supplementary information

	Description	Operating line	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Cost	Gross wage subsidies	Direct Program Expenditures	85,550	13,881	-	-	-	-
Cost recovery	Corporate Income Tax recovery	Corporate Income Tax	11,526	1,870	-	-	-	-
Total cost after recovery			74,024	12,011	-	-	-	-

Notes:

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