



OFFICE OF THE
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BUDGET

The Fiscal Cost of Indexing the Canada Child Benefit

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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.

This report responds to a request of Mr. Gérard Deltell, the member for Louis-Saint-Laurent, to estimate the cost of indexing the Canada Child Benefit.

This report was prepared by the staff of the Parliamentary Budget Officer. Carleigh Malanik wrote the report. Jason Jacques contributed to the analysis. Nancy Beauchamp 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

When introduced in Budget 2016, and as legislated as part of Bill C-15 (Budget Implementation Act 2016, No. 1) the Canada Child Benefit (CCB) was not subject to indexation. PBO's estimates contained in its report, *Fiscal Analysis of Federal Children's Benefits*, demonstrated that total spending on the CCB would decline steadily over time without indexation, as fewer families were eligible and the level of CCB payments declined with growing incomes.

In October of 2016 Bill C-29 *A second Act to implement certain provisions of the budget tabled in Parliament on March 22, 2016 and other measures* proposed that the Canada Child Benefit be indexed, beginning in 2020. This will index both the base benefits and the income thresholds to the consumer price index (CPI).

Member of Parliament Gérard Deltell asked PBO to estimate the cost of indexing the Canada Child Benefit.

This report provides an update to the report *Fiscal Analysis of Federal Children's Benefits*, estimating the cost of indexation if the first year of indexation were to occur in 2020.

PBO estimates that with indexation, the CCB will grow steadily over time. This is in contrast to the projected decline if the CCB continued to be not indexed to the consumer price index (CPI). The gap between the two represents the net fiscal cost of CCB indexation, presented in Summary Table 1 below.

Summary Table 1

Projected net cost of CCB indexation

<i>(millions \$)</i>	Net Fiscal Cost of Indexation	CCB - Indexed	CCB – Not Indexed
2020-21	301	21,697	21,396
2021-22	1,436	22,700	21,264
2022-23	2,356	23,504	21,148
2023-24	3,255	24,275	21,020
2024-25	4,137	25,025	20,888
2025-26	4,985	25,733	20,749
2026-27	5,787	26,398	20,611

Sources: SPSDM and PBO Calculations.

1. Introduction

PBO's *Fiscal Analysis of Federal Children's Benefits* report provided a fiscal cost estimate of replacing the Universal Child Care Benefit (UCCB), the Federal Child Tax Benefit (CCTB) and the Federal National Child Benefit Supplement (NCB) with the new Canada Child Benefit (CCB).

The CCB is a non-taxable, means-tested, monthly benefit payable for each eligible child. The base benefit varies by the age of the child: \$6,400 per child under the age of six and \$5,400 per child aged six to 17. The income thresholds for means-testing is \$30,000 and \$65,000, and deductions are determined by the number of children with increasing marginal phase-out rates for families with one, two, three and four or more children.¹

At the time, Bill C-15 repealed the provision for indexation of the new system of children's benefits and income thresholds in the *Income Tax Act*.

PBO's analysis identified three key findings:

1. The new system of children's benefits costs more than the old system; however, because the new system was not indexed the cost would decline over time.
2. Families with incomes below \$30,000 would receive the largest benefits on average.
3. Since the new system is income tested and the income thresholds were not indexed, over time more families would see their benefits decline and fewer families would receive benefits.

Furthermore, the report found that without indexation, total net spending on the Canada Child Benefit would fall to that of the old system of children's benefits by 2024-25 – had the old system not been repealed.

In October of 2016 Bill C-29, *A second Act to implement certain provisions of the budget tabled in Parliament on March 22, 2016 and other measures*, proposed that the CCB be indexed, beginning in 2020. This will index both the base benefits and the income thresholds to the consumer price index (CPI).

2. Analysis

Indexation of benefits that are either means tested, or otherwise tied to income levels, does not guarantee greater benefits for the same intended eligible recipients over time.

Generally, incomes tend to grow faster than inflation. This can result in an increasing number of families no longer being eligible, or becoming eligible for a smaller benefit, over time. However, income composition is an important consideration for this general conclusion as each source of income can grow at a different rate.

In the case of Children's Benefits, the definition of 'income' is the adjusted family net income for eligible recipients.² PBO analyzed the growth of adjusted family net income for all families and for recipients of the CCB, and determined this definition of income has grown more slowly than the consumer price index (CPI). Furthermore, PBO projects the gap between these growth rates will persist. This results in a greater number of families becoming eligible for the benefit, as well as existing recipients receiving larger amounts.

The population of children is another factor that can impact the growth patterns of children's benefits, both under the scenarios where there is, and is not, indexation. Projections of population growth among Canadians under the age of 18 are modest, with rates of 0.9 to 1.2 per cent over the next eight years before steadily falling beginning in 2025.³ Historical growth rates have also been low and even negative for several years.⁴

Additionally, the population growth of children under the age of six is projected to slow significantly during the projection period for this report, thus changing the composition of children, to which base benefits are tied. This explains how the growth of CCB can change, independent of other factors.

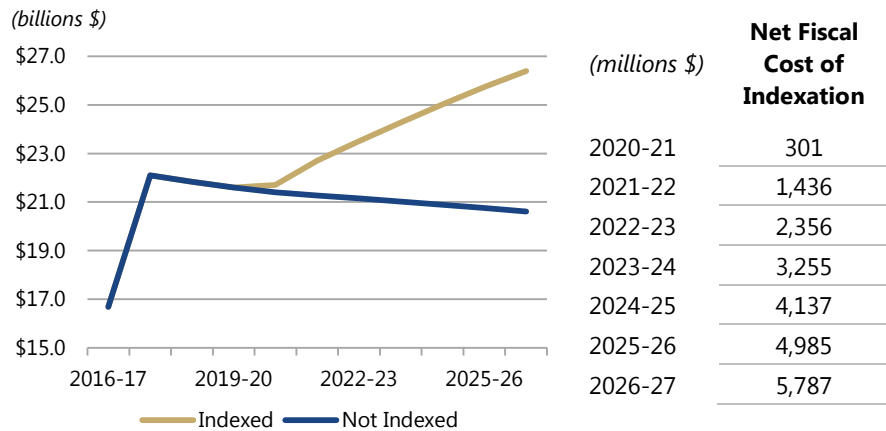
3. Results

PBO's analysis indicates that with indexation, total CCB spending is projected to grow over time. This is in line with PBO's previous projections, and is supported by the analysis of the factors at play, as summarized above.

Figure 3-1 presents the updated projections for the CCB, with and without indexation. The gap between the two represents the net fiscal cost of CCB indexation, as shown below in Table 3-1.

Figure 3-1

Projected cost of Indexation



Sources: SPSDM and PBO Calculations.

The distribution of these benefits also changes with indexation. As Table 3-1 presents, the number of eligible families will increase over time, and the distribution of those eligible families across the three income thresholds will remain much more stable than without indexation.

Table 3-1 Number of Recipients

('000)	Indexation in 2020			No Indexation		
	< First Income Threshold	First - Second Income Threshold	> Second Income Threshold	< First Income Threshold	First - Second Income Threshold	> Second Income Threshold
2016-17	807	821	1,855			
2017-18	817	806	1,888			
2018-19	796	791	1,921			
2019-20	775	778	1,953			
2020-21	755	770	1,978	760	762	1,989
2021-22	742	763	2,003	744	747	2,024
2022-23	743	756	2,029	728	731	2,056
2023-24	743	749	2,055	713	716	2,089
2024-25	743	742	2,082	698	701	2,123
2025-26	744	735	2,109	683	686	2,157
2026-27	744	728	2,136	668	671	2,191

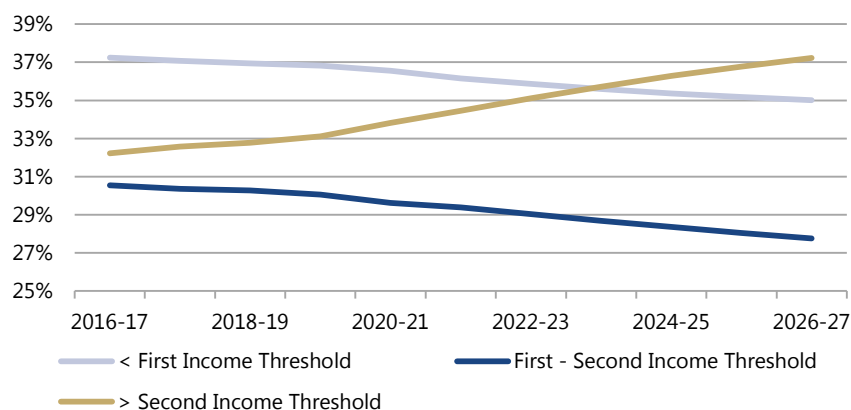
The number of recipients in the highest income threshold continue to grow under both scenarios of indexation and no indexation. Under no indexation, the growing number of recipients arises as a result of eligible families moving up from lower thresholds into the higher threshold. More specifically, families' adjusted family net incomes grow, pushing these families into the next income threshold.

Under the scenario where the CCB is indexed, the growing number of recipients is a result of indexation growing the income thresholds at a faster rate than that of adjusted family net incomes. This effectively expands the total number of recipients, placing them into the group with the highest income threshold.

As a result, the share of total CCB expenditures allocated to families with incomes above the highest income threshold will continue to grow.

Distribution of Total CCB among recipients

Since the average adjusted net family income grows more slowly than the rate of indexation, more families with incomes above the highest threshold will become eligible over time.

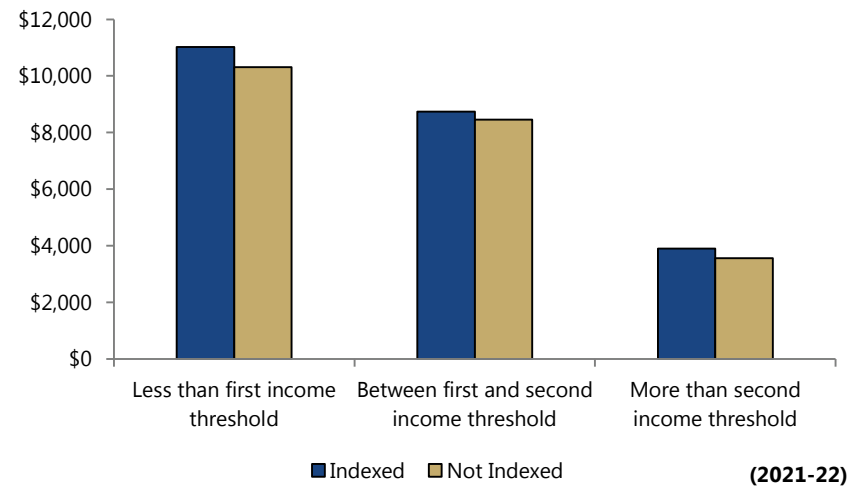


Sources: PBO calculations and SPSPDM

Even so, the average benefits of the higher income families would continue to be lower than that of families with lower incomes, as it was under projections of the non-indexed CCB (see Figure below).

Average CCB payments

Average payments across the three income thresholds will change slightly under indexation. This is a result of an increase in base benefits, as well as a change in the number of families facing a greater or smaller clawback.



Sources: PBO calculations and SPSPDM

Appendix A: Methodology

This analysis was done using growth rates and adjustment factors calculated from Statistics Canada's SPSDM version 22.2, and applying them to custom calculations provided by Statistics Canada from 2013, as well as estimates and projections of population and CPI.

The custom data from Statistics Canada calculated the level of the CCB for families by income group and the number of children (one to four or more), using the 2012 and 2013 T1 Family File.

Since the CCB did not actually exist in 2013, PBO deflated the 2016 benefit amounts and income thresholds to 2013 using historical CPI growth rates, and provided the data to Statistics Canada for calculation. Indexing backwards ensured the 2013 calculation would resemble results indicative of a 'first year of implementation'.

PBO updated CCB estimates for 2016 to 2021 that had been previously estimated for the *Fiscal Analysis of Federal Children's Benefits* report using the latest version of SPSDM. Then, PBO calculated an adjustment factor based on the difference between results from SPSDM and the custom data provided by Statistics Canada. Finally, PBO applied the 2013 adjustment factor for all years. That is, PBO assumes this adjustment factor will remain stable over time.

The *Fiscal Analysis of Federal Children's Benefits* report provides more details on the additional assumptions for the adjustment factor.

Tables A-1 through A-3 provide the CPI growth rates used to estimate benefit levels and income thresholds, as well as the projected levels of base benefits and income thresholds over the projection period (2020-21 to 2026-27).

Population, CPI and base benefit levels were used to calculate and project the base benefits. To calculate the deduction applied to the base CCB benefits, PBO projected the number of eligible families by the income groups and the number of children and applied the projected average income for each income threshold group.⁵

Table A-1 Projected growth rates of CPI and population

	CPI growth	Pop growth young child	Pop growth old child
2016-17	2.00%	1.10%	0.80%
2017-18	2.02%	1.20%	0.80%
2018-19	2.08%	1.20%	1.10%
2019-20	2.06%	1.10%	1.20%
2020-21	2.05%	1.10%	1.30%
2021-22	2.05%	1.00%	1.20%
2022-23	2.00%	0.80%	1.30%
2023-24	2.00%	0.70%	1.20%
2024-25	2.00%	0.50%	1.00%
2025-26	2.00%	0.30%	0.80%
2026-27	2.00%	0.20%	0.90%

Table A-2 Projected levels of key assumptions

	CCB young child	CCB old child	First Income Threshold	Second Income Threshold	Average income for second group	Average income for third group
2016	\$6,400	\$5,400	\$30,000	\$65,000	\$47,983	\$110,675
2017	\$6,400	\$5,400	\$30,000	\$65,000	\$48,224	\$111,103
2018	\$6,400	\$5,400	\$30,000	\$65,000	\$48,162	\$111,947
2019	\$6,400	\$5,400	\$30,000	\$65,000	\$48,360	\$112,958
2020	\$6,532	\$5,511	\$30,618	\$66,340	\$48,967	\$115,428
2021	\$6,666	\$5,624	\$31,245	\$67,697	\$48,959	\$117,243
2022	\$6,802	\$5,739	\$31,886	\$69,087	\$49,621	\$119,244
2023	\$6,938	\$5,854	\$32,524	\$70,468	\$50,292	\$121,278
2024	\$7,077	\$5,971	\$33,174	\$71,878	\$50,971	\$123,348
2025	\$7,219	\$6,091	\$33,838	\$73,315	\$51,660	\$125,452
2026	\$7,363	\$6,213	\$34,515	\$74,781	\$52,359	\$127,593
2027	\$7,510	\$6,337	\$35,205	\$76,277	\$53,066	\$129,770

Note: Average income refers to eligible families' average adjusted family net income. Second group refers to families with adjusted family net income above the first income threshold, but below the second. Third group refers to families with adjusted family net income above the second income threshold.

Table A-3 Long-term growth rates of number of recipients

	Number of children	< First Income Threshold	First - Second Income Threshold	> Second Income Threshold
Indexation	1	0.1%	-1.1%	1.1%
	2	0.1%	-1.4%	1.4%
	3	0.1%	-0.3%	1.4%
	4	0.1%	1.3%	1.4%
No Indexation	1	-2.1%	-2.3%	1.4%
	2	-2.1%	-2.4%	1.8%
	3	-2.1%	-0.4%	2.1%
	4	-2.1%	1.5%	4.4%

Since SPSPDM only projects as far as 2021, PBO updated its satellite model that produced very similar results to the adjusted SPSPDM estimates. More details on the construction of this model can be found in the Appendix of *Fiscal Analysis of Federal Children's Benefits*.

Updates included:

- applying new long-term growth rates, calculated using SPSPDM v. 22.2;
- improving the accuracy of estimating and projecting the distribution of families by the number of children (achieved by applying more micro-level growth rates); and,
- improving the accuracy of estimating the level of base benefits for each family by income threshold and number of children (achieved by allowing the adjustment factor to change over time).
- updating the growth rates of eligible families' adjusted net income, by CCB income threshold cutoffs.

Table A-4 below provides the key growth rates and adjustment factors used in this model.

Table A-4 Growth rates of key assumptions

		< First Income Threshold	First - Second Income Threshold	> Second Income Threshold	
Long-term growth rates	Indexation	Total CCB	1.9%	1.2%	3.7%
		Recipients' Adjusted family net income	1.8%	1.4%	1.7%
		Base benefits adjustment factor	89.9%	104.7%	89.0%
		Target growth rate for base benefits' adjustment factor	1.9%	0.9%	3.2%
	No Indexation	Total CCB	-1.7%	-1.7%	0.6%
		Target growth rate for base benefits' adjustment factor	-2.1%	-1.9%	1.7%*
		Recipients' Adjusted family net income	0.5%	0.1%	0.8%
Short-term	No Indexation	Base benefits adjustment factor	89.9%	104.7%	89.0%
		Target growth rate for base benefits' adjustment factor	-2.1%	-1.5%	1.5%

* A smoothing assumption was applied over four years to move from the short-term of 1.5% to the long-term target growth rate of 1.7%.

Notes

1. More details are provided in the PBO's *Fiscal Analysis of Federal Children's Benefits* http://www.pbo-dpb.gc.ca/web/default/files/Documents/Reports/2016/CCB/CCB_EN.pdf.
2. Adjusted family net income is equal to family total income less deductions, and less any registered disability savings plan (RDSP) plus RDSP repayments. Family income does not include children's net income, and is calculated every July, based on the previous year's income. http://www.cra-arc.gc.ca/E/pub/tg/t4114/t4114-e.html#family_net_income
3. PBO calculations of source data: Statistics Canada. Table 052-0005 - Projected population, by projection scenario, age and sex, as of July 1, Canada, provinces and territories, annual (persons), accessed: November 25, 2016.
4. PBO calculations of source data: Statistics Canada. Table 051-0001 - Estimates of population, by age group and sex for July 1, Canada, provinces and territories, annual (persons unless otherwise noted), accessed: November 25, 2016.
5. PBO did not estimate or project the average adjusted family net income based on the number of children and income threshold; only the average adjusted family net income for the income threshold.