

Future estimated annual expenditures of raising a child, assuming a higher inflation rate of 4 percent after 2020

Morgan Welch and Isabel Sawhill

August 2022

In a 2017 report, the [U.S. Department of Agriculture](#) (USDA) estimated the average total expenditures on children from birth through age 17 to be \$233,610 in 2015 dollars. This estimate is for a middle-income two-parent married family with two children, in which the youngest child is born in 2015. The Department of Agriculture relied on data from 2011-15 Consumer Expenditure Survey to conduct this analysis.

The \$233,610 estimate presented in the report is the total expenditures on a child of a certain age in 2015 dollars. The authors also calculated the total expenditures, factoring in inflation, and arrived at an estimate of \$284,570 for those in the middle-income group in 2020. This estimate assumes an average annual inflation rate of 2.23 percent. To calculate this, the USDA authors rely on the following future cost formula:

$$C_f = C_p (1 + i)^n$$

where:

C_f = projected future annual dollar expenditure on a child of a particular age

C_p = present (2015) annual dollar expenditure on a child of a particular age

i = projected annual inflation (or deflation) rate

n = number of years from present until child will reach a particular age

We recreated this analysis and show the results in Column A of Table 1 below. We arrived at an estimate of \$284,594, which deviates slightly from the authors' published figure likely due to rounding.

Next, we calculated total expenditures, factoring in inflation, but assuming a higher average annual inflation rate after 2021. We used an average inflation rate of 2.23 percent from 2015 to 2020, as the authors do in the report. From 2021 on we used an average inflation rate of 4 percent. We chose 4 percent as it was the average CPI increase from 1980 to 1997, a 17-year period that included a period of high inflation, comparable to high inflation rates that we are experiencing now and following the last time that the Federal Reserve raised interest rates substantially in an attempt to control inflation. This earlier history suggests that inflation will come down from its current peaks but may remain higher than normal for an extended period.

We estimate that total family expenses for a child born in 2015, adjusted for higher-future inflation, would be **\$310,605** (Column B). Due to higher inflation, a middle-income married family with two children would spend **\$26,011** more to raise a child to the age of 17 (the difference between \$310,605 and \$284,594).

Table 1
Future estimated annual expenditures on a child born in 2015

(A) Inflation adjusted using 2.23%			(B) Inflation adjusted using 4.0% after 2020		
Year	Child Age	Expenditures	Year	Child Age	Expenditures
2015	0	\$12,680	2015	0	\$12,680
2016	1	\$12,963	2016	1	\$12,963
2017	2	\$13,252	2017	2	\$13,252
2018	3	\$13,601	2018	3	\$13,601
2019	4	\$13,904	2019	4	\$13,904
2020	5	\$14,214	2020	5	\$14,214
2021	6	\$14,097	2021	6	\$14,341
2022	7	\$14,412	2022	7	\$14,915
2023	8	\$14,733	2023	8	\$15,512
2024	9	\$16,074	2024	9	\$17,216
2025	10	\$16,432	2025	10	\$17,905
2026	11	\$16,799	2026	11	\$18,621
2027	12	\$16,978	2027	12	\$19,146
2028	13	\$17,357	2028	13	\$19,911
2029	14	\$17,744	2029	14	\$20,708
2030	15	\$19,350	2030	15	\$22,974
2031	16	\$19,782	2031	16	\$23,893
2032	17	\$20,223	2032	17	\$24,849
Total		\$284,594	Total		\$310,605