

Table T22-0258
Tax Benefit of Education Tax Credits
Baseline: Current Law
Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2022 ¹
Detail Table

Expanded Cash Income Percentile ^{2,3}	Percent of Tax Units ⁴		Benefit as a Percent of After-Tax Income ⁵	Share of Total Benefit	Average Benefit		Share of Federal Taxes		Average Federal Tax Rate ⁷	
	With Benefit	Without Benefit			Dollars	Percent of Federal Taxes ⁶	With Provision	Without Provision	With Provision	Without Provision
Lowest Quintile	4.6	95.4	0.3	13.6	40	6.7	0.7	0.8	3.6	3.8
Second Quintile	6.2	93.8	0.2	22.0	80	2.1	3.7	3.7	9.0	9.1
Middle Quintile	6.1	93.9	0.2	25.1	100	0.9	10.0	10.1	14.3	14.4
Fourth Quintile	6.9	93.1	0.1	27.1	130	0.5	18.0	18.1	17.9	18.0
Top Quintile	4.2	95.8	0.0	12.1	70	0.1	67.3	67.1	25.4	25.4
All	5.6	94.4	0.1	100.0	80	0.4	100.0	100.0	20.2	20.2
Addendum										
80-90	7.5	92.5	0.1	11.3	130	0.3	14.4	14.4	20.8	20.9
90-95	1.4	98.6	0.0	0.7	20	0.0	11.0	11.0	22.8	22.8
95-99	0.1	99.9	0.0	0.1	*	0.0	16.2	16.2	25.2	25.2
Top 1 Percent	0.0	100.0	0.0	0.0	0	0.0	25.7	25.6	30.9	30.9
Top 0.1 Percent	0.0	100.0	0.0	0.0	0	0.0	12.8	12.7	31.4	31.4

Baseline Distribution of Income and Federal Taxes
by Expanded Cash Income Percentile, 2022 ¹

Expanded Cash Income Percentile ^{2,3}	Tax Units		Pre-Tax Income		Federal Tax Burden		After-Tax Income ⁵		Average Federal Tax Rate ⁶	
	Number (thousands)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total		
Lowest Quintile	47,560	26.3	17,250	4.0	620	0.7	16,630	4.8	3.6	
Second Quintile	39,530	21.9	43,170	8.2	3,870	3.7	39,310	9.4	9.0	
Middle Quintile	37,030	20.5	79,080	14.2	11,270	10.0	67,810	15.2	14.3	
Fourth Quintile	30,070	16.7	139,640	20.3	25,010	18.0	114,630	20.9	17.9	
Top Quintile	24,840	13.8	444,760	53.4	113,090	67.3	331,670	49.8	25.4	
All	180,540	100.0	114,660	100.0	23,110	100.0	91,560	100.0	20.2	
Addendum										
80-90	12,710	7.0	226,970	13.9	47,260	14.4	179,710	13.8	20.8	
90-95	6,220	3.4	324,910	9.8	74,120	11.0	250,800	9.4	22.8	
95-99	4,760	2.6	562,700	13.0	142,010	16.2	420,690	12.1	25.2	
Top 1 Percent	1,150	0.6	3,021,730	16.7	934,900	25.7	2,086,830	14.5	30.9	
Top 0.1 Percent	120	0.1	14,390,660	8.2	4,512,860	12.8	9,877,800	7.1	31.4	

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0722-2).

Number of AMT Taxpayers (millions). Baseline: 0.2 Proposal: 0.2

* Non-zero value rounded to zero; ** Insufficient data

(1) Calendar year. Baseline is current law as of December 21, 2022. Table shows the combined tax benefit of the American Opportunity Tax Credit (AOTC) and the Lifetime Learning tax credit. For more information on TPC's baseline definitions, see

<http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm>

(2) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see

<http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2022 dollars): 20% \$30,000; 40% \$58,500; 60% \$103,800; 80% \$189,200; 90% \$276,100; 95% \$398,100; 99% \$982,600; 99.9% \$4,439,400.

(4) Tax units with benefit are tax units with a net benefit of \$10 or more.

(5) After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

(6) For income categories for which the baseline tax burden is negative, a negative value for the tax benefit as a percent of federal tax indicates a net increase in federal subsidies, and a positive value indicates a net decrease in federal subsidies.

(7) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.

Table T22-0258
Tax Benefit of Education Tax Credits
Baseline: Current Law
Distribution of Federal Tax Change by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹
Detail Table

Expanded Cash Income Percentile ^{2,3}	Percent of Tax Units ⁴		Benefit as a Percent of After-Tax Income ⁵	Share of Total Benefit	Average Benefit		Share of Federal Taxes		Average Federal Tax Rate ⁷	
	With Benefit	Without Benefit			Dollars	Percent of Federal Taxes ⁶	With Provision	Without Provision	With Provision	Without Provision
Lowest Quintile	4.5	95.5	0.2	10.4	40	40.9	0.1	0.1	0.6	0.8
Second Quintile	6.4	93.7	0.2	19.6	80	2.6	2.6	2.7	7.6	7.8
Middle Quintile	7.8	92.2	0.2	33.3	130	1.5	8.1	8.1	13.0	13.2
Fourth Quintile	7.1	92.9	0.1	30.8	130	0.6	17.3	17.3	17.5	17.6
Top Quintile	2.0	98.0	0.0	5.8	30	0.0	71.7	71.5	25.2	25.2
All	5.6	94.4	0.1	100.0	80	0.4	100.0	100.0	20.2	20.2
Addendum										
80-90	3.5	96.5	0.0	5.4	50	0.1	15.5	15.5	20.8	20.8
90-95	0.6	99.4	0.0	0.4	10	0.0	12.0	11.9	22.5	22.5
95-99	0.1	99.9	0.0	0.1	*	0.0	17.5	17.5	24.9	24.9
Top 1 Percent	0.0	100.0	0.0	0.0	0	0.0	26.7	26.6	30.8	30.8
Top 0.1 Percent	0.0	100.0	0.0	0.0	0	0.0	13.3	13.3	31.4	31.4

Baseline Distribution of Income and Federal Taxes
by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹

Expanded Cash Income Percentile ^{2,3}	Tax Units		Pre-Tax Income		Federal Tax Burden		After-Tax Income ⁵		Average Federal Tax Rate ⁶
	Number (thousands)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total	
Lowest Quintile	39,730	22.0	16,390	3.2	90	0.1	16,290	3.9	0.6
Second Quintile	37,050	20.5	38,780	6.9	2,940	2.6	35,840	8.0	7.6
Middle Quintile	36,770	20.4	70,430	12.5	9,130	8.1	61,290	13.6	13.0
Fourth Quintile	34,010	18.8	121,490	20.0	21,200	17.3	100,290	20.6	17.5
Top Quintile	31,450	17.4	378,040	57.4	95,080	71.7	282,960	53.8	25.2
All	#####	100.0	114,660	100.0	23,110	100.0	91,560	100.0	20.2
Addendum									
80-90	16,050	8.9	193,890	15.0	40,260	15.5	153,630	14.9	20.8
90-95	7,920	4.4	279,920	10.7	63,000	12.0	216,920	10.4	22.5
95-99	6,100	3.4	482,890	14.2	120,020	17.5	362,870	13.4	24.9
Top 1 Percent	1,390	0.8	2,599,650	17.5	800,230	26.7	1,799,420	15.2	30.8
Top 0.1 Percent	140	0.1	12,486,470	8.6	3,914,250	13.3	8,572,220	7.4	31.4

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0722-2).

Number of AMT Taxpayers (millions). Baseline: 0.2 Proposal: 0.2

* Non-zero value rounded to zero; ** Insufficient data

(1) Calendar year. Baseline is current law as of December 21, 2022. Table shows the combined tax benefit of the American Opportunity Tax Credit (AOTC) and the Lifetime Learning tax credit. For more information on TPC's baseline definitions, see <http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm>

(2) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see <http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The incomes used are adjusted for family size by dividing by the square root of the number of people in the tax unit. The resulting percentile breaks are (in 2022 dollars): 20% \$21,000; 40% \$40,700; 60% \$69,300; 80% \$116,100; 90% \$169,100; 95% \$239,000; 99% \$571,800; 99.9% \$2,557,900.

(4) Tax units with benefit are tax units with a net benefit of \$10 or more.

(5) After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

(6) For income categories for which the baseline tax burden is negative, a negative value for the tax benefit as a percent of federal tax indicates a net increase in federal subsidies, and a positive value indicates a net decrease in federal subsidies.

(7) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.

Table T22-0258
Tax Benefit of Education Tax Credits
Baseline: Current Law
Distribution of Federal Tax Change by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹
Detail Table - Single Tax Units

Expanded Cash Income Percentile ^{2,3}	Percent of Tax Units ⁴		Benefit as a Percent of After-Tax Income ⁵	Share of Total Benefit	Average Benefit		Share of Federal Taxes		Average Federal Tax Rate ⁷	
	With Benefit	Without Benefit			Dollars	Percent of Federal Taxes ⁶	With Provision	Without Provision	With Provision	Without Provision
Lowest Quintile	4.7	95.3	0.3	18.7	40	6.8	1.4	1.5	4.3	4.6
Second Quintile	6.6	93.4	0.3	29.5	80	2.7	5.5	5.7	9.5	9.7
Middle Quintile	6.3	93.7	0.2	36.1	100	1.3	13.8	13.9	14.2	14.4
Fourth Quintile	3.5	96.5	0.1	14.9	60	0.3	23.1	23.0	18.7	18.8
Top Quintile	0.5	99.5	0.0	0.7	*	0.0	55.9	55.6	25.6	25.6
All	4.8	95.2	0.1	100.0	60	0.5	100.0	100.0	18.9	19.0
Addendum										
80-90	0.9	99.2	0.0	0.7	10	0.0	15.6	15.5	22.0	22.0
90-95	0.1	100.0	0.0	0.0	0	0.0	10.0	10.0	23.3	23.3
95-99	*	**	0.0	0.0	0	0.0	13.5	13.4	25.6	25.6
Top 1 Percent	0.0	100.0	0.0	0.0	0	0.0	16.9	16.8	32.6	32.6
Top 0.1 Percent	0.0	100.0	0.0	0.0	0	0.0	8.4	8.3	33.2	33.2

Baseline Distribution of Income and Federal Taxes
by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹

Expanded Cash Income Percentile ^{2,3}	Tax Units		Pre-Tax Income		Federal Tax Burden		After-Tax Income ⁵		Average Federal Tax Rate ⁶	
	Number (thousands)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total		
Lowest Quintile	25,910	28.7	13,220	6.1	570	1.4	12,650	7.2	4.3	
Second Quintile	20,240	22.4	30,700	11.0	2,910	5.5	27,790	12.3	9.5	
Middle Quintile	19,070	21.1	54,450	18.4	7,720	13.8	46,730	19.5	14.2	
Fourth Quintile	14,660	16.2	89,470	23.2	16,760	23.1	72,710	23.3	18.7	
Top Quintile	9,720	10.8	239,050	41.2	61,290	55.9	177,750	37.7	25.6	
All	90,420	100.0	62,430	100.0	11,780	100.0	50,650	100.0	18.9	
Addendum										
80-90	5,430	6.0	138,800	13.4	30,560	15.6	108,250	12.8	22.0	
90-95	2,290	2.5	199,730	8.1	46,600	10.0	153,130	7.7	23.3	
95-99	1,680	1.9	334,350	9.9	85,540	13.5	248,820	9.1	25.6	
Top 1 Percent	320	0.4	1,712,540	9.8	557,760	16.9	1,154,780	8.1	32.6	
Top 0.1 Percent	30	0.0	8,364,720	4.8	2,776,630	8.4	5,588,090	3.9	33.2	

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0722-2).

* Non-zero value rounded to zero; ** Insufficient data

(1) Calendar year. Baseline is current law as of December 21, 2022. Table shows the combined tax benefit of the American Opportunity Tax Credit (AOTC) and the Lifetime Learning tax credit. For more information on TPC's baseline definitions, see

<http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm>

(2) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see

<http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The incomes used are adjusted for family size by dividing by the square root of the number of people in the tax unit. The resulting percentile breaks are (in 2022 dollars): 20% \$21,000; 40% \$40,700; 60% \$69,300; 80% \$116,100; 90% \$169,100; 95% \$239,000; 99% \$571,800; 99.9% \$2,557,900.

(4) Tax units with benefit are tax units with a net benefit of \$10 or more.

(5) After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

(6) For income categories for which the baseline tax burden is negative, a negative value for the tax benefit as a percent of federal tax indicates a net increase in federal subsidies, and a positive value indicates a net decrease in federal subsidies.

(7) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.

Table T22-0258
Tax Benefit of Education Tax Credits
Baseline: Current Law
Distribution of Federal Tax Change by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹
Detail Table - Married Tax Units Filing Jointly

Expanded Cash Income Percentile ^{2,3}	Percent of Tax Units ⁴		Benefit as a Percent of After- Tax Income ⁵	Share of Total Benefit	Average Benefit		Share of Federal Taxes		Average Federal Tax Rate ⁷	
	With Benefit	Without Benefit			Dollars	Percent of Federal Taxes ⁶	With Provision	Without Provision	With Provision	Without Provision
Lowest Quintile	4.3	95.7	0.2	3.4	40	13.6	0.1	0.1	1.2	1.4
Second Quintile	7.2	92.9	0.2	10.4	90	2.8	1.0	1.0	6.3	6.4
Middle Quintile	9.7	90.3	0.2	28.3	170	1.6	4.6	4.7	11.8	11.9
Fourth Quintile	10.8	89.2	0.2	46.9	210	0.9	14.3	14.4	16.5	16.7
Top Quintile	2.8	97.2	0.0	10.9	40	0.0	79.8	79.6	24.9	25.0
All	6.8	93.2	0.1	100.0	110	0.3	100.0	100.0	21.4	21.5
Addendum										
80-90	5.3	94.7	0.0	10.2	80	0.2	15.8	15.8	20.2	20.3
90-95	0.9	99.1	0.0	0.7	10	0.0	13.2	13.2	22.3	22.3
95-99	0.1	99.9	0.0	0.1	*	0.0	20.2	20.2	24.6	24.6
Top 1 Percent	0.0	100.0	0.0	0.0	0	0.0	30.5	30.4	30.5	30.5
Top 0.1 Percent	0.0	100.0	0.0	0.0	0	0.0	14.5	14.4	31.1	31.1

Baseline Distribution of Income and Federal Taxes
by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹

Expanded Cash Income Percentile ^{2,3}	Tax Units		Pre-Tax Income		Federal Tax Burden		After-Tax Income ⁵		Average Federal Tax Rate ⁶	
	Number (thousands)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total		
Lowest Quintile	6,700	10.6	22,020	1.1	270	0.1	21,740	1.4	1.2	
Second Quintile	8,560	13.5	50,320	3.3	3,160	1.0	47,170	4.0	6.3	
Middle Quintile	11,850	18.7	92,280	8.4	10,840	4.6	81,440	9.5	11.8	
Fourth Quintile	15,860	25.0	151,360	18.5	25,030	14.3	126,320	19.7	16.5	
Top Quintile	19,920	31.4	446,180	68.6	111,280	79.8	334,910	65.6	24.9	
All	63,440	100.0	204,210	100.0	43,790	100.0	160,420	100.0	21.4	
Addendum										
80-90	9,570	15.1	227,000	16.8	45,930	15.8	181,060	17.0	20.2	
90-95	5,180	8.2	318,840	12.8	70,970	13.2	247,880	12.6	22.3	
95-99	4,170	6.6	547,240	17.6	134,760	20.2	412,480	16.9	24.6	
Top 1 Percent	1,000	1.6	2,792,340	21.5	850,680	30.5	1,941,660	19.0	30.5	
Top 0.1 Percent	100	0.2	13,208,980	10.0	4,103,810	14.5	9,105,180	8.8	31.1	

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0722-2).

* Non-zero value rounded to zero; ** Insufficient data

(1) Calendar year. Baseline is current law as of December 21, 2022. Table shows the combined tax benefit of the American Opportunity Tax Credit (AOTC) and the Lifetime Learning tax credit. For more information on TPC's baseline definitions, see

<http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm>

(2) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see

<http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The incomes used are adjusted for family size by dividing by the square root of the number of people in the tax unit. The resulting percentile breaks are (in 2022 dollars): 20% \$21,000; 40% \$40,700; 60% \$69,300; 80% \$116,100; 90% \$169,100; 95% \$239,000; 99% \$571,800; 99.9% \$2,557,900.

(4) Tax units with benefit are tax units with a net benefit of \$10 or more.

(5) After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

(6) For income categories for which the baseline tax burden is negative, a negative value for the tax benefit as a percent of federal tax indicates a net increase in federal subsidies, and a positive value indicates a net decrease in federal subsidies.

(7) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.

Table T22-0258
Tax Benefit of Education Tax Credits
Baseline: Current Law
Distribution of Federal Tax Change by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹
Detail Table - Head of Household Tax Units

Expanded Cash Income Percentile ^{2,3}	Percent of Tax Units ⁴		Benefit as a Percent of After- Tax Income ⁵	Share of Total Benefit	Average Benefit		Share of Federal Taxes		Average Federal Tax Rate ⁷	
	With Benefit	Without Benefit			Dollars	Percent of Federal Taxes ⁶	With Provision	Without Provision	With Provision	Without Provision
Lowest Quintile	4.3	95.7	0.2	13.1	40	-1.9	-6.4	-6.2	-8.7	-8.6
Second Quintile	5.4	94.7	0.2	26.6	70	2.8	9.1	9.2	5.4	5.6
Middle Quintile	10.5	89.5	0.3	43.9	180	1.7	23.8	23.9	12.6	12.8
Fourth Quintile	7.4	92.6	0.1	15.7	120	0.5	28.8	28.6	18.4	18.5
Top Quintile	0.7	99.3	0.0	0.6	10	0.0	44.7	44.3	25.5	25.5
All	6.2	93.9	0.1	100.0	90	0.9	100.0	100.0	13.1	13.3
Addendum										
80-90	1.1	98.9	0.0	0.5	20	0.0	13.2	13.1	21.6	21.6
90-95	0.2	99.9	0.0	0.1	*	0.0	7.2	7.2	22.2	22.2
95-99	0.0	100.0	0.0	0.0	0	0.0	6.6	6.5	26.5	26.5
Top 1 Percent	0.0	100.0	0.0	0.0	0	0.0	17.7	17.5	31.3	31.3
Top 0.1 Percent	0.0	100.0	0.0	0.0	0	0.0	12.2	12.1	31.6	31.6

Baseline Distribution of Income and Federal Taxes
by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹

Expanded Cash Income Percentile ^{2,3}	Tax Units		Pre-Tax Income		Federal Tax Burden		After-Tax Income ⁵		Average Federal Tax Rate ⁶	
	Number (thousands)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total		
Lowest Quintile	6,740	29.6	23,030	9.6	-2,010	-6.4	25,040	12.0	-8.7	
Second Quintile	7,450	32.7	47,790	22.0	2,590	9.1	45,200	24.0	5.4	
Middle Quintile	4,900	21.5	81,860	24.8	10,310	23.8	71,560	24.9	12.6	
Fourth Quintile	2,580	11.3	128,890	20.6	23,660	28.8	105,220	19.3	18.4	
Top Quintile	1,080	4.7	346,000	23.0	88,320	44.7	257,670	19.7	25.5	
All	22,800	100.0	70,970	100.0	9,320	100.0	61,650	100.0	13.1	
Addendum										
80-90	670	2.9	195,050	8.0	42,150	13.2	152,900	7.3	21.6	
90-95	270	1.2	259,800	4.3	57,610	7.2	202,190	3.8	22.2	
95-99	110	0.5	473,300	3.3	125,560	6.6	347,740	2.8	26.5	
Top 1 Percent	30	0.1	3,885,920	7.4	1,214,800	17.7	2,671,120	5.9	31.3	
Top 0.1 Percent	*	0.0	27,376,630	5.1	8,648,490	12.2	18,728,140	4.0	31.6	

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0722-2).

* Non-zero value rounded to zero; ** Insufficient data

(1) Calendar year. Baseline is current law as of December 21, 2022. Table shows the combined tax benefit of the American Opportunity Tax Credit (AOTC) and the Lifetime Learning tax credit. For more information on TPC's baseline definitions, see

<http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm>

(2) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see

<http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The incomes used are adjusted for family size by dividing by the square root of the number of people in the tax unit. The resulting percentile breaks are (in 2022 dollars): 20% \$21,000; 40% \$40,700; 60% \$69,300; 80% \$116,100; 90% \$169,100; 95% \$239,000; 99% \$571,800; 99.9% \$2,557,900.

(4) Tax units with benefit are tax units with a net benefit of \$10 or more.

(5) After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

(6) For income categories for which the baseline tax burden is negative, a negative value for the tax benefit as a percent of federal tax indicates a net increase in federal subsidies, and a positive value indicates a net decrease in federal subsidies.

(7) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.

Table T22-0258
Tax Benefit of Education Tax Credits
Baseline: Current Law
Distribution of Federal Tax Change by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹
Detail Table - Tax Units with Children

Expanded Cash Income Percentile ^{2,3}	Percent of Tax Units ⁴		Benefit as a Percent of After-Tax Income ⁵	Share of Total Benefit	Average Benefit		Share of Federal Taxes		Average Federal Tax Rate ⁷	
	With Benefit	Without Benefit			Dollars	Percent of Federal Taxes ⁶	With Provision	Without Provision	With Provision	Without Provision
Lowest Quintile	6.3	93.7	0.2	7.0	60	-3.1	-1.1	-1.1	-7.5	-7.3
Second Quintile	8.5	91.5	0.2	14.8	110	3.3	2.2	2.2	6.3	6.5
Middle Quintile	14.2	85.8	0.3	31.3	260	2.0	7.6	7.8	13.5	13.8
Fourth Quintile	16.9	83.2	0.3	39.2	340	1.1	17.6	17.7	18.7	18.9
Top Quintile	4.8	95.2	0.0	7.6	70	0.1	73.5	73.2	26.3	26.3
All	10.0	90.0	0.1	100.0	160	0.5	100.0	100.0	20.9	21.0
Addendum										
80-90	8.6	91.4	0.1	7.1	120	0.2	15.5	15.5	21.9	21.9
90-95	1.6	98.4	0.0	0.5	20	0.0	11.5	11.4	23.6	23.6
95-99	0.3	99.8	0.0	0.1	*	0.0	17.9	17.9	26.3	26.3
Top 1 Percent	0.0	100.0	0.0	0.0	0	0.0	28.6	28.5	31.0	31.0
Top 0.1 Percent	0.0	100.0	0.0	0.0	0	0.0	13.4	13.3	31.1	31.1

Baseline Distribution of Income and Federal Taxes
by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹

Expanded Cash Income Percentile ^{2,3}	Tax Units		Pre-Tax Income		Federal Tax Burden		After-Tax Income ⁵		Average Federal Tax Rate ⁶
	Number (thousands)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total	
Lowest Quintile	10,610	20.7	23,870	3.1	-1,790	-1.1	25,660	4.2	-7.5
Second Quintile	11,440	22.3	51,750	7.2	3,270	2.2	48,490	8.5	6.3
Middle Quintile	10,050	19.6	96,600	11.8	13,070	7.6	83,530	12.9	13.5
Fourth Quintile	9,680	18.9	167,300	19.7	31,220	17.6	136,090	20.2	18.7
Top Quintile	9,290	18.1	518,210	58.4	136,100	73.5	382,120	54.5	26.3
All	51,320	100.0	160,580	100.0	33,520	100.0	127,060	100.0	20.9
Addendum									
80-90	4,730	9.2	257,980	14.8	56,410	15.5	201,570	14.6	21.9
90-95	2,260	4.4	370,020	10.1	87,430	11.5	282,590	9.8	23.6
95-99	1,820	3.6	644,010	14.3	169,160	17.9	474,850	13.3	26.3
Top 1 Percent	490	1.0	3,270,130	19.3	1,014,540	28.6	2,255,590	16.8	31.0
Top 0.1 Percent	50	0.1	16,128,520	9.0	5,016,740	13.4	11,111,780	7.8	31.1

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0722-2).

* Non-zero value rounded to zero; ** Insufficient data

Note: Tax units with children are those claiming an exemption for children at home or away from home or with children qualifying for the Child Tax Credit or EITC.

(1) Calendar year. Baseline is current law as of December 21, 2022. Table shows the combined tax benefit of the American Opportunity Tax Credit (AOTC) and the Lifetime Learning tax credit. For more information on TPC's baseline definitions, see

<http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm>

(2) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see

<http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The incomes used are adjusted for family size by dividing by the square root of the number of people in the tax unit. The resulting percentile breaks are (in 2022 dollars): 20% \$21,000; 40% \$40,700; 60% \$69,300; 80% \$116,100; 90% \$169,100; 95% \$239,000; 99% \$571,800; 99.9% \$2,557,900.

(4) Tax units with benefit are tax units with a net benefit of \$10 or more.

(5) After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

(6) For income categories for which the baseline tax burden is negative, a negative value for the tax benefit as a percent of federal tax indicates a net increase in federal subsidies, and a positive value indicates a net decrease in federal subsidies.

(7) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.

Table T22-0258
Tax Benefit of Education Tax Credits
Baseline: Current Law
Distribution of Federal Tax Change by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹
Detail Table - Elderly Tax Units

Expanded Cash Income Percentile ^{2,3}	Percent of Tax Units ⁴		Benefit as a Percent of After-Tax Income ⁵	Share of Total Benefit	Average Benefit		Share of Federal Taxes		Average Federal Tax Rate ⁷	
	With Benefit	Without Benefit			Dollars	Percent of Federal Taxes ⁶	With Provision	Without Provision	With Provision	Without Provision
Lowest Quintile	0.2	99.8	0.0	5.7	*	1.1	0.2	0.2	1.2	1.2
Second Quintile	0.3	99.7	0.0	8.4	*	0.2	1.6	1.6	3.1	3.1
Middle Quintile	0.5	99.5	0.0	30.6	10	0.2	6.0	6.1	6.9	6.9
Fourth Quintile	0.8	99.2	0.0	43.8	20	0.1	13.7	13.7	11.6	11.6
Top Quintile	0.4	99.6	0.0	11.4	10	0.0	77.8	77.7	23.2	23.2
All	0.4	99.6	0.0	100.0	10	0.0	100.0	100.0	16.3	16.3
Addendum										
80-90	0.6	99.4	0.0	10.3	10	0.0	12.7	12.7	15.9	16.0
90-95	0.1	99.9	0.0	1.1	*	0.0	10.1	10.1	18.5	18.5
95-99	0.0	100.0	0.0	0.0	0	0.0	17.4	17.4	22.2	22.2
Top 1 Percent	0.0	100.0	0.0	0.0	0	0.0	37.6	37.6	30.7	30.7
Top 0.1 Percent	0.0	100.0	0.0	0.0	0	0.0	21.8	21.8	31.5	31.5

Baseline Distribution of Income and Federal Taxes
by Expanded Cash Income Percentile Adjusted for Family Size, 2022 ¹

Expanded Cash Income Percentile ^{2,3}	Tax Units		Pre-Tax Income		Federal Tax Burden		After-Tax Income ⁵		Average Federal Tax Rate ⁶
	Number (thousands)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total	Average (dollars)	Percent of Total	
Lowest Quintile	9,650	20.5	16,250	3.3	190	0.2	16,060	3.9	1.2
Second Quintile	11,310	24.0	35,200	8.4	1,090	1.6	34,110	9.8	3.1
Middle Quintile	10,340	22.0	65,180	14.3	4,490	6.0	60,690	15.9	6.9
Fourth Quintile	8,250	17.5	110,240	19.3	12,790	13.7	97,450	20.4	11.6
Top Quintile	6,870	14.6	374,980	54.6	86,990	77.8	287,990	50.1	23.2
All	47,030	100.0	100,280	100.0	16,340	100.0	83,940	100.0	16.3
Addendum									
80-90	3,510	7.5	174,850	13.0	27,870	12.7	146,980	13.1	15.9
90-95	1,650	3.5	253,330	8.9	46,970	10.1	206,360	8.7	18.5
95-99	1,360	2.9	442,870	12.8	98,150	17.4	344,720	11.9	22.2
Top 1 Percent	350	0.7	2,690,100	20.0	824,700	37.6	1,865,400	16.6	30.7
Top 0.1 Percent	50	0.1	11,769,950	11.2	3,711,740	21.8	8,058,210	9.2	31.5

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0722-2).

* Non-zero value rounded to zero; ** Insufficient data

Note: Elderly tax units are those with either head or spouse (if filing jointly) age 65 or older.

(1) Calendar year. Baseline is current law as of December 21, 2022. Table shows the combined tax benefit of the American Opportunity Tax Credit (AOTC) and the Lifetime Learning tax credit. For more information on TPC's baseline definitions, see <http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm>

(2) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see <http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The incomes used are adjusted for family size by dividing by the square root of the number of people in the tax unit. The resulting percentile breaks are (in 2022 dollars): 20% \$21,000; 40% \$40,700; 60% \$69,300; 80% \$116,100; 90% \$169,100; 95% \$239,000; 99% \$571,800; 99.9% \$2,557,900.

(4) Tax units with benefit are tax units with a net benefit of \$10 or more.

(5) After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

(6) For income categories for which the baseline tax burden is negative, a negative value for the tax benefit as a percent of federal tax indicates a net increase in federal subsidies, and a positive value indicates a net decrease in federal subsidies.

(7) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.