Before and after TCJA: Who pays federal income taxes and how much do they pay?

SUMMARY POINTS

- With the enactment of the TCJA, the average effective federal income tax rate declined from 14.4% in 2017 to 13.0% in 2018 (after accounting for changes to tax rates and brackets, deductions, and credits). The largest reduction was among people making between $500,000 and $1 million per year.
- Individuals earning over $100,000 per year paid 83.3% of all 2018 federal individual income taxes, up from 81.1% in 2017. The portion of taxes paid by those making over $500,000 per year increased from 38.2% to 40.6%.
- In 2018, 34.7% of people did not have taxable income after accounting for deductions and did not owe federal individual income taxes, including 75.2% of those making under $25,000 per year.

INTRODUCTION

The Tax Cuts and Jobs Act (TCJA) introduced a series of federal individual income tax reforms. These included reducing marginal tax rates and adjusting tax brackets, nearly doubling the standard deduction, limiting the state and local tax deduction (SALT), and doubling the child tax credit (CTC), among others. After accounting for all these changes to individual income taxes, some decreasing and others increasing taxes, how have tax rates on average changed? This brief explores average effective tax rates and the distribution of the federal individual income tax burden since TCJA's enactment.

POLICY CHANGE

Firstly, TCJA reduced statutory tax rates for most income levels and adjusted the income ranges for each tax bracket. The table below compares the tax brackets and rates the year before TCJA in 2017 to those after its implementation at the beginning of 2018.

Tax brackets and rates

Pre-TCJA (2017)			Post-TCJA (2018)		
INCOME RANGE		TAX RATE	INCOME RANGE		TAX RATE
SINGLE	MARRIED FILING JOINTLY		SINGLE	MARRIED FILING JOINTLY	
$0–$9,325	$0–$18,650	10%	$0–$9,525	$0–$19,050	10%
$9,325–$37,950	$18,650–$75,900	15%	$9,525–$38,700	$19,050–$77,400	12%
$37,950–$91,900	$75,900–$153,100	25%	$38,700–$82,500	$77,400–$165,000	22%
$91,900–$191,650	$153,100–$233,350	28%	$82,500–$157,500	$165,000–$315,000	24%
$191,650–$416,700	$233,350–$416,700	33%	$157,500–$200,000	$315,000–$400,000	32%
$416,700–$418,400	$416,700–$470,700	35%	$200,000–$500,000	$400,000–$600,000	35%
$418,400+	$470,700+	39.6%	$500,000+	$600,000+	37%

TCJA also adjusted deductions and credits that impact the total amount of taxes a family owes each year. Deductions lower taxes by reducing taxable income, while credits directly reduce the amount of taxes owed. So, if you earn $50,000 per year and claim a $10,000 tax deduction, then you pay taxes on only $40,000. If you also receive a $1,000 tax credit, your taxes owed would decrease by that same amount after accounting for the deduction.

Starting in 2018, TCJA nearly doubled the standard deduction from $6,500 to $12,000 for individual filers and from $13,000 to $24,000 for joint filers. These standard deduction amounts have since increased annually with inflation adjustments.

Standard deduction: before and after TCJA

Filing Status	2017 (pre-TCJA)	2018	2025*
Individual	$6,500	$12,000	$15,000
Married filing jointly	$13,000	$24,000	$30,000
Head of household	$9,550	$18,000	$22,500

**Increased annually since 2018 with inflation adjustments*

TCJA also reduced certain itemized deductions, the most prominent being the SALT deduction. The act limited the amount of state and local taxes that a taxpayer could deduct to $10,000 when there previously was no cap. TCJA also lowered the limit on the mortgage interest deduction from the first $1 million in the principal value of a mortgage to the first $750,000.

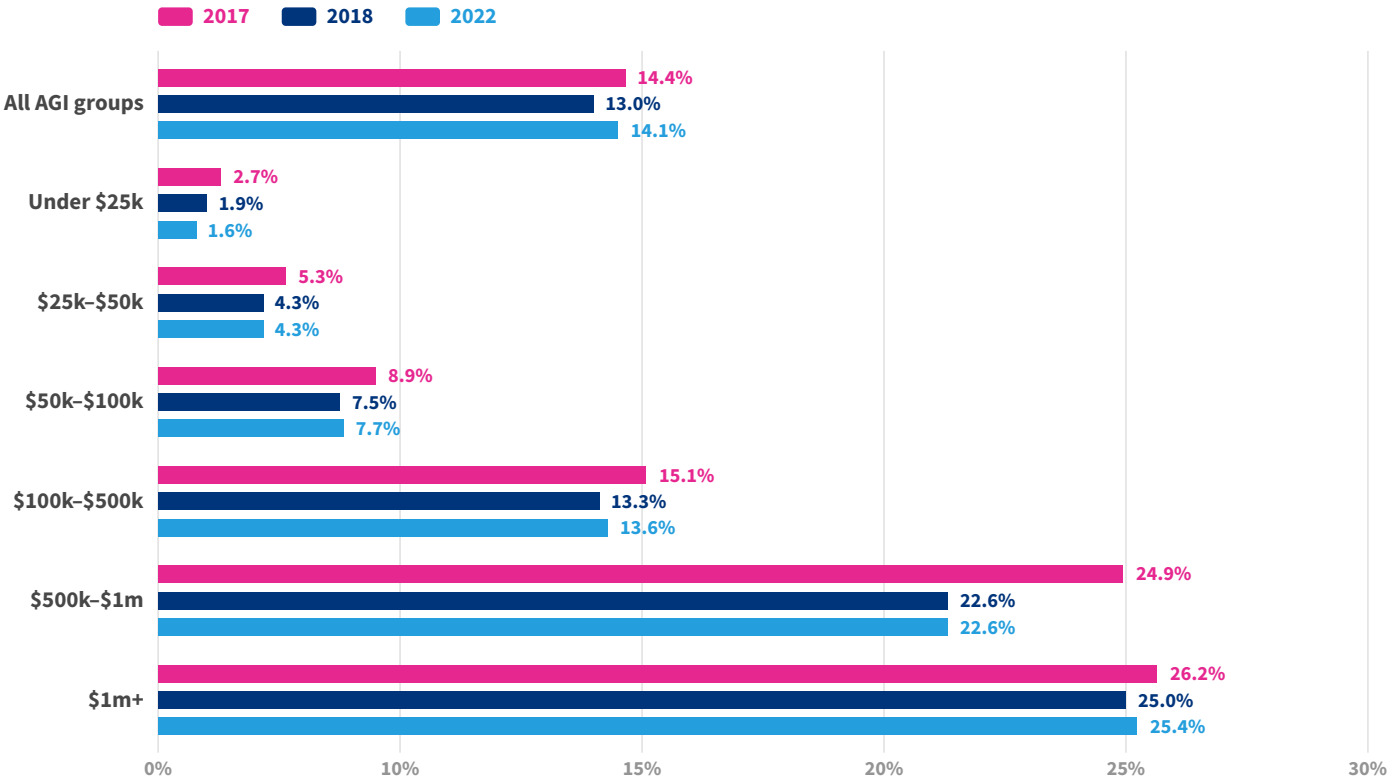
The act also doubled the maximum child tax credit and expanded eligibility to higher income households. In particular, TCJA increased the maximum CTC from $1,000 to $2,000, and it raised the start of the tax credit's phase out from $75,000 to $200,000 for single or head of household filers and from $110,000 to $400,000 for those married filing jointly.

All of these provisions enacted by TCJA are scheduled to sunset at the end of 2025. Absent new legislation, these tax provisions will return to what they were in 2017: tax rates will increase, the standard deduction will revert to its pre-TCJA levels, the $10,000 limitation on SALT will be lifted, the previous mortgage interest deduction limitation will be reinstated, and the CTC would decrease to $1,000, among other changes.

WHAT PERCENT OF INCOME DO PEOPLE PAY IN FEDERAL INDIVIDUAL INCOME TAXES?

The average effective tax rate among all returns and across income levels declined after TCJA's enactment. The below chart categorizes returns in adjusted gross income (AGI) groups — the income measure Internal Revenue Service (IRS) uses to determine taxes owed each year.

Average effective tax rates by AGI, 2017, 2018, & 2022



Source: Internal Revenue Service, Statistics of Income

Average taxes paid by AGI, 2017, 2018 & 2022

AGI Group	2017	2018	2022
All AGI groups	$10,343	$9,818	$13,010
Under $25k	$215	$155	$126
$25k–$50k	$1,916	$1,556	$1,566
$50k–$100k	$6,343	$5,316	$5,468
$100k–$500k	$25,899	$22,975	$24,393
$500k–$1m	$167,482	$152,265	$151,847
$1m+	$879,724	$824,691	$859,443

Source: Internal Revenue Service, Statistics of Income

The average effective individual income tax rate across all returns declined from 14.4% in 2017 to 13% in 2018. The average rate also decreased across income distributions. Those who make between $50,000 and $100,000 per year paid an average effective tax rate of 7.5% in 2018, down from 8.9% in 2017. The effective tax rate declined most among those making between $500,000 and $1 million per year, from 24.9% to 22.6%

Federal individual taxes before and after lawmakers enacted TCJA remained progressive, meaning tax rates increased with earnings.

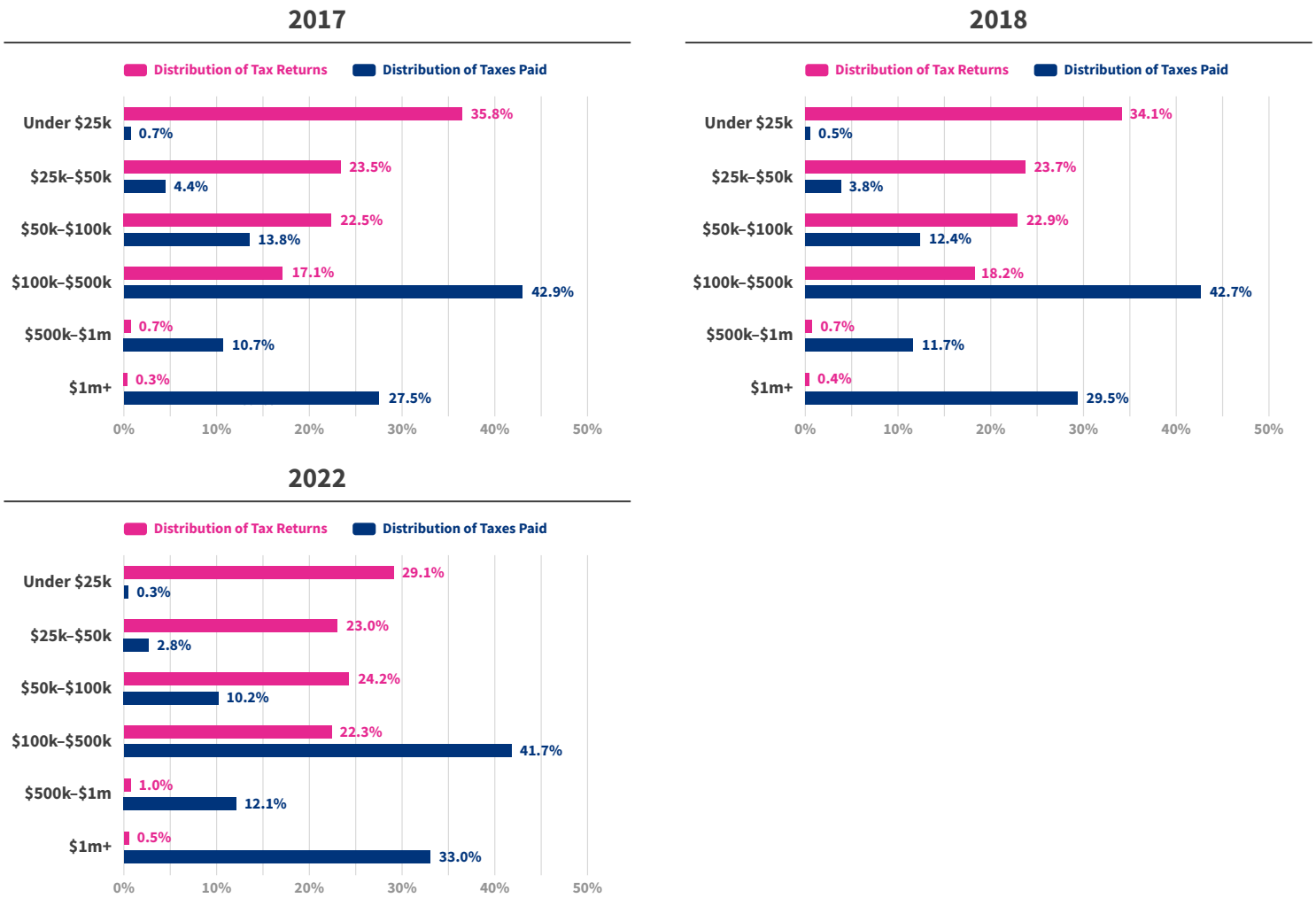
Yet, between 2017 and 2018, average taxes paid declined the most among high income tax returns. For example, average taxes paid by those making over $1 million per year declined by $55,033 in 2018. Average taxes also declined for low- and middle-income groups. For example, average taxes declined by $359 among those making between $25,000 and $50,000 per year.

Factors independent of TCJA, such as population shifts, employment, earnings growth, and other economic conditions, also likely influenced these figures over time. By 2022, the most recent year of data, the average effective tax rate across all returns had risen to 14.1% due to more returns in higher AGI groups (see distribution tables in the following sections).

WHAT IS THE DISTRIBUTION OF TAXES PAID BY INCOME LEVEL?

Although effective tax rates declined across the income distribution, the portion of taxes paid by high income people grew since TCJA. The following chart provides the portion of taxes paid by AGI group compared to the distribution of tax returns in 2017, 2018, and 2022.

Distribution of taxes paid by AGI, 2017, 2018, & 2022



Source: Internal Revenue Service, Statistics of Income

People with high income paid the largest share of 2017 federal income taxes, with their share growing slightly in 2018 and more so in 2022. The portion of taxes paid by people making at least $100,000 per year increased from 81.1% in 2017 to 83.3% in 2018. People making more than $500,000 account for less than 2% all tax returns but paid 40.6% of federal individual income taxes in 2018, up from 38.2% in 2017.

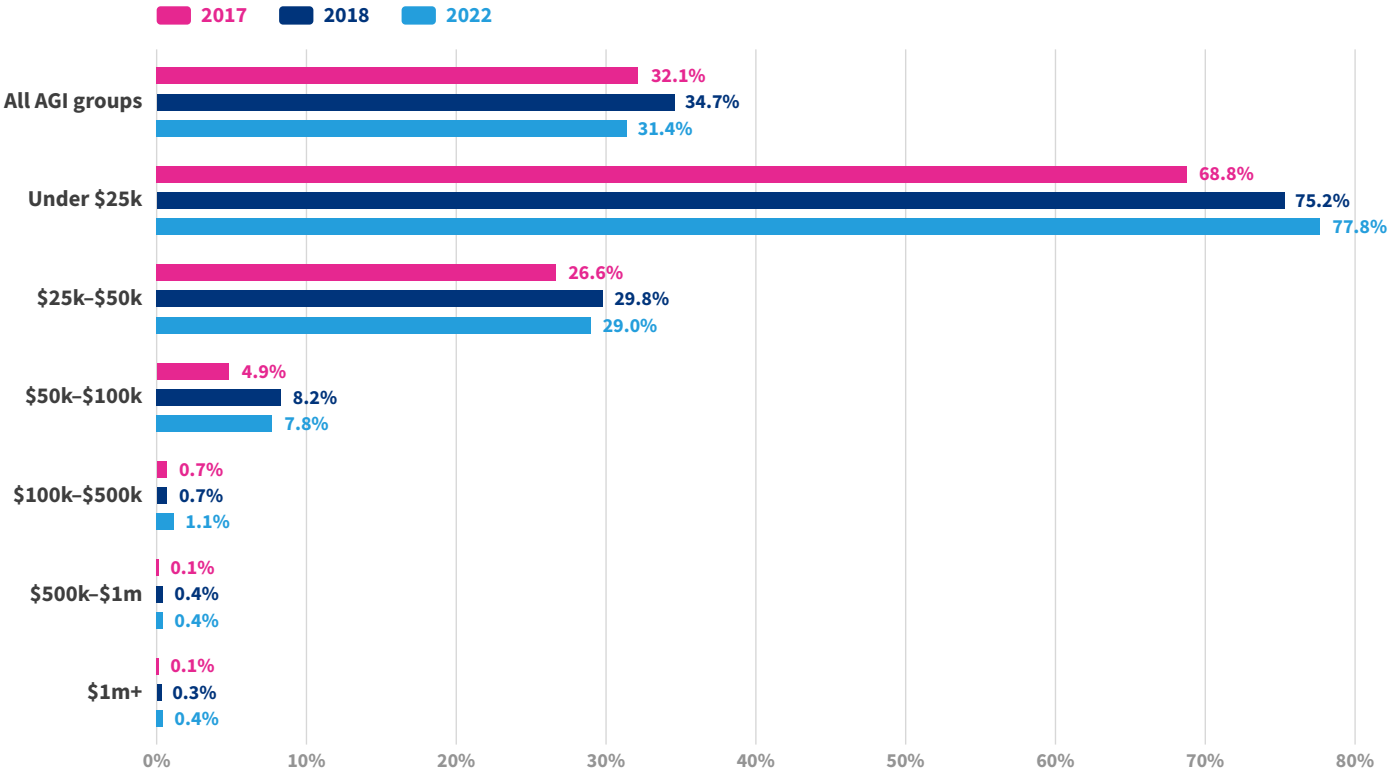
Meanwhile, people making under $50,000, who account for more than half of all tax returns, accounted for a smaller share of taxes paid after TCJA. Specifically, those making under $50,000 represented 59.4% of tax returns, but paid 5.1% of federal income taxes in 2017. In 2018, they accounted for 57.8% of tax returns and paid 4.3% of all federal individual income taxes.

These trends continued into 2022, with the share of taxes paid by upper-income groups continuing to rise. However, these trends are at least in part due to earnings growth, as the share of tax returns in high-income AGI groups rose during this period.

WHO DOESN'T PAY FEDERAL INCOME TAXES?

A large portion of people do not pay federal income taxes because they do not have federally taxable income after accounting for deductions.

Portion of tax returns without taxable income by AGI, 2017, 2018, & 2022



Source: Internal Revenue Service, Statistics of Income

In 2018, 34.7% of all tax returns did not have taxable income and, thus, did not pay federal income taxes, up from 32.1% in 2017. The portion not paying federal income taxes is concentrated among low-income people and grew after TCJA took effect. This is likely partly due to the near doubling of the standard deduction; any return with an income below the standard deduction would not pay federal individual income tax.

In particular, the portion returns making under $25,000 that did not pay federal income tax grew from 68.8% to 75.2%, while those making between $25,000 and $50,000 not paying taxes increased from 26.6% to 29.8%.

Although the overall portion of returns without taxable income had declined by 2022, it remained higher than in 2017 at each income level. This is because returns with less than $50,000 in income are the most likely to have no taxable income, and those returns declined by 6.8 million between 2017 and 2022.

So, even though the percent of returns without taxable income within each group increased, the number of returns with incomes below $50,000 declined enough to reduce the overall percent of returns with no taxable income.

TAX DATA CHALLENGES

All of the data discussed in this explainer are compiled and published by the IRS's Statistics of Income (SOI). While these data provide valuable insight, statistical systems that use tax data face several challenges. As such, policymakers and analysts have limited information to evaluate the effect of previous tax policy and the potential impact of new proposals. Some of the limitations in tax data include:

Delays

There are major delays in tax data.

- Tabulated topline data typically lags two to three years, with the most recent individual and corporate income tax data being from 2022 and 2021, respectively.
- The latest public-use file, which provides detailed microdata on individual income tax returns, is from 2015, and there is no public-use file on corporate income tax returns. This means that economists are still unable to perform deeper analyses of the impact of TCJA (enacted in 2017) on investment, work, and earnings. Moreover, they are also forced to rely on decade-old data when attempting to forecast the potential impact of new policy changes into the 2030s.

Unpublished data

Despite gathering significant amounts of information from businesses, workers, families, and educational institutions, among others, the IRS has been unable to publish data on several key topics Americans care about, such as health insurance and student debt.

Website

Tax data is not easily accessible on the IRS's website. Users must have a strong working knowledge of existing tables and the US tax system to answer simple questions.

Informational technology

The IRS runs on outdated hardware, meaning that SOI is unable to leverage modern tools, such as AI and machine reading, to efficiently prepare data for the public.

Talent

SOI relies on a team of statisticians, data scientists, and other specialized professionals to produce data for the public. However, it has long faced a resource-constrained environment with limited staffing. This impacts SOI's capacity to release data, contributing to delays and unpublished data.

APPENDIX: **DETAILED TABLES**

Average effective tax rates by AGI, 2017, 2018, & 2022

AGI Group	2017	2018	2022
All AGI groups	14.4%	13.0%	14.1%
Under $25k	2.7%	1.9%	1.6%
$25k–$50k	5.3%	4.3%	4.3%
$50k–$100k	8.9%	7.5%	7.7%
$100k–$500k	15.1%	13.3%	13.6%
$500k–$1m	24.9%	22.6%	22.6%
$1m+	26.2%	25.0%	25.4%

Source: Internal Revenue Service, Statistics of Income

Average taxes paid by AGI, 2017, 2018 & 2022

AGI Group	2017	2018	2022
All AGI groups	$10,343	$9,818	$13,010
Under $25k	$215	$155	$126
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Source: Internal Revenue Service, Statistics of Income

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Distribution of taxes paid by AGI, 2017, 2018, & 2022

AGI Group	2017		2018		2022	
	Distribution of Tax Returns	Distribution of Taxes Paid	Distribution of Tax Returns	Distribution of Taxes Paid	Distribution of Tax Returns	Distribution of Taxes Paid
Under $25k	35.8%	0.7%	34.1%	0.5%	29.1%	0.3%
$25k–$50k	23.5%	4.4%	23.7%	3.8%	23.0%	2.8%
$50k–$100k	22.5%	13.8%	22.9%	12.4%	24.2%	10.2%
$100k–$500k	17.1%	42.9%	18.2%	42.7%	22.3%	41.7%
$500k–$1m	0.7%	10.7%	0.7%	11.2%	1.0%	12.1%
$1m+	0.3%	27.5%	0.4%	29.5%	0.5%	33.0%

Source: Internal Revenue Service, Statistics of Income

Portion of tax returns without taxable income by AGI, 2017, 2018, & 2022

AGI Group	2017		2018		2022	
	Distribution of Tax Returns	Percent of Returns with No Taxable Income	Distribution of Tax Returns	Percent of Returns with No Taxable Income	Distribution of Tax Returns	Percent of Returns with No Taxable Income
All AGI groups	100.0%	32.1%	100.0%	34.7%	100.0%	31.4%
Under $25k	35.8%	68.8%	34.1%	75.2%	29.1%	77.8%
$25k–$50k	23.5%	26.6%	23.7%	29.8%	23.0%	29.0%
$50k–$100k	22.5%	4.9%	22.9%	8.2%	24.2%	7.8%
$100k–$500k	17.1%	0.7%	18.2%	0.7%	22.3%	1.1%
$500k–$1m	0.7%	0.1%	0.7%	0.4%	1.0%	0.4%
$1m+	0.3%	0.1%	0.4%	0.3%	0.5%	0.4%

Source: Internal Revenue Service, Statistics of Income