TAX POLICY CENTER
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WHAT ARE THE LARGEST NONBUSINESS TAX EXPENDITURES

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In this brief we consider the largest nonbusiness tax expenditures in the individual income tax. We provide a description of these provisions, estimates of their cost and the distribution of their tax benefits across income groups, and briefly summarize their effects. We consider tax expenditures for business income in a separate brief. This latter category includes tax benefits people claim on their individual income tax returns from provisions that affect pass-through businesses, such as sole proprietorships, partnerships, and S corporations.

Both the Office of Tax Analysis (OTA) in the US Treasury Department and the Congressional Joint Committee on Taxation (JCT) publish annual lists of tax expenditures.[1] We report tax expenditure estimates from both organizations for fiscal years 2019 to 2022. Fiscal year 2019 is the first full year after enactment of the 2017 Tax Act commonly referred to as the Tax Cuts and Jobs Act (TCJA), and 2022 is the last fiscal year for which JCT provides estimates in its most recent tax expenditure report.

THE TEN LARGEST CATEGORIES OF NONBUSINESS TAX EXPENDITURES

The 10 largest categories of nonbusiness individual income tax expenditures sum to $4.8 trillion in 2019 to 2022, according to JCT, ranging from about $1.1 trillion each for retirement savings and health care to about $130 billion for education (figure 1). These 10 categories account for about 95 percent of total nonbusiness tax expenditures. OTA's

[1] Joint Committee on Taxation, "Estimates of Federal Tax Expenditures for Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018. JCT and OTA estimates differ for several reasons. The organizations use different assumptions regarding projections of income, expenses, and the take-up of certain tax preferences. In addition, there are methodological differences, a major one being that JCT assumes that if a tax expenditure is eliminated, taxpayers would take advantage of other provisions in the tax code. So, for example, if the exclusion for employer provided health premiums were eliminated and instead treated as taxable income to employees, taxpayers would claim the expense of those premiums as an itemized deduction. OTA does not allow for the take up of other tax preferences when it measures the cost of a tax expenditure.

estimate for the total is quite similar ($4.6 trillion), but its estimate is higher for health care ($1.2 trillion) and lower for retirement saving ($860 billion) than JCT's.

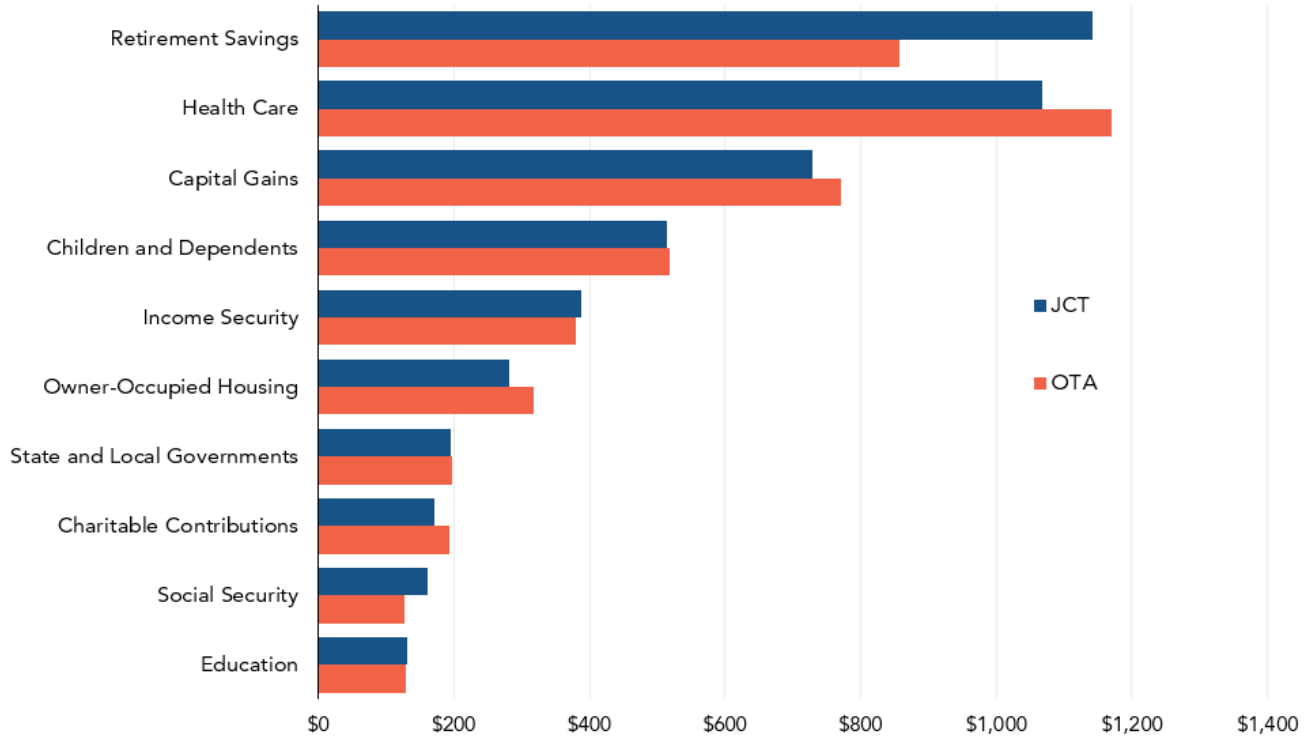
The sum of the losses for each provision estimated separately, as reported here, would not equal the combined revenue loss for all provisions estimated together because of interactions among the provisions. For example, eliminating one exemption from taxable income would push some taxpayers into higher tax rate brackets, thereby increasing the revenue loss from remaining exemptions. Conversely, eliminating one itemized deduction would reduce the number of taxpayers who itemize their deductions, thereby decreasing the revenue loss from remaining itemized deductions. Estimates by the Tax Policy Center (TPC) suggest that the combined revenue loss from all individual tax expenditures is about 5 percent larger than the amount computed by summing individual tax expenditures.

The tax benefits from these provisions are distributed across the population in very different ways. Some, such as those in the income security category, which includes the earned income tax credit (EITC), provide benefits mostly to low-income households. Others, such as the special tax rates and various other preferences for capital gains, benefit mostly high-income households. Most of the benefits in the education category go to middle-income households.

FIGURE 1

Top Individual Income Tax Expenditures

Categorized by budget function, billions of dollars, fiscal years 2019–22



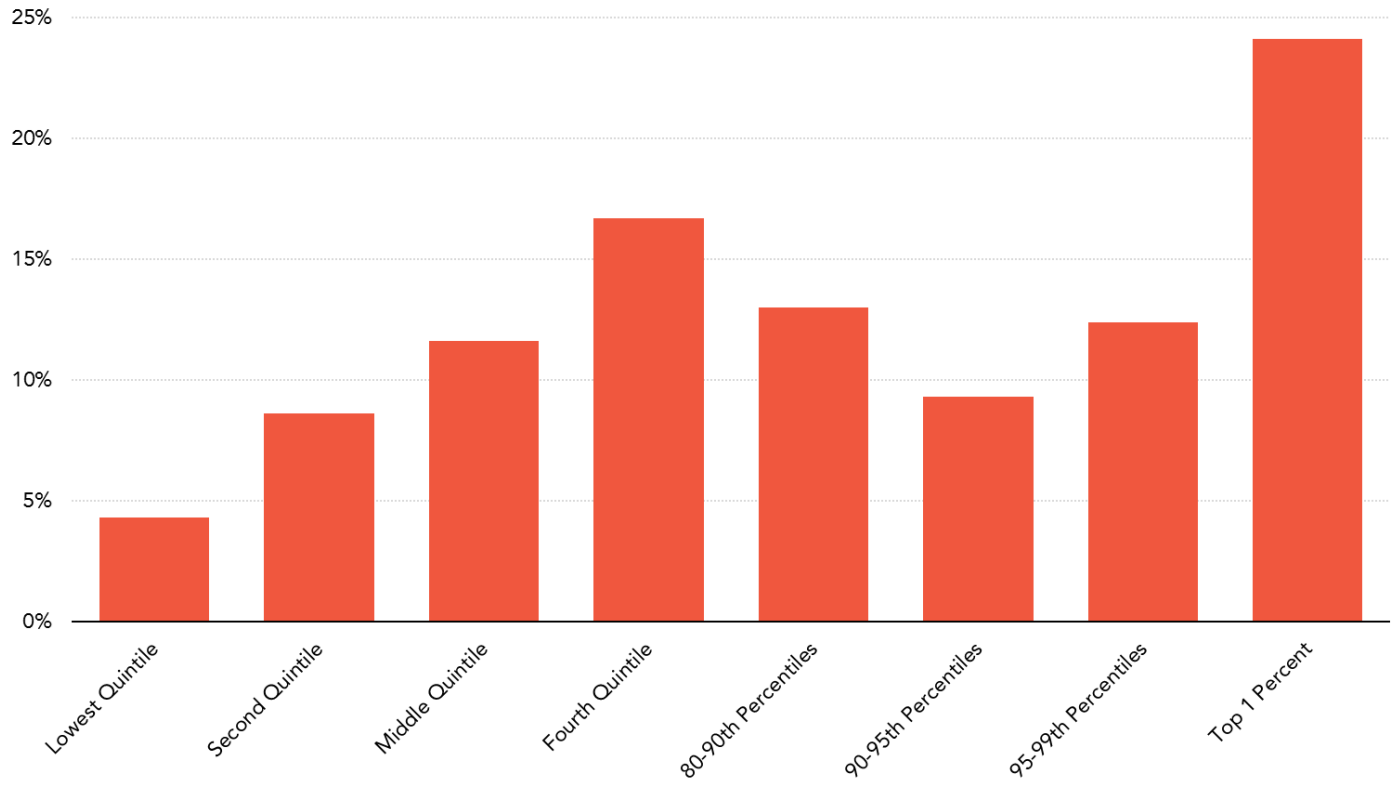
Source: Joint Committee on Taxation, "Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018; Authors' analysis.

Taken together, the major non-business tax expenditures provide a greater share of tax benefits to households at the top of the income scale than to households in other income groups. Almost 60 percent of the tax benefits from the major nonbusiness tax expenditures go to households in the top income quintile, with almost one-quarter going to the top 1 percent.

FIGURE 2

Nonbusiness Individual Income Tax Expenditures

Shares of tax benefits by income groups, calendar year 2019



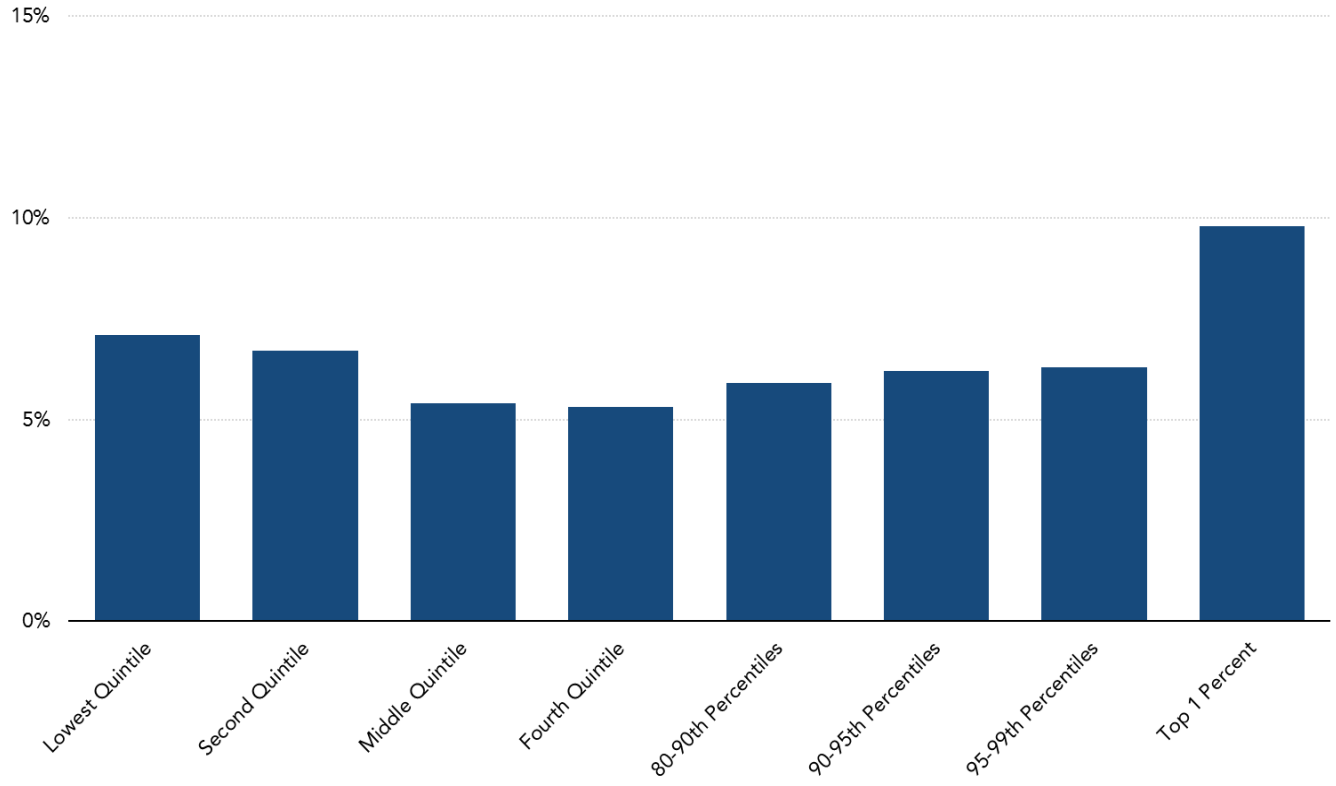
Source: Daniel Berger and Eric Toder. *Distributional Effects of Individual Income Tax Expenditures After the 2017 Tax Cuts and Job Acts*. Tax Policy Center. June 2019.

However, measured as a percentage of income, the distribution of tax expenditures looks quite different. Apart from the top 1 percent, the benefits as a percentage of income are largest for households in the bottom two income quintiles.

FIGURE 3

Nonbusiness Individual Income Tax Expenditures

Tax benefits as a percentage of pretax income by income groups, calendar year 2019



Source: Daniel Berger and Eric Toder. *Distributional Effects of Individual Income Tax Expenditures After the 2017 Tax Cuts and Job Acts.* Tax Policy Center. June 2019.

RETIREMENT SAVINGS

Tax preferences for retirement savings are the largest single category, reaching over $1.141 trillion in 2019 to 2022 according to JCT. The largest items are the exclusion from taxable income of pension contributions and earnings for defined-contributions plans ($522.5 billion) and for defined-benefit plans ($430.7 billion). OTA tax expenditures estimates are noticeably lower for both defined-contribution ($348.2) and defined-benefit plans ($296.1).

Defined-benefit and defined-contribution plans are the primary types of employer-sponsored pension plans. Defined-benefit plans generally distribute funds regularly during retirement according to formulas that reflect employees' years of work, age at retirement, and earnings. Employers typically make all contributions to defined-benefit plans, although some plans require employee contributions or permit voluntary ones. In defined-contribution plans, such as 401(k) plans, 403(b) plans, and the Federal Thrift Saving plan, plan balances depend on past employee and employer contributions and on the investment returns accumulated on those contributions. Contributions to traditional defined-contribution plans and the investment income earned on plan balances are excluded from taxable income until withdrawn. Likewise, taxes on employer contributions to and investment earnings of defined-benefit pension plans are also deferred until the benefits are paid to employees.

TABLE 1

Individual Income Tax Expenditures for Retirement Savings

Billions of dollars, fiscal years 2019–22

Item	JCT	OTA
Net exclusions of pension contributions and earnings	**$1,022.7**	**$757.5**
Defined contributions plans	$522.5	$348.2
Defined benefit plans	$430.7	$296.1
Self-employment (Keogh) plans	$69.5	$113.2
Individual Retirement Accounts	**$113.6**	**$95.5**
Traditional IRAs	$78.7	N/A
Roth IRAs	$34.9	N/A
Credit for retirment savings contributions (Saver's credit)	**$4.8**	**$4.7**
Total	**$1,141.1**	**$857.7**

Source: Joint Committee on Taxation, "Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018; Authors' analysis.

Self-employed workers can establish and make contributions to retirement plans. Like employer-sponsored defined-contribution plans, taxes on contributions and investment earnings are deferred until withdrawn. The projected tax expenditure for self-employment retirement plans is $69.5 billion (according to JCT) and $113.2 billion (according to OTA).

Individuals also may establish their own individual retirement accounts (IRAs). There are two main types: traditional IRAs and Roth IRAs. Like most 401(k) plans, traditional IRAs allow taxpayers to deduct their contributions, up to a preset limit, when computing taxable income. Tax liability is only triggered when funds are distributed to the account owners. By contrast, contributions to Roth IRAs and Roth 401(k)s are not deductible, but distributions to retirees, including accumulated investment income, are tax free. Employees may also make tax-free transfers from their 401(k) or 403(b) accounts to IRAs when they terminate employment with the 401(k) or 403(b) plan sponsors. The JCT estimate of tax expenditures for IRAs is much smaller than for employment-related plans but is still substantial: $78.7 billion for traditional IRAs and $34.9 billion for Roth accounts. OTA does not provide separate estimates for different types of IRAs, but it estimates a total tax expenditure for IRAs of $95.5 billion in 2019 to 2022.

Low- and moderate-income workers also can claim a nonrefundable Saver's credit of up to 50 percent of their IRA and other retirement plan contributions. The maximum Saver's credit is $2,000 ($4,000 for married taxpayers filing a joint return). The credit percentage phases down with income, reaching zero for singles with income of $32,000 or more ($64,000 or more for married couples) in 2019.

The TCJA did not make significant changes to retirement saving tax expenditures. However, the new law modestly reduced the cost of those tax expenditures by reducing individual income tax rates. Lower marginal tax rates reduce the cost of tax expenditures that take the form of exclusions and deductions because the resulting reduction in taxable income provides a smaller tax benefit at lower tax rates.

The revenue loss from retirement saving tax incentives is measured on a cash-flow basis and is calculated as the sum of the revenue loss attributable to the tax exclusion for current-year contributions and earnings on account balances, minus the revenue from taxation of current-year pension and IRA distributions from traditional plans. Cash-flow tax expenditure estimates are consistent with how the federal budget measures most spending programs. They do not, however, capture the true economic costs and benefits of retirement tax incentives. Cash flow measures would show a negative benefit for retirees who are paying tax on retirement plan and IRA distributions because they would not capture the past benefits of the tax exclusion for contributions and earnings on account balances. Conversely, they would show an overstated benefit for workers from those exclusions because they would not capture future taxes to be paid on distributions. Further, cash flow measures overstate the benefits from deductible contributions to traditional accounts compared with benefits from Roth accounts, which come in the form of an exclusion from tax of income from future payouts.

Alternative estimates that account for the deferral of tax payments on contributions to pensions and IRAs and on future earnings from those contributions give a more meaningful picture of the distribution of tax benefits. That calculation is the sum of the immediate revenue loss attributable to retirement savings contributions, plus the "present value" of the revenue loss that occurs from the tax exemption for accrued earnings on that contribution in future years, minus the present value of the revenue due from taxes upon future withdrawals.[2]

TABLE 1b

Tax Benefit of Retirement Saving Incentives (Present Value Approach)

Distribution of tax benefits, by income percentile, calendar year 2018

Expanded Cash Income Percentile	Share of Tax Units (%)		Benefit as Share of After-Tax Income (% points)	Share of Total Benefit (%)	Average Benefit ($)
	With benefit	Without benefit			
Lowest quintile	5.1%	94.9%	0.1%	0.4%	$20
Second quintile	29.2%	70.8%	0.6%	3.7%	$180
Middle quintile	49.3%	50.7%	1.0%	10.9%	$600
Fourth quintile	66.1%	33.9%	1.5%	22.5%	$1,470
Top quintile	81.3%	18.7%	1.8%	62.5%	$4,840
All	40.3%	59.7%	1.4%	100.0%	$1,100
Addendum: top quintile					
80-90	79.2%	20.8%	2.0%	19.9%	$2,990
90-95	84.7%	15.3%	2.5%	16.6%	$5,200
95-99	83.0%	17.0%	2.3%	19.4%	$7,880
Top 1 percent	79.5%	20.5%	0.7%	6.6%	$10,950
Top 0.1 percent	72.7%	27.4%	0.1%	0.6%	$10,080

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0718-1), October 2018.
Notes: "Expanded Cash Income Percentile" 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; the income percentile classes used are based on the income distribution for the entire population and contain an equal number of people, not tax units.

Most of the benefit from tax expenditures for retirement saving goes to higher-income taxpayers. This occurs because they are more likely to have access to employer-sponsored retirement plans, are more likely to make contributions to plans when offered and to IRAs, and receive a larger tax benefit for each dollar contributed (because their marginal income tax rate is higher) than middle- and lower-income taxpayers. Measured using the present-value approach, the tax benefit from retirement saving incentives is concentrated in the top two quintiles, with taxpayers in those income

[2] OTA publishes present value estimates for certain tax expenditures in addition to cash flow estimates.

groups receiving 85 percent of the benefits. The benefit as a percentage of after-tax income is highest for taxpayers in the 90th to 95th percentiles. The benefit as a share of after-tax income then declines at the very highest incomes because of legislated limits on amounts that can be contributed to tax-qualified defined-contribution plans and amounts of retirement income that can be earned from tax-qualified defined-benefit plans.

Tax-favored retirement savings accounts are popular: half of working adults are covered by an employer plan, and about 30 percent of workers have an IRA. It's unclear, however, whether the accounts make much difference to overall retirement saving. Although traditional defined-benefit pension plans, defined contribution-plans, and IRAs make up a sizable share of households' wealth, the accounts do not increase household saving if households finance their contributions by shifting existing assets into tax-favored accounts by borrowing or by depositing in retirement accounts funds they would have saved without the tax incentive.

HEALTH CARE

TABLE 2

Individual Income Tax Expenditures for Health Care

Billions of dollars, fiscal years 2019–22

Item	JCT	OTA
Exclusions from taxable income	**$731.3**	**$896.4**
Employer contributions for health insurance premiums and health care	$723.5	$885.2
Interest on qualified private activity bonds for private nonprofit hospital facilities	$7.8	$11.2
Tax credits	**$244.5**	**$174.7**
Subsidies for insurance purchased through ACA marketplaces	$244.5	$174.7
Deductions	**$68.1**	**$63.4**
Health insurance premiums paid by the self-employed	$34.2	$32.8
Medical expenses and long-term care expenses	$33.9	$30.6
Health savings accounts	**$24.1**	**$35.1**
Total	**$1,068.0**	**$1,169.6**

Source: Joint Committee on Taxation, "Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018; Authors' analysis.

Tax preferences for health care are almost as large as for retirement saving, totaling an estimated $1.068 trillion in 2019 to 2022 according to JCT. OTA estimates that these tax expenditures will total $1.170 trillion, larger than its estimate of tax expenditures for retirement saving. The largest single item is the exclusion of employer contributions for employee health insurance premiums, health care, and long-term care insurance premiums, costing $723.5 billion (per JCT) and $885.2 billion (per OTA) in 2019 to 2022. These contributions are excluded from an employee's gross income, although an employer may deduct the cost as a business expense. The estimates include the cost of health care flexible spending accounts (FSAs), which are tax-advantaged benefit plans established by an employer to reimburse employees for qualified medical and dental expenses not covered by insurance. FSAs usually are funded through salary-reduction agreements in which the employee agrees to receive lower monetary compensation in exchange for equivalent contributions to an FSA.

The exclusion of employer contributions to health care also substantially reduces payroll taxes, though that impact is not included in official tax expenditure estimates. OTA estimates that employer contributions for health care will reduce

payroll taxes by $585.5 billion in 2019 to 2022. A portion of the reduction in payroll tax receipts, however, is offset by a reduction in future Social Security benefits to workers reporting lower taxable wages.

The next largest item is the subsidy for purchasing health insurance through health benefit exchanges under the Affordable Care Act (ACA). The subsidy is available to people ineligible for employer-sponsored or public health insurance. Those subsidies are estimated to cost $244.5 billion (per JCT) and $174.7 billion (per OTA) in 2019 to 2022. The TCJA reduced the total cost of the subsidy by eliminating a penalty tax on individuals who lack insurance coverage, thereby reducing the number of people who are expected to purchase subsidized insurance coverage.

The difference between the JCT and OTA estimates for the cost of tax expenditures for employer health insurance contributions in part reflects a difference in the methodology used by the two agencies. JCT assumes that if the exclusion for employer-sponsored health insurance premiums were eliminated and instead treated as taxable income to employees, taxpayers would claim those premiums as a medical expense itemized deduction. OTA does not allow for this potential offset. Differences for the cost of ACA subsidies likely reflect different estimates of the number of workers with employer-sponsored coverage and the number with insurance purchased through health insurance exchanges. In a world with constantly changing federal health care policy, any health insurance coverage estimates are highly uncertain.

TABLE 2b

Tax Benefit of the Exclusion of Employer-Sponsored Health Benefits and Deduction for Self-Employed Health Insurance Premiums

Distribution of tax benefits, by income percentile, calendar year 2018

Expanded Cash Income Percentile	Share of Tax Units (%)		Benefit as Share of After-Tax Income (% points)	Share of Total Benefit (%)	Average Benefit ($)
	With benefit	Without benefit			
Lowest quintile	8.4%	91.7%	0.1%	0.5%	$20
Second quintile	36.7%	63.3%	1.0%	7.6%	$350
Middle quintile	65.2%	34.8%	1.7%	19.4%	$980
Fourth quintile	78.7%	21.3%	1.7%	26.7%	$1,610
Top quintile	86.0%	14.0%	1.2%	45.8%	$3,270
All	48.8%	51.2%	1.3%	100.0%	$1,010
Addendum: Top Quintile					
80-90	85.9%	14.1%	1.8%	19.2%	$2,660
90-95	87.6%	12.4%	1.6%	11.2%	$3,250
95-99	85.1%	14.9%	1.3%	11.7%	$4,400
Top 1 percent	81.8%	18.2%	0.4%	3.7%	$5,630
Top 0.1 percent	80.8%	19.2%	0.1%	0.4%	$5,420

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0718-1), October 2018.
Notes: "Expanded Cash Income Percentile" 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; the income percentile classes used are based on the income distribution for the entire population and contain an equal number of people, not tax units.

Individuals who participate in a qualifying high-deductible health insurance plan can establish a health savings account (HSA) to pay for qualifying medical expenses. Both employees and employers can make contributions to an HSA. Contributions made by employers are exempt from federal income and payroll taxes, and account owners can deduct their contributions from income subject to federal income taxes. Any income earned on the funds in an HSA accrues tax free, and withdrawals for qualifying medical expenses are not taxed. Withdrawals used for nonqualifying expenses are subject to income tax and an additional 20 percent penalty, but the penalty is waived for account holders who are

disabled, are ages 65 or older, or have died. Unused balances can be carried over from year to year without limit. The tax expenditures for HSAs are projected to equal $24.1 billion (per JCT) and $35.1 billion (per OTA) in 2019 to 2022.

Other notable items are the deduction for health insurance premiums for self-employed workers, costing $34.2 billion (per JCT) and $32.8 billion (per OTA), and the deduction for out-of-pocket medical expenses and health insurance premiums, costing $33.9 billion (per JCT) and $30.6 billion (per OTA). Taxpayers can claim an itemized deduction for out-of-pocket expenses and premiums that exceed 10 percent of their adjusted gross income. The TCJA temporarily lowered the threshold to 7.5 percent of income in 2017 and 2018.

Because exclusions and deductions for health insurance premiums reduce taxable income, they are worth more to taxpayers in higher tax brackets than to those in lower brackets. For example, an employer-paid insurance premium of $1,000 reduces federal income taxes by $120 for a worker in the 12 percent tax bracket but by $240 for a worker in the 24 percent bracket. Savings on payroll taxes and state and local income taxes lower the after-tax cost of health insurance even more.

The increasing subsidy per dollar of premium together with the greater likelihood of employer-sponsored coverage and higher insurance premiums for higher-income workers tilts the tax benefits from the exclusion toward the upper part of the income scale. TPC estimates that just over 45 percent of the benefit goes to taxpayers in the highest income quintile. The average benefit as a share of after-tax income, however, is largest for those in the middle and fourth income quintiles. Beyond a certain income level, health care outlays do not increase much with income, so the tax benefit as a share of income is much lower at the highest income levels than for middle- and upper-middle income households.

Tax preferences for health insurance premiums have contributed to widespread health insurance coverage for working-age adults. About 80 percent of working adults ages 19 to 64 have health insurance coverage either through their employer, union, or purchased directly from an insurance company. The open-ended nature of the exclusions and deductions, however, likely has increased health care costs by encouraging the purchase of more comprehensive health insurance policies with lower cost sharing or with less tightly managed care than consumers would otherwise purchase.

The ACA imposed an excise tax on employer-sponsored health insurance that exceeds specified thresholds. This "Cadillac tax" was originally scheduled to take effect in 2018 but has been delayed twice by legislation and is now scheduled to take effect starting in 2022. Although not a direct limit on the exclusion for health benefits, the Cadillac tax would have a similar effect. Either way, benefits above the thresholds would be taxed. Employers could avoid the excise tax by shifting compensation from health benefits to taxable wages, which would be subject to income and payroll taxes, or they could continue to offer high-cost health plans and pay the excise tax on those excess benefits.

TABLE 3

Individual Income Tax Expenditures for Capital Gains and Dividends (Excluding Owner-Occupied Housing)

Billions of dollars, fiscal years 2019–22

Item	JCT	OTA
Reduced rates of tax on dividends and long-term capital gains	$518.1	$533.1
Exclusion of capital gains at death	$167.0	$211.6
Deferral of gain on like-kind exchanges	$27.1	$8.0
Carryover basis of capital gains on gifts	$9.0	$11.8
Exclusion of gain from certain small business stock	$6.7	$5.8
Total	**$727.9**	**$770.5**

Source: Joint Committee on Taxation, "Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018; Authors' analysis.

Various tax preferences for capital gains and dividends will cost an estimated $727.9 billion in 2019 to 2022 according to JCT and $770.5 billion according to OTA. The largest item in this category is the preferential rate structure for capital gains and qualified dividends, which are taxed at rates ranging from 0 to 20 percent, compared with individual income tax rates that range from 10 to 37 percent.

Capital gains also benefit from the step up in basis at death, which permanently exempts all unrealized capital gains accrued during an individual's lifetime on assets that are passed on at death, costing $167 billion (per JCT) and $211.6 billion (per OTA) in 2019 to 2022. Deferral of gain on like-kind exchanges allow taxpayers to defer tax on an exchange of investment property, such as selling a rental house in one location to purchase a rental property somewhere else.

Capital gains have been taxed at lower rates than ordinary income throughout most of the history of the income tax, and since 2003, qualified dividends also have been taxed at the same lower rates. Reasons given for the lower tax rates include offsetting taxes already paid at the corporate level, spurring economic growth, encouraging risk taking and entrepreneurship, offsetting the effects of inflation, preventing "lock-in" (the disincentive to sell assets), and mitigating the tax penalty on savings under the income tax. Although some of the suggested economic benefits of lower rates are debatable, lower tax rates on capital gains are the linchpin of many tax shelters that employ sophisticated financial techniques to convert ordinary income (such as wages and salaries) to capital gains. These arrangements can lead to a less efficient allocation of economic resources and thereby undermine economic growth.

Most of the tax benefit from the preferential tax rates for capital gains and dividends accrues to the highest-income taxpayers. TPC estimates that 75 percent of the benefits go to the 1 percent of households with the highest incomes. The tax benefit is 5.9 percent of after-tax income on average for taxpayers in that income group (and 9.3 percent of after-tax income for taxpayers in the top 0.1 percent of the income distribution).

An additional 3.8 percent net investment income tax applies to dividends, capital gains, and other investment income for taxpayers with modified adjusted gross income above certain amounts ($200,000 for single taxpayers and $250,000 for married couples filing a joint return). Because it is a special tax rate that is higher than the normal rate, JCT treats the net investment income tax as a negative tax expenditure and estimates that it will raise an additional $129.8 billion in 2019 to 2022, offsetting some of the cost of the reduced rates on gains and dividends.

TABLE 3b

Tax Benefit of the Preferential Rates on Long-Term Capital Gains and Qualified Dividends

Distribution of tax benefits, by income percentile, calendar year 2018

Expanded Cash Income Percentile	Share of Tax Units (%)		Benefit as Share of After-Tax Income (% points)	Share of Total Benefit (%)	Average Benefit ($)
	With Benefit	Without Benefit			
Lowest quintile	0.7%	99.3%	0.0%	0.1%	*
Second quintile	3.7%	96.3%	0.0%	0.4%	$20
Middle quintile	11.5%	88.5%	0.1%	2.0%	$80
Fourth quintile	22.2%	77.8%	0.2%	4.0%	$200
Top quintile	42.0%	58.0%	2.0%	93.2%	$5,410
All	13.0%	87.0%	1.1%	100.0%	$820
Addendum: Top Quintile					
80-90	29.4%	70.7%	0.2%	3.1%	$350
90-95	43.7%	56.3%	0.4%	3.9%	$910
95-99	64.0%	36.0%	1.0%	11.3%	$3,440
Top 1 percent	82.8%	17.2%	5.9%	75.0%	$93,730
Top 0.1 percent	93.3%	6.7%	9.3%	56.7%	$698,290

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0718-1), October 2018.
Notes: "Expanded Cash Income Percentile" 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; the income percentile classes used are based on the income distribution for the entire population and contain an equal number of people, not tax units.
* Non-zero value rounded to zero.

CHILDREN AND DEPENDENTS

TABLE 4

Individual Income Tax Expenditures for Children and Dependents

Billions of dollars, fiscal years 2019–22

Item	JCT	OTA
Credit for children and other dependents (CTC)	$491.4	$491.8
Credit for child and dependent care (CDCTC) and exclusion of employer-provided child care	$18.6	$21.1
Exclusion of certain foster care payments	$2.1	$2.1
Adoption credit and employee adoption benefits exclusion	$1.2	$2.8
Total	**$513.3**	**$517.8**

Source: Joint Committee on Taxation, "Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018; Authors' analysis.

Various tax preferences for children and dependents will total $513.3 billion in 2019-2022 according to JCT and $517.8 billion according to OTA. The largest item is the credit for children and other dependents (the CTC) with a cost of $491.4 billion (per JCT) and $491.8 billion (per OTA) in 2019 to 2022. The TCJA significantly raised the cost of the CTC. OTA estimated that before enactment of the TCJA, the CTC would have cost $214.1 billion in 2019 to 2022.[3] The new law doubled the CTC to $2,000 per qualifying child, increased the maximum refundable credit amount to $1,400, raised

[3] OTA tax expenditure estimates made prior to enactment of TCJA are from: U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 16, 2017.

the income at which the credit begins to phase out to $400,000 for joint returns ($200,000 for singles), and introduced a new $500 credit for nonchild dependents. At the same time, the TCJA eliminated personal exemptions for taxpayers and dependents. JCT and OTA, perhaps inconsistently, did not count the dependent exemption as a tax expenditure, so the increase in measured tax expenditures for children is much greater than the actual increase in tax benefits for households with children.

The combination of the credit for child and dependent care tax credit and the exclusion for employer provided child care will cost $18.6 billion (per JCT) and $21.1 billion (per OTA) in 2019 to 2022. The child and dependent care tax credit provides a credit worth between 20 and 35 percent of child care costs to working parents for a child under age 13 or any dependent physically or mentally incapable of self-care. Eligible child care expenses are limited to $3,000 per dependent (up to $6,000 for two or more dependents). Higher credit rates apply to families with lower adjusted gross income. The credit is nonrefundable so it can only be used to offset income taxes owed; any excess credit beyond taxes owed is lost.

Employer-provided child and dependent care benefits include amounts paid directly for care, the value of care in a day-care facility provided or sponsored by an employer, and, more commonly, contributions made to a dependent care FSA. Employees can set aside up to $5,000 per year of their salary, regardless of the number of children, in a dependent care FSA to pay child care expenses. The money set aside in an FSA is not subject to income or payroll taxes.

Before the TCJA, the income levels at which the CTC began to phase out were much lower—$110,000 for married couples and $75,000 for singles. By raising those limits, TCJA extended the benefits of the CTC to higher-income taxpayers. About one-quarter of the benefits now go to each of the top three income quintiles. The benefits as a percentage of after-tax income, however, are largest for households in the second income quintile.

TABLE 4b

Tax Benefit of the Child Tax Credit

Distribution of tax benefits, by income percentile, calendar year 2018

Expanded Cash Income Percentile	Share of Tax Units (%)		Benefit as Share of After-Tax Income (% points)	Share of Total Benefit (%)	Average Benefit ($)
	With Benefit	Without Benefit			
Lowest quintile	13.9%	86.1%	1.3%	6.5%	$180
Second quintile	27.9%	72.1%	1.9%	19.0%	$640
Middle quintile	31.7%	68.3%	1.6%	24.5%	$900
Fourth quintile	38.8%	61.2%	1.2%	25.9%	$1,140
Top quintile	43.6%	56.4%	0.5%	23.9%	$1,250
All	28.9%	71.1%	1.0%	100.0%	$740
Addendum: Top Quintile					
80-90	46.5%	53.5%	0.9%	13.8%	$1,390
90-95	48.7%	51.4%	0.6%	6.3%	$1,330
95-99	39.7%	60.3%	0.3%	3.8%	$1,050
Top 1 Percent	0.4%	99.6%	0.0%	0.0%	$10
Top 0.1 Percent	*	**	0.0%	0.0%	*

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0718-1), October 2018.
Notes: "Expanded Cash Income Percentile" 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; the income percentile classes used are based on the income distribution for the entire population and contain an equal number of people, not tax units.
* Non-zero value rounded to zero; ** Insufficient data.

TABLE 5

Individual Income Tax Expenditures for Income Security

Billions of dollars, fiscal years 2019–22

Item	JCT	OTA
Earned income credit (EITC)	**$293.6**	**$299.8**
Additional standard deduction for the blind and the elderly	**$23.5**	**$21.9**
Exclusions	**$63.6**	**$52.6**
Employer premiums on group term life, accident, and disability insurance	$33.5	$13.3
Workers compensation benefits	$30.1	$39.3
Other	**$7.6**	**$5.8**
Total	**$388.3**	**$380.2**

Source: Joint Committee on Taxation, "Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018; Authors'

Income security tax preferences are an estimated $388.3 billion in 2019-2022 according to JCT and $380.2 billion according to OTA. Most of the cost, $293.6 billion (per JCT) and $299.8 billion (per OTA), is from the EITC. The EITC primarily benefits low- and moderate-income working families with children. The maximum credit in 2019 ranges from $6,557 for a family with three qualifying children to $3,526 for a family with one child. A much smaller credit (a maximum of $529) is available to workers between the ages of 25 and 65 with no qualifying children. The credit phases in with earnings and phases out as income rises above a threshold amount. The credit is fully refundable, meaning that if the credit exceeds income tax liability, taxpayers receive the excess credit as a payment from the Internal Revenue Service. Most of the credit's budgetary cost comes from the portion that exceeds income tax liability.

In addition to the EITC, the income security category includes the additional standard deduction available to taxpayers who are blind or age 65 and over, costing $23.5 billion (according to JCT) and $21.9 billion (according to OTA), and exclusions for various employment-related benefits, costing a combined $63.6 billion (per JCT) and $52.6 billion (per OTA).

Because the EITC is designed to help low-income working families and singles, most of the benefits (88 percent) go to households in the two lowest income quintiles. Although only about one-quarter of all households in the lowest two income quintiles receive the EITC, TPC estimates that about 80 percent of households with children in those income quintiles benefits from the EITC.

In addition to boosting income of low-income working families, and especially families with children, research has demonstrated that the EITC encourages single people and primary earners in married couples to enter the labor force. Although the EITC phase-out could cause workers to reduce their hours (because credits are lost for each additional dollar of earnings in the credit phase-out range), there is little empirical evidence of this happening. There is some evidence to suggest that the EITC may decrease labor force participation by lower-earning spouses in married couples. On balance, though, the increase in participation by singles and primary earners resulting from the EITC dwarfs the decline in participation among secondary earners.

TABLE 5b

Tax Benefit of the Earned Income Tax Credit

Distribution of tax benefits, by income percentile, calendar year 2018

Expanded Cash Income Percentile	Share of Tax Units (%)		Benefit as Share of After-Tax Income (% points)	Share of Total Benefit (%)	Average Benefit ($)
	With benefit	Without benefit			
Lowest quintile	28.6%	71.4%	4.6%	43.6%	$630
Second quintile	25.3%	74.7%	2.3%	44.5%	$760
Middle quintile	12.2%	87.9%	0.4%	11.2%	$210
Fourth quintile	0.4%	99.6%	0.0%	0.3%	$10
Top quintile	*	**	0.0%	0.0%	*
All	15.7%	84.3%	0.5%	100.0%	$380

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0718-1), October 2018.
Notes: "Expanded Cash Income Percentile" 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; the income percentile classes used are based on the income distribution for the entire population and contain an equal number of people, not tax units.
* Non-zero value rounded to zero; ** Insufficient data.

OWNER-OCCUPIED HOUSING

TABLE 6

Individual Income Tax Expenditures for Owner-Occupied Housing

Billions of dollars, fiscal years 2019–22

Item	JCT	OTA
Exclusion of capital gains on sales of principal residences	$151.8	$126.1
Deduction for mortgage interest on owner-occupied residences	$129.4	$191.5
Total	**$281.2**	**$317.6**

Source: Joint Committee on Taxation, "Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018; Authors' analysis.

Tax preferences for owner-occupied housing totaled $281.2 billion in 2019 to 2022 according to JCT and $317.6 billion according to OTA. The largest tax expenditure for owner-occupied housing according to JCT is the exclusion of the first $250,000 of gains ($500,000 for joint filers) on sales of a principal residence, with a cost of $151.8 billion (per JCT) and $126.1 billion (per OTA). Homeowners also benefit from the home mortgage interest deduction, costing $129.4 billion (per JCT) and $191.5 billion (per OTA), and the deduction for state and local property taxes. OTA estimates that the state and local property tax deduction will cost $27.5 billion in 2019 to 2022 but notes that because of the interaction with the $10,000 cap on total state and local tax deductions, the sum of the separate estimates for the cost of the deduction for state and local taxes other than property taxes ($28.6 billion) and the property tax deduction will understate the combined effect of eliminating both deductions ($87.3 billion). JCT no longer reports a separate tax expenditure estimate for the property tax deduction.

A major tax benefit for homeowners is that they do not pay tax on the imputed rental income from their own homes. They do not have to count the rental value of their homes as taxable income, even though that value is a return on investment akin to stock dividends or interest on a savings account. OTA considers the exclusion of imputed rental income of homeowners (net of deductions for interest, depreciation, and other costs of homeownership) as a tax expenditure with an estimated cost of $510.7 billion in 2019 to 2022. JCT regards the exclusion of imputed rent as an administrative necessity and does not classify that provision as a tax expenditure.

Before enactment of the TCJA, OTA estimated that the revenue loss from the home mortgage interest deduction would be $341.7 billion in 2019 to 2022. The TCJA substantially reduced the benefit of the mortgage interest deduction by raising the standard deduction and setting a $10,000 limit on state and local income and property tax deductions, with the result that many fewer taxpayers will claim itemized deductions, and many of those who do claim them will receive much smaller benefits than before.

The TCJA also made changes to the mortgage interest deduction itself. Before the TCJA, the deduction was limited to interest paid on up to $1 million of debt incurred to purchase or substantially rehabilitate a home. Homeowners also could deduct interest paid on up to $100,000 of home equity debt regardless of how they used the borrowed funds. The TCJA limited the deduction to interest on up to $750,000 of mortgage debt incurred after December 14, 2017, to buy or improve a first or second home. It also generally eliminated the deduction for home equity debt unless it is used to buy, build, or substantially improve the taxpayer's home that secures the loan.

Because many fewer taxpayers will itemize their deductions, and those that do are mostly higher-income taxpayers with higher mortgage interest costs, the remaining benefit from the mortgage interest deduction mostly goes to high-income households. TPC estimates that almost 80 percent of the benefit will go to household in the top income quintile. Before the TCJA, 73 percent of the tax benefit went to those households.

TABLE 6b

Tax Benefit of the Itemized Deduction for Home Mortgage Interest

Distribution of tax benefits, by income percentile, calendar year 2018

Expanded Cash Income Percentile	Share of Tax Units (%)		Benefit as Share of After-Tax Income (% points)	Share of Total Benefit (%)	Average Benefit ($)
	With benefit	Without benefit			
Lowest quintile	0.1%	99.9%	0.0%	0.1%	$0
Second quintile	1.4%	98.6%	0.0%	0.7%	$10
Middle quintile	4.7%	95.3%	0.1%	4.3%	$40
Fourth quintile	12.9%	87.1%	0.2%	15.6%	$160
Top quintile	33.6%	66.4%	0.4%	79.3%	$960
All	8.2%	91.8%	0.2%	100.0%	$170
Addendum: top quintile					
80–90	23.8%	76.2%	0.3%	17.1%	$400
90–95	35.2%	64.8%	0.4%	15.8%	$770
95–99	50.9%	49.1%	0.5%	29.7%	$1,890
Top 1 percent	62.3%	37.7%	0.3%	16.7%	$4,370
Top 0.1 percent	55.8%	44.2%	0.1%	1.8%	$4,710

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0718-1), October 2018.
Notes: "Expanded Cash Income Percentile" 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; the income percentile classes used are based on the income distribution for the entire population and contain an equal number of people, not tax units.

Homeowners claiming itemized deductions may deduct both mortgage interest and property tax payments (subject to the $10,000 cap on the total state and local tax, or SALT, deduction) from their federal income tax. JCT and OTA treat these provisions as tax expenditures because the asset to which they apply (a home) does not generate taxable income, so deducting the cost is a subsidy. In contrast, deducting interest and taxes is necessary to measure net income correctly for individuals holding business assets that generate taxable receipts.

Current tax expenditures for owner-occupied housing probably do little to increase homeownership. The US homeownership rate is lower than that in many other developed countries that have no such subsidies, such as Australia, Canada, and the United Kingdom. The bulk of US subsidies go to middle- and upper-income households that likely would own their homes anyway; thus, these subsidies simply facilitate the acquisition of larger houses, second homes, and more mortgage debt. In addition, evidence suggests that the tax subsidies raise housing costs, thus raising the cost of home ownership for the approximately 90 percent of households who do not itemize deductions and thus cannot claim deductions for mortgage interest or property taxes.

STATE AND LOCAL GOVERNMENTS

TABLE 7

Individual Income Tax Expenditures for State and Local Governments

Billions of dollars, fiscal years 2019–22

Item	JCT	OTA
Exclusion of interest on public purpose state and local government bonds	$97.5	$95.9
Build America bonds	$3.6	$14.4
Deduction of nonbusiness state and local government taxes	$94.7	$87.3
Total	**$195.8**	**$197.7**

Source: Joint Committee on Taxation, "Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018; Authors' analysis.

The federal government provides indirect support to state and local governments through provisions in the tax code that subsidize borrowing by those governments and provisions that partially offset the cost of state and local taxes to taxpayers in those jurisdictions. Those tax subsidies will cost an estimated $195.8 billion in 2019 to 2022 according to JCT and $197.7 billion according to OTA.

The federal income tax exempts interest payments received from municipal bonds. State and local governments also typically exempt interest on bonds issued by taxpayers' state of residence but tax interest on bonds issued by other jurisdictions.

Because of the federal tax exemption, state and local governments can borrow more cheaply than other debt issuers, such as corporations, for a given level of risk and maturity. The federal tax exemption therefore functions as a federal subsidy to state and local borrowing for public infrastructure investment and other purposes. This subsidy comes at a cost in forgone tax revenues, estimated at $97.5 billion (per JCT) and $95.9 billion (per OTA) in 2019 to 2022.

The federal tax exemption is not as efficient as it might be because high-bracket taxpayers receive more than the inducement needed to purchase municipal bonds. For example, if a high-grade taxable municipal bond yielded 6 percent and the yield for a comparable tax-exempt bond was 4.5 percent, taxpayers whose federal tax rate was 25 percent should be just indifferent between the two types of bonds because the bonds would have the same after-tax yield. Anyone in a higher tax bracket would receive a windfall that generates no additional benefit for the borrower.

Build America Bonds were introduced in 2009 as taxable bonds that offered either a tax credit to the borrower or a direct payment to the lender is lieu of a tax exemption, but they failed to generate a sizeable market and were discontinued at the end of 2010.

Taxpayers who itemize deductions on their federal income tax returns can deduct state and local real estate and personal property taxes, as well as either income taxes or general sales taxes. The cost of the SALT deduction will reach an estimated $94.7 billion (per JCT) and $87.3 billion (per OTA) in 2019 to 2022.

The SALT deduction had been one of the largest federal tax expenditures, with an estimated revenue cost (prior to TCJA) of $525.2 billion in 2019 to 2022 according to OTA. The estimated revenue cost dropped significantly because the TCJA nearly doubled the standard deduction amounts (thereby reducing the number of taxpayers who will itemize deductions and claim the SALT deduction) and capped the total annual SALT deduction at $10,000.

Most of the benefit (75 percent) from the SALT deduction goes to taxpayers in the highest income quintile. But with many fewer taxpayers claiming the deduction and the $10,000 cap, the average tax benefit within that income group will be only about 0.2 percent of after-tax income.

TABLE 7b

Tax Benefit of the Itemized Deduction for State and Local Taxes

Distribution of tax benefits, by income percentile, calendar year 2018

Expanded Cash Income Percentile	Share of Tax Units (%)		Benefit as Share of After-Tax Income (% points)	Share of Total Benefit (%)	Average Benefit ($)
	With benefit	Without benefit			
Lowest quintile	0.2%	99.8%	0.0%	0.0%	$0
Second quintile	2.1%	97.9%	0.0%	1.0%	$10
Middle quintile	6.3%	93.7%	0.1%	5.2%	$30
Fourth quintile	15.5%	84.5%	0.1%	18.6%	$140
Top quintile	38.1%	61.9%	0.2%	75.2%	$650
All	9.8%	90.3%	0.2%	100.0%	$120
Addendum: top quintile					
80–90	26.9%	73.1%	0.2%	19.6%	$330
90–95	39.4%	60.6%	0.3%	17.1%	$600
95–99	56.5%	43.5%	0.3%	26.1%	$1,190
Top 1 percent	79.0%	21.0%	0.2%	12.4%	$2,320
Top 0.1 percent	88.7%	11.3%	0.0%	1.4%	$2,630

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0718-1), October 2018.
Notes: "Expanded Cash Income Percentile" 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; the income percentile classes used are based on the income distribution for the entire population and contain an equal number of people, not tax units.

Even though the SALT deduction mostly benefits high-income taxpayers, the story is more complicated when considering the impact of the deduction on state budgets. Many states rely heavily on the taxes paid by high-income residents to fund state programs that largely benefit low- and middle-income households. Without the tax subsidy from the SALT deduction, high-income residents may be more likely to oppose those taxes and thereby jeopardize political support for that spending.

TABLE 8

Individual Income Tax Expenditures for Charitable Contributions

Billions of dollars, fiscal years 2019–22

Item	JCT	OTA
Deduction for charitable contributions other than for education and health	$128.1	$159.6
Deduction for charitable contributions to educational institutions	$30.4	$16.0
Deduction for charitable contributions to health organizations	$13.5	$17.8
Total	**$172.0**	**$193.4**

Source: Joint Committee on Taxation, "Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018; Authors' analysis.

The tax expenditure for deductions of charitable contributions is estimated to cost $172 billion in 2019 to 2022 according to JCT and $193.4 billion according to OTA. While many nonprofit institutions are exempt from paying federal income tax, taxpayers may only deduct donations to organizations set up under Internal Revenue Code section 501(c)(3) on their income tax returns. Donations to other nonprofits are made from income after taxes. Individuals may deduct cash and certain other contributions of up to 60 percent of adjusted gross income but may carry forward any excess for deduction on future tax returns for up to five years. The limit was 50 percent of adjusted gross income prior to the TCJA.

Only taxpayers who itemize may take the charitable deduction. Most taxpayers instead claim a standard deduction, which generally is larger than their potential itemized deductions but does not provide a tax incentive to make charitable contributions. The TCJA nearly doubled the standard deduction amounts, which will greatly reduce the number of taxpayers who itemize and thus the number who have a tax incentive to make charitable contributions.

The charitable deduction subsidizes donors by lowering the net cost of the gift. Just how much the tax deductibility lowers the cost of giving depends on the donor's marginal tax rate. For instance, it costs a donor in the 32 percent tax bracket only 68 cents of after-tax income for every dollar donated to a qualifying charity, while the cost per dollar donated is 85 cents for a taxpayer in the 15 percent bracket. By lowering tax rates, though only modestly for individuals, the TCJA increased the net cost of giving. But more significantly, the TCJA increased the standard deduction, reducing the number of taxpayers who itemize and raising the cost of charitable giving to 100 cents per dollar for those who no longer itemize.

TABLE 8b

Tax Benefit of the Itemized Deduction for Charitable Contributions

Distribution of tax benefits, by income percentile, calendar year 2018

Expanded Cash Income Percentile	Share of Tax Units (%)		Benefit as Share of After-Tax Income (% points)	Share of Total Benefit (%)	Average Benefit ($)
	With benefit	Without benefit			
Lowest quintile	0.1%	99.9%	0.0%	0.0%	$0
Second quintile	1.4%	98.6%	0.0%	0.3%	*
Middle quintile	4.9%	95.1%	0.0%	1.6%	$20
Fourth quintile	13.3%	86.7%	0.1%	6.5%	$90
Top quintile	35.4%	64.6%	0.6%	91.5%	$1,490
All	8.5%	91.5%	0.3%	100.0%	$230
Addendum: top quintile					
80–90	24.1%	75.9%	0.2%	8.0%	$250
90–95	36.4%	63.6%	0.3%	8.5%	$560
95–99	54.2%	45.8%	0.5%	18.6%	$1,590
Top 1 percent	78.2%	21.8%	1.3%	56.4%	$19,810
Top 0.1 percent	88.9%	11.1%	1.6%	35.0%	$121,070

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0718-1), October 2018.
Notes: "Expanded Cash Income Percentile" 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; the income percentile classes used are based on the income distribution for the entire population and contain an equal number of people, not tax units.
* Non-zero value rounded to zero.

Higher-income individuals generally save more taxes by giving to charity than those with lower incomes both because they have higher marginal tax rates and because they are more likely to itemize deductions and take advantage of the tax savings. TPC estimates that over 90 percent of the tax benefit from the deduction for charitable contributions will go to taxpayers in the highest income quintile, with 56 percent of the benefits going to households in the top 1 percent of the income scale. Prior to the TCJA, 83 percent of the tax benefits went to taxpayers in the highest income quintile, with 38 percent going to the top 1 percent.

Charitable contributions are intended for the benefit of those supported by the charitable activity, such as through education, health care, or direct economic support. Donors choose the charitable activities to which they make contributions. Thus, because part of the cost of donations is borne by the government through reduced revenue, donors effectively have a direct say about the activities to which the government provides financial support.

TABLE 9

Individual Income Tax Expenditures for Social Security

Billions of dollars, fiscal years 2019–22

Item	JCT	OTA
Exclusion of untaxed Social Security and railroad retirement benefits	$162.1	$127.3

Source: Joint Committee on Taxation, "Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018; Authors' analysis.

The exclusion of untaxed Social Security and railroad benefits is estimated to cost $162.1 billion in 2019 to 2022 according to JCT and $127.3 billion according to OTA. Social Security benefits are partially or fully excluded from adjusted gross income for taxpayers whose incomes fall below threshold amounts. If a Social Security recipient's income (including tax-exempt interest and one-half of Social Security benefits received) exceeds $25,000 (for a single taxpayer) or $32,000 (for a married couple filing a joint return), up to 50 percent of the benefits are taxable. If income exceeds $34,000 (single) of $44,000 (married) up to 85 percent of the benefits are taxable. About 70 percent of Social Security benefits are not taxable.

Because households affected by the exclusion of Social Security benefits are more prevalent among middle- and lower-income groups (but not the lowest whose income is below the taxpaying threshold) and because the portion of benefits that are taxable rises with income, over 80 percent of the tax benefit from the exclusion goes to households in the second and middle income quintiles.

TABLE 9b

Tax Benefit of the Partial Exclusion of Social Security Benefits

Distribution of tax benefits, by income percentile, calendar year 2018

Expanded Cash Income Percentile	Share of Tax Units (%)		Benefit as Share of After-Tax Income (% points)	Share of Total Benefit (%)	Average Benefit ($)
	With benefit	Without benefit			
Lowest quintile	9.2%	90.8%	0.2%	6.1%	$30
Second quintile	23.2%	76.9%	0.7%	38.1%	$240
Middle quintile	20.0%	80.0%	0.5%	43.3%	$300
Fourth quintile	7.0%	93.0%	0.1%	11.8%	$100
Top quintile	0.4%	99.6%	0.0%	0.6%	$10
All	12.8%	87.2%	0.2%	100.0%	$140

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0718-1), October 2018.
Notes: "Expanded Cash Income Percentile" 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; the income percentile classes used are based on the income distribution for the entire population and contain an equal number of people, not tax units.

If Social Security benefits were taxed in the same way as benefits from defined-benefit pension plans, the entire benefit of each beneficiary would be taxed except for the portion attributable to past employee payroll tax contributions made by that person that were previously included in taxable income. Employee contributions generally do not account for more than 15 percent of benefits, even for those receiving the highest benefits, so taxing up to 85 percent of benefits under current law approximates this rule. Taxing a smaller percentage of benefits or not taxing them at all for beneficiaries with income below certain thresholds provides further income support for lower- and middle-income retirees who would pay some or additional income tax if 85 percent of their Social Security benefits were taxable.

TABLE 10

Individual Income Tax Expenditures for Education

Billions of dollars, fiscal years 2019–22

Item	JCT	OTA
Tax Credits	**$79.7**	**$85.2**
Credits for tuition for post-secondary education	$76.5	$80.4
Tax credit bonds for school rehabilitation and repair programs	$3.2	$4.9
Exclusions from taxable income	**$41.4**	**$35.3**
Scholarship and fellowship income	$14.0	$12.2
Earnings of qualified education savings programs	$5.8	$10.2
Employer-provide education assistance and tuition reduction	$7.0	$3.9
Earnings of Coverdell education savings accounts	$0.4	$0.2
Income attributable to the discharge of certain student loan debt	$0.8	$0.4
Interest on private activity bonds for educational facilities and student loans	$13.4	$8.6
Deductions	**$10.3**	**$8.9**
Interest on student loans	$9.5	$8.2
Teacher classroom expenses	$0.8	$0.8
Total	**$131.4**	**$129.5**

Source: Joint Committee on Taxation, "Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022", JCX-81-18, October 2018; U.S. Department of the Treasury, Office of Tax Analysis, "Tax Expenditures", October 19, 2018; Authors' analysis.

Tax incentives for education are estimated to cost $131.4 billion in 2019 to 2022 according to JCT and $129.5 billion according to OTA. The largest item is tax credits for postsecondary education, consisting of two credits: the American opportunity tax credit (AOTC) and the lifetime learning credit (LLC).

The AOTC provides a credit up to $2,500 per student during the first four years of undergraduate postsecondary school. Up to $1,000 of the AOTC is refundable; to qualify for the credit, students must be enrolled at least half time for one or more academic periods during the year. The maximum benefit for the AOTC begins to phase out when modified adjusted gross income reaches $80,000 ($160,000 for married couples) and is completely phased out at modified adjusted gross income of $90,000 ($180,000 for married couples). Neither the credit amount nor the phase-out thresholds are indexed for inflation.

The LLC equals 20 percent of tuition and fees for any postsecondary education expense, up to a maximum annual credit of $2,000 per taxpayer. That maximum applies to the combined expenses of all students in the household claiming the credit and is reached when total qualifying expenses equal $10,000. The maximum benefit for the LLC phases out for modified adjusted gross income between $57,000 and $67,000 in 2018 (and between $114,000 and $134,000 for married couples). The phase-out thresholds for the lifetime learning credit are adjusted annually for inflation. The LLC is nonrefundable, so only people who owe income tax can benefit.

The student loan interest deduction will cost an estimated $9.5 billion (per JCT) and $8.2 billion (per OTA) in 2019 to 2022. Taxpayers with qualified student loans (loans taken out solely to pay qualified higher-education expenses) can deduct $2,500 or the interest paid during the year, whichever is less, from their taxable income. Qualified expenses include tuition and fees; room and board; books, supplies and equipment; and other necessary expenses such as transportation. To qualify for a student loan interest deduction in 2019, a taxpayer's AGI may not exceed $85,000 for single, head of household, or qualifying widower filers, or $170,000 for married filers.

Almost all states have some form of college savings plan and/or prepaid tuition plan ("529 plans"). Anyone, regardless of income, may contribute to a 529 plan for a designated beneficiary. Contributions are not tax deductible (though some states allow a deduction against state income taxes), but investment income in 529 plans accumulates tax free. Funds are not taxed when withdrawn from 529 plans if they are used to pay qualified expenses for postsecondary education (tuition, room and board, books and supplies, and technology). The TCJA expanded the qualified uses for tax- and penalty-free withdrawals from 529 plans to also cover K–12 elementary and secondary school tuition for public, private, and religious schools.

In addition to the benefits discussed above, tax benefits for education include exclusion from taxable income of scholarships, grants, and tuition reductions, costing $14.0 billion (per JCT) and $12.2 billion (per OTA) in 2019-2022; exclusion of employer-provided educational assistance costing $7.0 billion (per JCT) and $3.9 billion (per OTA); and a small deduction (up to $250 per year) for teacher paid classroom expenses costing $0.8 billion (according to both JCT and OTA). Most of the tax benefits from education credits and the deduction for student loan interest go to households in the three middle income quintiles.

TABLE 10b

Tax Benefit of the Education Credits and Student Loan Interest Deduction

Distribution of tax benefits, by income percentile, calendar year 2018

Expanded Cash Income Percentile	Share of Tax Units (%)		Benefit as Share of After-Tax Income (% points)	Share of Total Benefit (%)	Average Benefit ($)
	With benefit	Without benefit			
Lowest quintile	7.6%	92.4%	0.4%	13.2%	$60
Second quintile	11.3%	88.7%	0.3%	20.2%	$110
Middle quintile	14.7%	85.3%	0.3%	24.1%	$150
Fourth quintile	16.4%	83.6%	0.2%	28.3%	$200
Top quintile	9.6%	90.4%	0.1%	14.2%	$120
All	11.6%	88.4%	0.2%	100.0%	$120
Addendum: Top Quintile					
80–90	17.8%	82.2%	0.2%	13.6%	$230
90–95	1.5%	98.5%	0.0%	0.5%	$20
95–99	0.2%	99.9%	0.0%	0.1%	*
Top 1 percent	0.0%	100.0%	0.0%	0.0%	$0
Top 0.1 percent	0.0%	100.0%	0.0%	0.0%	$0

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0718-1), October 2018.
Notes: "Expanded Cash Income Percentile" 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; the income percentile classes used are based on the income distribution for the entire population and contain an equal number of people, not tax units.
* Non-zero value rounded to zero.

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