TAX POLICY CENTER
URBAN INSTITUTE & BROOKINGS INSTITUTION

AN ANALYSIS OF FORMER VICE PRESIDENT BIDEN'S TAX PROPOSALS

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In this brief, we estimate the revenue and distributional effects of former vice president Joe Biden's 2020 campaign tax proposals. Biden's spending proposals would also have important distributional and economic effects, but we have not estimated the distributional effects of those initiatives. Our modeling assumptions are based on information released by the Biden campaign and conversations with its staff; we detail these assumptions in appendix B. We analyze Biden's proposals as of February 23, 2020.

Biden would increase income and payroll taxes on high-income individuals and increase income taxes on corporations. He would increase federal revenues by $4.0 trillion over the next decade. Under his plan, the highest-income households would see substantially larger tax increases than households in other income groups, both in dollar amounts and as a share of their incomes.

MAJOR ELEMENTS OF THE PROPOSALS

Former vice president Joe Biden has proposed an increase in the income and payroll taxes of high-income individuals and higher income taxes on corporations. His plan would also reduce tax subsidies for commercial real estate and fossil fuels; provide additional tax subsidies for investments in renewable energy, energy efficiency, and electric vehicles; and restructure tax incentives for retirement saving. Key elements of the plan are as follows.

Individual Income and Payroll Taxes

High-income taxpayers would face increased income and payroll taxes. Biden's plan would roll back income tax reductions from the Tax Cuts and Jobs Act of 2017 (TCJA) for taxpayers with incomes above $400,000. It would also limit the value of itemized deductions for taxpayers in income tax brackets above 28 percent. His plan would tax capital gains and dividends at the same rate as ordinary income for taxpayers with incomes above $1 million and tax unrealized capital gains at death. Biden also would subject earnings over $400,000 to the Social Security payroll tax.

Business Taxes

Biden's plan would increase the top corporate income tax rate from 21 percent to 28 percent and impose a 15 percent minimum tax on companies' book income. The plan also would double the existing minimum tax on profits earned by foreign subsidiaries of US firms, raising it from 10.5 to 21 percent.

Tax Expenditures

Biden's plan would reduce tax expenditures for investments in fossil-fuel production and commercial real estate. It would also provide additional tax credits for investments in electric vehicles, renewable energy, and energy-efficient technologies as well as tax benefits for family caregiving, student loans, and childless workers age 65 and older. His plan would make tax incentives for retirement saving more progressive by replacing the deduction for traditional individual retirement account (IRA) and defined-contribution pension plan contributions with a refundable tax credit as well as by automatically enrolling most workers without pensions in IRAs.

Policy Provisions Outside the Scope of This Brief

Biden's spending proposals would have important distributional and economic effects. Those proposals include changes to Social Security benefits, federal financial aid for postsecondary students, and housing assistance as well as creating a public insurance option for Affordable Care Act Marketplaces. However, we do not estimate the costs or the distributional effects of those plans. Appendix B provides a detailed description of Biden's tax plan and our assumptions.

REVENUE EFFECTS

We estimate Biden's tax proposals (assumed to take effect January 1, 2021) would increase federal revenues relative to current law by about $4.0 trillion between 2021 and 2030, or 1.5 percent of gross domestic product over that period (table 1).[1] About half of the revenue gain would come from higher taxes on high-income households, and about half would come from higher taxes on businesses, especially corporations. Increasing the corporate tax rate to 28 percent would account for about one-third of the additional revenue (table A1). Applying Social Security taxes to earnings above $400,000 would account for about another quarter. Increased taxes on capital gains and dividends would account for another 11 percent of the revenue gain, and repealing the TCJA tax cuts for taxpayers with incomes above $400,000 would raise a similar amount of revenue over that 10-year budget window. The additional revenue would be partially offset over the period by more than $270 billion in tax credits and income exclusions for family caregiving, retirement saving, student loan forgiveness, energy efficiency, renewable energy, and electric cars.

The revenue gain generally grows throughout the 10-year period except in 2026, when it declines by $65 billion, and in 2027, when it declines by $10 billion. This is because certain provisions of the TCJA are set to expire or change. The TCJA's individual income tax cuts expire at end of calendar year 2025, so Biden's proposal to repeal them for high-income taxpayers raises less revenue in fiscal year 2026 and no additional revenue in later years.[2] Similarly, the minimum

[1] Our revenue estimates incorporate microdynamic behavioral responses. We assume the elasticity of taxable income with respect to the net of tax rate (ETI) rises with income and equals 0.25 for those in the top 0.1 percent of the income distribution. Because the TCJA expanded the individual income tax base, we reduce our elasticities by one-fifth for 2021-2025. Under current law, we assume the elasticity of long-term capital gains realizations rises with the tax rate and equals -0.7 at a tax rate of 20 percent. Because the Biden plan taxes unrealized capital gains at death, which reduces the incentive to defer realizations of gains, we use a lower elasticity that equals -0.4 at a 20 percent rate.

[2] The proposal still raises revenue in fiscal year 2026 because some revenues coming into the Treasury reflect tax liabilities from calendar year 2025.

tax on profits earned by foreign subsidiaries of US firms is scheduled to increase from 10.5 to 13.125 percent in 2026, so Biden's proposal to increase it to 21 percent raises less revenue from that year onward.

TABLE 1

Estimated Effects of Biden's Tax Plan on Tax Revenues

Fiscal years 2021 to 2040, billions of dollars

	Fiscal Year											
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2021-30	2031-40
Individual income and payroll taxes	99.9	175.3	200.0	214.9	227.6	193.7	181.1	193.2	205.5	218.9	1,910.2	3,034.0
Business taxes	99.8	188.2	214.3	227.8	239.9	208.5	212.2	218.8	230.7	244.0	2,084.1	3,175.4
Estate and gift or wealth taxes	-	-	-	-	-	-	-	-	-	-	-	-
Consumption taxes	-	-	-	-	-	-	-	-	-	-	-	-
Total revenue effect of all provisions	**199.7**	**363.5**	**414.3**	**442.7**	**467.4**	**402.2**	**393.3**	**412.0**	**436.3**	**462.8**	**3,994.2**	**6,209.4**
As a percentage of gross domestic product	**0.9**	**1.5**	**1.7**	**1.7**	**1.8**	**1.5**	**1.4**	**1.4**	**1.4**	**1.4**	**1.5**	**1.6**

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2) and TPC estimates.
Notes: Baseline is current law. Proposal includes all assumptions detailed in the appendix.

Biden's plan would continue to raise revenue over the longer run. His plan increases federal revenues by 1.6 percent of gross domestic product between 2031 and 2040, about the same increase as over the first 10 years.

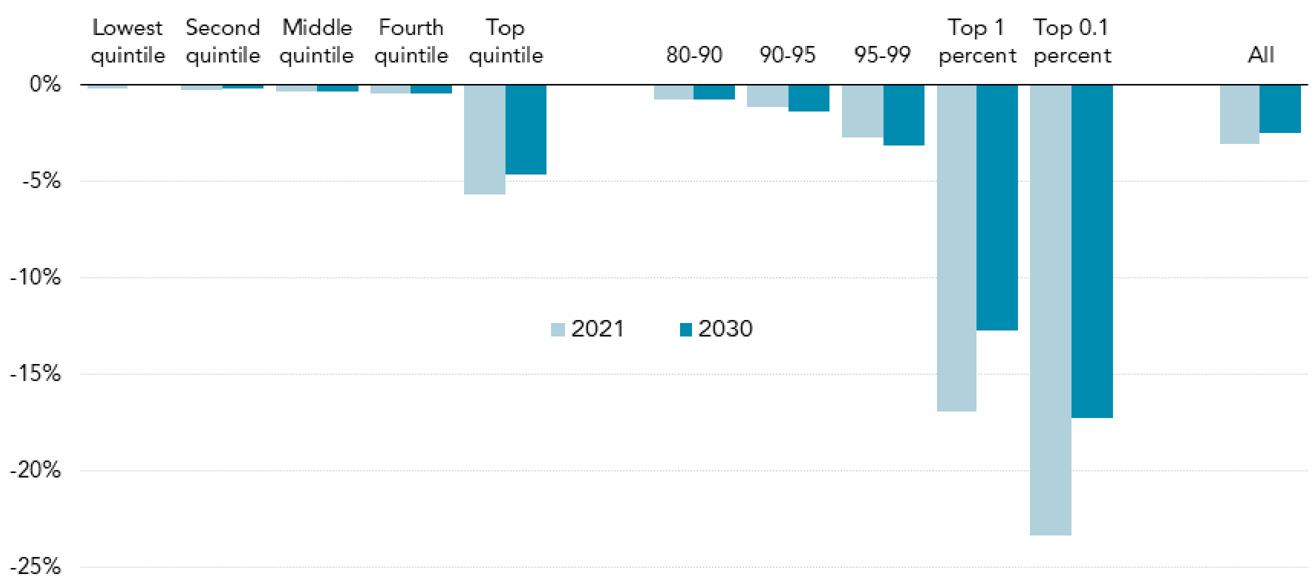
DISTRIBUTIONAL EFFECTS

Biden's proposals would have different effects on the distribution of tax burdens in different years, so we present results for the 2021 and 2030 tax changes (figure 1).

FIGURE 1

Percent Change in After-tax Income under Biden's Tax Plan

By expanded cash income percentile, 2021 and 2030



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).
Note: Baseline is current law.

In 2021, the proposals would increase taxes on average on all income groups, but the highest-income households would see substantially larger increases, both in dollar amounts and as a share of their incomes (table 2). His plan would raise taxes on households in the top 1 percent of the income distribution (those with income more than $837,000) by an average of about $299,000, or 17.0 percent of after-tax income. By contrast, taxpayers in the middle-income quintile (those with income between about $52,000 and $93,000) would experience an average tax increase of just $260, or 0.4 percent of after-tax income. Taxpayers in the bottom quintile (those with income less than $26,000) would see an average tax increase of only $30, or 0.2 percent of after-tax income. In total, almost 93 percent of the tax increases would be borne by taxpayers in the top quintile of the income distribution.

TABLE 2

Distribution of Federal Tax Change under Biden's Tax Plan

By expanded cash income percentile, 2021

Expanded cash income percentile[a]	Percent change in after-tax income[b]	Share of total federal tax change (%)	Average federal tax change ($)	Average federal tax rate[c]	
				Change (% points)	Under the proposal (%)
Lowest quintile	-0.2	0.3	30	0.2	3.4
Second quintile	-0.3	0.9	110	0.3	8.2
Middle quintile	-0.4	2.0	260	0.4	13.5
Fourth quintile	-0.5	3.7	590	0.5	17.3
Top quintile	-5.7	92.6	17,480	4.4	28.4
All	-3.1	100.0	2,660	2.5	21.4
Addendum					
80–90	-0.8	3.8	1,390	0.7	20.6
90–95	-1.2	3.8	2,920	1.0	22.5
95–99	-2.8	11.0	10,860	2.1	25.8
Top 1 percent	-17.0	74.0	299,340	12.0	41.7
Top 0.1 percent	-23.4	46.3	1,830,770	16.3	46.7

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Notes: Estimates are for calendar year. Baseline is current law. Proposal includes all assumptions detailed in the appendix. Number of alternative minimum tax taxpayers is 0.2 million under baseline and 0.1 million under proposal.

(a) Percentiles include both filing and nonfiling units but exclude 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 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 (in 2019 dollars) are 20%: $26,200; 40%: $52,000; 60%: $93,300; 80%: $169,500; 90%: $247,700; 95%: $352,800; 99%: $837,400; 99.9%: $3,665,700. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm.

(b) 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.

(c) Average federal tax (including 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.

Nearly all of the increase in tax burden for the bottom four income quintiles would be because of the indirect effects of increased corporate income taxes. Our model assumes that in the long run 60 percent of the corporate income tax is borne by shareholders, 20 percent is borne by capital owners, and 20 percent is borne by labor.[3] The Joint Committee on Taxation, Congressional Budget Office, and Treasury make similar assumptions. For low- and middle-income households, the reduction in wages and investment income would, on average, more than offset the effects of Biden's new tax credits.

[3] For further discussion, see Nunns (2012).

The distribution of tax changes in 2030 is similar to the distribution in 2021 except the average tax increase as a share of after-tax income is smaller, because certain TCJA provisions expire or change starting in 2026 (figure 1). In 2030, Biden's plan would raise taxes for households in the top 1 percent of the income distribution by an average of about $295,000, or 12.8 percent of after-tax income. By contrast, taxpayers in the middle income quintile would see an average tax increase of about $330, or 0.4 percent of after-tax income. Taxpayers in the bottom quintile would see an average tax increase of just $20, or 0.1 percent of after-tax income.

TABLE 3

Distribution of Federal Tax Change under Biden Tax Plan

By expanded cash income percentile, 2030

Expanded cash income percentile[a]	Percent change in after-tax income[b]	Share of total federal tax change (%)	Average federal tax change ($)	Average federal tax rate[c]	
				Change (% points)	Under the proposal (%)
Lowest quintile	-0.1	0.2	20	0.1	3.9
Second quintile	-0.2	0.9	120	0.2	9.4
Middle quintile	-0.4	2.4	330	0.3	15.0
Fourth quintile	-0.5	4.2	700	0.4	18.7
Top quintile	-4.7	91.9	18,620	3.5	29.2
All	-2.5	100.0	2,880	2.0	22.3
Addendum					
80–90	-0.8	4.5	1,760	0.6	21.8
90–95	-1.4	5.2	4,290	1.1	23.8
95–99	-3.2	15.6	16,780	2.4	28.9
Top 1 percent	-12.8	66.6	295,240	8.8	40.1
Top 0.1 percent	-17.3	41.0	1,773,670	11.8	43.4

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Notes: Estimates are for calendar year. Baseline is current law. Proposal includes all assumptions detailed in the appendix. Number of alternative minimum tax taxpayers is 7.6 million under baseline and 7.9 million under proposal.

(a) Percentiles include both filing and nonfiling units but exclude 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 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 (in 2019 dollars) are 20%: $30,200; 40%: $59,200; 60%: $103,500; 80%: $183,200; 90%: $264,000; 95%: $382,500; 99%: $915,400; 99.9%: $4,199,600. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm.

(b) 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.

(c) Average federal tax (including 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.

APPENDIX A. DETAILED REVENUE ESTIMATES

TABLE A1

Estimated Effect of Biden Tax Plan on Tax Revenues

Fiscal years 2021 to 2040, billions of dollars

Provision	Fiscal Year											
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2021-30	2031-40
Individual Income and Payroll Taxes												
Restore pre-TCJA rates above $400,000 of income	17.4	26.3	28.2	30.1	31.7	9.6	0.0	0.0	0.0	0.0	143.4	0.0
Restore limitation on itemized deductions above $400,000 of income	7.6	13.1	13.7	14.4	15.0	6.1	0.0	0.0	0.0	0.0	69.9	0.0
Phase out qualified business income deduction above $400,000 of income	23.8	39.0	42.6	46.5	49.2	17.5	0.0	0.0	0.0	0.0	218.5	0.0
Tax capital gains and dividends at same rate as ordinary income above $1 million of income and tax unrealized capital gains at death	5.3	34.2	47.4	49.4	52.0	48.9	48.2	51.0	54.0	57.2	447.6	817.6
Extend the earned income tax credit to childless workers age 65 and older	0.0	-0.4	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-4.2	-4.9
Provide a tax credit for family caregivers of individuals with physical and cognitive needs	-1.7	-8.8	-9.1	-9.4	-9.8	-10.5	-11.5	-12.1	-12.5	-13.0	-98.4	-157.7
Limit tax benefit of itemized deductions to 28 percent of value	8.6	14.9	15.5	16.2	16.8	33.6	46.2	48.8	51.4	54.2	306.3	718.0
Apply 12.4 percent Old-Age, Survivors, and Disability Insurance payroll tax to earnings above $400,000	51.9	74.4	80.6	87.1	92.8	99.9	107.2	114.9	122.6	131.1	962.4	1825.7
Establish automatic IRAs and a small business start-up credit for offering retirement plans	-1.0	-1.5	-1.7	-1.9	-2.2	-2.7	-3.1	-3.4	-3.8	-4.3	-25.6	-71.8
Replace the deductibility of worker IRA/DC pension contributions with 26% refundable tax credit	-9.4	-12.6	-12.4	-12.3	-12.0	-2.4	1.2	1.5	1.8	2.1	-54.7	59.3
Exempt forgiven student loans from taxable income	0.0	0.0	0.0	-0.1	-0.3	-0.5	-0.6	-0.7	-0.9	-0.9	-4.0	-56.0
Reinstate tax credits for residential energy efficiency	-1.1	-1.7	-2.8	-3.0	-3.1	-3.2	-3.4	-3.5	-3.7	-3.9	-29.4	-47.3
Restore the full electric vehicle tax credit and target it to middle-income consumers	-1.5	-1.5	-1.5	-1.7	-2.0	-2.3	-2.5	-2.7	-2.9	-3.2	-21.6	-48.8
Total for individual income and payroll taxes	*99.9*	*175.3*	*200.0*	*214.9*	*227.6*	*193.7*	*181.1*	*193.2*	*205.5*	*218.9*	*1,910.2*	*3,034.0*
Business Taxes												
Increase corporate income tax rate to 28%	49.1	101.3	124.3	134.4	143.0	144.2	144.9	148.7	152.3	158.1	1300.3	2,010.5
Reduce the global intangible low-tax income deduction from 50% to 25%	26.5	45.9	47.6	49.4	51.2	16.4	17.1	17.7	18.4	19.1	309.3	241.5
Impose 15% minimum tax on global book income	8.2	14.0	14.2	14.7	15.3	15.8	16.4	17.0	23.0	27.9	166.4	421.2
End tax deduction for direct-to-consumer prescription drug advertising	0.8	1.4	1.4	1.5	1.5	1.6	1.7	1.7	1.8	1.9	15.3	23.5
Restore the energy investment tax credit and make permanent	-0.9	-2.4	-3.0	-2.9	-2.8	-2.8	-2.6	-2.6	-2.6	-2.5	-25.1	-25.4
Eliminate certain tax preferences for the real estate industry	14.1	24.8	26.4	27.5	28.8	30.9	32.9	34.5	36.0	37.8	293.7	497.7
Eliminate tax preferences for fossil fuels	2.0	2.9	2.8	2.8	2.6	2.0	1.5	1.3	1.2	1.0	20.1	-3.6
Tighten the rules for classifying independent contractors	0.2	0.7	1.3	1.5	1.7	1.7	1.7	1.8	1.8	1.8	14.2	21.0
Provide a tax credit for distressed manufacturing communities	0.0	0.0	-0.1	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-2.5	-4.0
Provide a tax credit for carbon dioxide investment and sequestration	-0.2	-0.4	-0.6	-0.9	-1.1	-1.0	-1.0	-0.9	-0.8	-0.7	-7.6	-7.0
Total for business taxes	*99.8*	*188.2*	*214.3*	*227.8*	*239.9*	*208.5*	*212.2*	*218.8*	*230.7*	*244.0*	*2,084.1*	*3,175.4*
Estate and Gift or Wealth Taxes												
Total for estate and gift or wealth tax revenues	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Excise or Consumption Taxes												
Total for excise or consumption tax revenues	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Total revenue effect of all provisions												
Total revenue effect of plan	**199.7**	**363.5**	**414.3**	**442.7**	**467.4**	**402.2**	**393.3**	**412.0**	**436.3**	**462.8**	**3,994.2**	**6,209.4**
As a percentage of gross domestic product	**0.9**	**1.5**	**1.7**	**1.7**	**1.8**	**1.5**	**1.4**	**1.4**	**1.4**	**1.4**	**1.5**	**1.6**

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2) and Tax Policy Center estimates.

APPENDIX B. BIDEN'S TAX PLAN AND ASSUMPTIONS

Because candidates' proposals rarely include all the details needed to model them accurately, we ask their staff to clarify provisions or specify more details. We sent questions and assumptions, based on former vice president Biden's statements and materials posted on the campaign website, to the Biden campaign. A representative of the campaign kindly reviewed our assumptions and confirmed that most were consistent with Biden's proposals. In a few instances, the campaign provided us with more information about the proposal and we revised our assumptions accordingly. A campaign's review of our questions and assumptions does not imply that the campaign agrees with or endorses our analysis.

Biden's Tax Provisions

Unless otherwise noted, we assume Biden's tax proposals allow all temporary tax provisions to expire as scheduled (e.g., the TCJA's individual income tax changes will expire after 2025). These provisions are as of February 23, 2020.

INDIVIDUAL INCOME TAXES

- Repeal the TCJA's individual income tax cuts for taxpayers with incomes above $400,000. *We assume*
    - *individual income tax rates revert to their pre-TCJA values for taxable incomes above $400,000,*
    - *itemized deductions begin to phase out at taxable incomes over $400,000,*
    - *the qualified business deduction begins to phase out at taxable incomes above $400,000, and*
    - *the $400,000 income threshold does not vary by filing status and is indexed for inflation.*
- Cap itemized deductions at 28 percent of value. *We assume the proposal applies only to itemized deductions and does not apply to employer-provided health and retirement benefits.*
- Tax capital gains and dividends at the same rate as ordinary income for taxpayers with over $1 million in income. *We assume the proposal adds a fourth bracket for long-term capital gains and qualifying dividends (resulting in brackets of 0 percent, 15 percent, 20 percent, and 39.6 percent).*
- Tax unrealized capital gains at death. *We assume the proposal's exemption and treatment of gifts and transfers to spouses and charity is the same as detailed by the US Department of the Treasury (2016, 155–57).*
- Increase tax preferences for middle-income taxpayers' contributions to 401(k) plans and individual retirement accounts. *We assume*
    - *the proposal replaces the deduction for worker contributions to traditional IRAs and defined-contribution pensions with a refundable tax credit as proposed by Gale, John, and Smith (2012), and*
    - *a credit rate of 26 percent, which is roughly revenue neutral over the long run.*
- Provide automatic enrollment in IRAs for workers who do not have a pension or 401(k)-type plan. Offer tax credits to small businesses to offset the costs of workplace retirement plans. *We assume the proposal is the same as detailed by the US Department of the Treasury (2016, 134–38).*
- Restore the full electric vehicle tax credit, target it to middle-income consumers, and prioritize the purchase of American-made vehicles. *We assume the proposal makes the electric vehicle tax credit permanent, repeals the per manufacturer cap, and phases out the credit for taxpayers with income above $250,000.*
- Create a $5,000 tax credit for family caregivers of people who have certain physical and cognitive needs. *We assume the credit is the same as in the Credit for Caring Act of 2019 (except with a $5,000 maximum).*[4]
- Extend the earned income tax credit to workers age 65 and older without qualifying children.

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[4] See S.1443, "Caring for Credit Act of 2019," 116th Cong., (2019).

- Exclude student loan forgiveness from taxable income.
- Reinstate the solar investment tax credit.
- Reinstate tax credits for residential energy efficiency.

PAYROLL TAXES

- Apply the 12.4 percent Old-Age, Survivors, and Disability Insurance (OASDI) tax to earnings above $400,000. *We assume that earnings above the current-law maximum taxable earnings and below $400,000 are not subject to the OASDI tax and that the $400,000 threshold is not indexed for inflation.*

BUSINESS TAXES

- Increase the top corporate income tax rate to 28 percent. *We assume a single 28 percent corporate income tax rate rather than a graduated rate structure.*
- Impose a 15 percent minimum tax on companies' book income with a tax credit for income taxes paid to other countries, and allow companies to carry over losses from nonprofitable years. *We assume the tax is based on global book income and is structured as an alternative minimum tax.*
- Double the minimum tax on profits earned by foreign subsidiaries of US firms from 10.5 percent to 21 percent. *We assume the proposal is implemented by reducing the global intangible low-tax income deduction from 50 percent to 25 percent.*
- Establish a new manufacturing communities tax credit that targets communities that experience mass layoffs or the closure of a major government institution and fund the credit for five years. *We assume this proposal is the same as detailed by the US Department of the Treasury (2016, 42–43) but funded for five years rather than three.*
- Expand tax deductions for energy technology upgrades, smart metering systems, and other emissions-reducing investments in commercial buildings. *We assume this proposal is the same as detailed by the US Department of the Treasury (2016, 50–52).*
- Eliminate tax preferences for fossil fuels. *We assume this proposal is the same as detailed by the US Department of the Treasury (2016, 89–96).*
- Enhance tax incentives for carbon capture, use, and storage. *We assume this proposal is the same as detailed by the US Department of the Treasury (2016, 50–52).*
- Eliminate certain tax preferences for the real estate industry. *We assume the proposal repeals*
  - *the exemption from passive loss rules for $25,000 of rental loss,*
  - *the accelerated depreciation of rental housing, and*
  - *the deferral of capital gains from like-kind exchanges.*
- Tighten the rules for classifying independent contractors by increasing penalties for misclassification. *We assume this proposal is the same as detailed by the US Department of the Treasury (2016, 205–09).*
- End pharmaceutical companies' tax deduction for advertisement spending. *We assume the proposal eliminates all deductions for expenses to advertise prescription drugs as in the End Taxpayer Subsidies for Drug Ads Act.*[5]

[5] See S.2478, "End Taxpayer Subsidies for Drug Ads Act," 115th Cong., (2018).

EXCLUDED TAX PROVISIONS

We exclude the following provisions from our analysis because we lack some clarifying details or data necessary to estimate their effects. We also exclude health-coverage-related tax provisions because our analysis does not include the distributional impact of changes in government health benefits.

- Increase tax benefits for older Americans who purchase long-term care insurance using their retirement savings.
- Allow caregivers to make tax-preferred contributions to retirement plans to make up for periods they are not in the formal labor market.
- Provide a tax credit of up to $8,000 for child care.
- Develop a low-carbon manufacturing sector by providing tax credits for businesses to upgrade their equipment and processes, investing in factory construction and expansion, and deploying low-carbon technologies.
- Expand the Affordable Care Act's premium tax credit.

APPENDIX C. ALTERNATIVE WAYS OF MEASURING DISTRIBUTIONAL EFFECTS OF TAX CHANGES

Analysts use several measures to assess the distributional effects of tax changes. There is no perfect measure, and a combination of measures may be more informative than any single measure.[6]

The Tax Policy Center generally focuses on the percentage change in after-tax income because it measures the gain or loss of income available to households to buy goods and services relative to the amount available before the tax change. A tax change that raises or lowers after-tax income by the same percentage for all households leaves the progressivity of the tax system unchanged.

Other measures used to assess a tax change's effects include the shares of the tax change going to different parts of the income distribution, the size of each income group's change measured in dollars, and the percentage change in total federal tax liability. The first two measures poorly indicate the effects of a tax change because they ignore the initial distribution of taxes and thus do not assess changes in a tax's progressivity. The percentage change in tax liability can be particularly misleading because it relies too much on the initial distribution of taxes. Cutting the tax on a person making $1,000 from $50 to $10 is an 80 percent cut, whereas reducing taxes on a person making $1 million from $250,000 to $150,000 is a 40 percent cut. But the tax savings boost after-tax income only about 4 percent for the lower-income person compared with over a 13 percent increase for the higher-income person.

Table A2 shows several measures of the effects of Biden's tax proposals on households at different income levels in 2021. Measured by percent change in after-tax income, the impact of the proposal increases steadily with income. The share of both total tax change and average tax change also increase with income. In contrast, the percent change in tax paid declines over the first three income quintiles before increasing with income, simply because low-income tax units have low tax liability under current law.

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[6] For further discussion, see "Measuring the Distribution of Tax Changes," Urban-Brookings Tax Policy Center, accessed March 3, 2020, https://www.taxpolicycenter.org/resources/measuring-distribution-tax-changes.

TABLE A2

Alternative Presentations of Change in Distribution of Tax Burdens under Biden's Tax Plan

By expanded cash income percentile, 2021

Expanded cash income percentile[a]	Percent change in after-tax income[b]	Share of total federal tax change (%)	Average federal tax change[c]		Share of federal taxes	
			Dollars	Percent	Change (% points)	Under the proposal (%)
Lowest quintile	-0.2	0.3	30	5.9	0.0	0.6
Second quintile	-0.3	0.9	110	3.4	-0.3	3.2
Middle quintile	-0.4	2.0	260	2.6	-0.9	8.9
Fourth quintile	-0.5	3.7	590	2.7	-1.7	16.8
Top quintile	-5.7	92.6	17,480	18.2	3.0	70.2
All	-3.1	100.0	2,660	13.2	0.0	100.0
Addendum						
80–90	-0.8	3.8	1,390	3.3	-1.3	14.0
90–95	-1.2	3.8	2,920	4.4	-0.9	10.5
95–99	-2.8	11.0	10,860	8.9	-0.6	15.7
Top 1 percent	-17.0	74.0	299,340	40.3	5.8	30.0
Top 0.1 percent	-23.4	46.3	1,830,770	53.4	4.1	15.5

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Notes: Estimates are for calendar year. Baseline is current law. Proposal includes all assumptions detailed in the appendix. Number of alternative minimum tax taxpayers is 0.2 million under baseline and 0.1 million under proposal.

(a) Percentiles include both filing and nonfiling units but exclude 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 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 (in 2019 dollars) are 20%: $26,200; 40%: $52,000; 60%: $93,300; 80%: $169,500; 90%: $247,700; 95%: $352,800; 99%: $837,400; 99.9%: $3,665,700. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm.

(b) 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.

(c) Average federal tax (including 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.

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