PENN WHARTON
UNIVERSITY of PENNSYLVANIA
Budget Model

This analysis has been updated as part of PWBM's comprehensive analysis of the Biden platform.

Summary: Presidential candidate Joe Biden's campaign recently released more details regarding his tax plan. Relative to current law, PWBM projects that the updated Biden tax plan would raise between $3.1 trillion (including macroeconomic effects) and $3.7 trillion (not including macroeconomic effects) in additional revenue over the 10-year budget window 2021 - 2030 while reducing GDP by 0.6 percent in 2030 and by 0.7 percent in 2050. Almost 54 percent of the tax increase would fall on the top 0.1 percent of the income distribution.

Key Points

- Presidential candidate Joe Biden's updated tax plan includes a "donut hole" payroll tax and repeals major provisions in the Tax Cuts and Jobs Act for higher-income tax filers.

- Relative to current law, PWBM projects that the updated Biden tax plan would raise between $3.1 trillion (including macroeconomic effects) and $3.7 trillion (not including macroeconomic effects) over fiscal years 2021-2030 while decreasing GDP by 0.6 percent in 2030 and 0.7 percent in 2050.

- We project that 54 percent of the updated Biden tax plan falls on the top 0.1 percent of the income distribution, corresponding to an average tax increase of more than $1.3 million per taxpayer and an 18 percent reduction in their after-tax income. The top 1 percent of the income distribution pays about 80 percent of the tax change.

The Updated Biden Tax Plan: Budgetary, Distributional, and Economic Effects

Introduction

Presidential candidate and former Vice President Joe Biden's campaign recently released more details regarding his tax plan. PWBM's analysis of a previous version of the plan is available here. The updated Biden tax plan adds two major provisions that significantly affect the budgetary and macroeconomic effects of the plan:

- **Implement a Social Security "Donut Hole".** Under current law, the 12.4 percent Social Security (OASDI) employer and employee combined payroll tax rate applies to earnings up to the annual taxable maximum threshold ($137,700 in 2020). Under the proposal, only earnings between the taxable maximum threshold and $400,000 would be exempt, creating a "donut hole" of non-taxable wages between the taxable maximum threshold and $400,000. Earnings above $400,000 would be subject to the 12.4 percent tax. The taxable maximum threshold would continue to grow with average wages in the economy consistent with current law while the $400,000 level remains fixed. Eventually, the taxable maximum threshold would reach $400,000 and the donut hole disappears, subjecting all earnings to Social Security taxes.
- **Repeal elements of the Tax Cuts and Jobs Act (TCJA) for high-income filers.** The TCJA lowered the top rate on ordinary income, introduced a 20 percent deduction on qualified business income (QBI), and repealed the Pease limitation on itemized deductions. For filers with more than $400,000 of taxable income (regardless of marital status), the Biden tax plan would restore the previous top rate of 39.6 percent, phase out the QBI deduction, and re-introduce the Pease limitation.[1]

Our previous analysis contains descriptions of the other provisions in the Biden tax plan, and all of the provisions in the updated tax plan are shown in Table 1 below.

Projected Budgetary Effects

PWBM projects that together, the Biden proposal would raise about $3.7 trillion over the budget window on a conventional scoring basis. When accounting for dynamic economic feedback effects, PWBM estimates the revenue raised decreases to $3.1 trillion over the same period. Table 1 presents the year-by-year revenue estimates for these figures.

Table 1. Conventional and Dynamic Revenue Estimates, Fiscal Years 2021-2030

Billions of Dollars, Change from Current-Law Baseline

DOWNLOAD DATA

Provision	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**Budget window**
Implement a Social Security "donut hole"	64	86	90	94	98	104	113	122	129	136	1,035
Eliminate stepped-up basis	10	15	16	18	19	21	23	25	27	30	204
Raise the top rate on ordinary income	20	24	24	25	26	14	10	7	2	1	153
Tax capital gains and dividends at ordinary rates	15	18	19	20	21	16	16	17	18	19	178
Limit itemized deductions	16	21	22	23	24	27	30	32	33	35	263
Limit Section 199A	26	35	38	40	42	16	9	3	1	0	208
Raise the corporate tax rate	57	93	102	106	109	118	125	126	125	127	1,088
Impose a minimum tax on corporate book income	21	17	14	17	20	23	26	28	30	31	227
Raise the tax rate on foreign profits	26	37	39	41	43	25	26	27	28	29	323
Miscellaneous	1	1	0	1	1	10	13	14	14	14	67
Conventional	**255**	**346**	**364**	**383**	**402**	**374**	**392**	**400**	**408**	**422**	**3,745**
Dynamic (includes macroeconomic effects)	***210***	***284***	***299***	***314***	***330***	***307***	***322***	***329***	***335***	***347***	***3,077***

Table 1 reports conventional revenue estimates for each individual provision of the proposal. PWBM's integrated model allows for revenue estimates that are "stacked" one after the other, meaning each estimate is relative to a baseline that includes all provisions listed above it. This stacking ensures that we are accounting for interaction effects between policies.

For example, the provision "Impose a minimum tax on corporate book income" raises less revenue under the Biden proposal than if this provision were estimated in isolation relative to current law. This difference arises because fewer businesses would pay an effective tax rate less than 15 percent once the corporate tax rate was increased from 21 to 28 percent, as noted in the preceding provision, "Raise the corporate tax rate."

The proposal also includes a number of smaller provisions denoted in Table 1 by "Miscellaneous"; for more detail on these policies, refer to Appendix B here.[2] For these items we apply PWBM's macroeconomic forecast to the Tax Policy Center's revenue estimates.

Projected Distributional Effects

Table 2 presents several distributional measures of the proposed tax changes. Using the drop down button, readers can see the distributional effects under two approaches. The first incorporates the burden of corporate income taxes under the assumption that 75 percent of the tax falls on returns to capital and the rest on wages; the second includes direct tax changes to individual and payroll taxes only.

Table 2: Distribution of Federal Tax Change Under Presidential Candidate Biden's Tax Plan, 2021

DOWNLOAD DATA

- (•) Corporate, individual and payroll tax
- ( ) Individual and payroll tax only

Corporate, individual and payroll taxes

Income group	Average tax change	Share with a tax increase	Percent change in after-tax income	Share of tax change	Share of federal taxes paid	Change in share of federal taxes paid
Bottom quintile	$15	30.3%	-0.5%	0.3%	-0.2%	0.1%
Second quintile	$90	93.1%	-0.4%	1.1%	0.7%	0.1%
Middle quintile	$180	95.8%	-0.4%	2.2%	7.6%	-0.7%
Fourth quintile	$360	95.2%	-0.4%	3.8%	15.8%	-1.5%
80-90%	$665	98.8%	-0.5%	2.8%	12.8%	-1.2%
90-95%	$1,155	98.5%	-0.6%	2.3%	10.0%	-0.9%
95-99%	$4,360	97.4%	-1.4%	7.1%	16.5%	-1.2%
99-99.9%	$72,835	100.0%	-8.5%	26.1%	16.4%	1.2%
Top 0.1%	$1,304,950	100.0%	-17.7%	53.9%	20.1%	4.1%

Individual and payroll tax only

Income group	Average tax change	Share with a tax increase	Percent change in after-tax income	Share of tax change	Share of federal taxes paid	Change in share of federal taxes paid
Bottom quintile	$0	0.0%	0.0%	0.0%	-0.3%	0.0%
Second quintile	$0	0.0%	0.0%	0.0%	0.4%	0.0%
Middle quintile	$0	0.0%	0.0%	0.0%	7.7%	-0.7%
Fourth quintile	$0	0.0%	0.0%	0.0%	16.3%	-1.4%
80-90%	$0	0.0%	0.0%	0.0%	13.3%	-1.2%
90-95%	$5	0.3%	0.0%	-0.1%	10.2%	-0.9%
95-99%	$1,365	24.8%	-0.4%	3.3%	16.7%	-1.2%
99-99.9%	$58,410	97.2%	-6.8%	31.1%	16.4%	1.3%
Top 0.1%	$1,068,660	99.9%	-14.5%	65.6%	19.0%	4.1%

Note: "Income" is defined as AGI plus: above-the-line deductions, nontaxable interest income, nontaxable Social Security benefits, nontaxable pensions and annuities, employer-side payroll taxes, and corporate liability. Seventy-five percent of the corporate income tax is assumed to be borne by the owners of capital; the rest is assumed to fall on wages. Federal taxes included are individual income, payroll, and corporate income taxes.

Including the distribution of the corporate income tax at the household level, we project that 54 percent of the tax change would fall on the top 0.1 percent of the income distribution, corresponding to an average tax increase of more than $1.3 million. Average after-tax incomes would fall by nearly 18 percent for the top 0.1 percent of the income distribution and nearly 9 percent for the rest of the top 1 percent. All groups outside of the top 5 percent of the income distribution see their after-tax incomes fall by less than 1 percent.

Projected Economic Effects

Table 3 reports PWBM's projections of how the updated Biden tax plan would affect the macroeconomy. We apply the standard, long-standing scoring convention used by the Congressional Budget Office (CBO) and PWBM of applying the additional revenue toward deficit reduction.

Table 3. Economic Effects of Presidential Candidate Biden's Tax Plan

Percent Change from Baseline

DOWNLOAD DATA

Year	GDP	Capital stock	Hours worked	Average hourly wage
2030	-0.6%	-0.7%	-0.6%	-0.1%
2040	-0.7%	-1.3%	-0.7%	0.0%
2050	-0.7%	-1.2%	-0.7%	0.0%

Note: Consistent with empirical evidence, the projections above assume that the U.S. economy is 40 percent open and 60 percent closed. Specifically, 40 percent of new government debt is purchased by foreigners.

The Biden tax plan has two opposing effects on the macroeconomy. On one hand, reducing federal deficits increases investment, leading to greater capital accumulation and therefore increasing GDP. On the other hand, the increase in marginal tax rates discourages labor and savings. In our previous analysis of Biden's original tax plan, these two effects largely offset. However, as noted above, Biden's updated tax plan now includes a donut hole payroll tax, which materially changes the macroeconomic outcomes.

As we explained elsewhere, unlike the current structure of Social Security payroll taxes, a donut hole tax does not trigger a corresponding increase in future benefits.[3] A donut hole tax is, therefore, fully distorting to labor supply because of its lack of a "contribution-benefit" linkage. Moreover, a well established principle in the field of public economics is that these labor supply distortions increase in proportion to the *square* of the tax rate. Hence, a new tax on top of existing taxes distorts labor supply decisions by more than the new tax relative to no taxes. The additional 12.4 percent tax in the Biden plan is levied on households who already face the highest combined statutory federal-state-local income and payroll tax rates.

Taking all above-mentioned effects into consideration, we project that the updated Biden tax plan reduces GDP by 0.6 percent in 2030, by 0.7 percent in 2040, and by 0.7 percent in 2050.

John Ricco, Alexander Arnon and Xiaoyue Sun produced this analysis under the direction of Efraim Berkovich, Richard Prisinzano and Kent Smetters. Calculations are based on PWBM's model that is developed and maintained by PWBM staff.

---

1. These three provisions are included in Table 1 as "Raise the top rate on ordinary income", "Limit Section 199A", and "Limit itemized deductions". The latter also includes the revenue effects of the proposal to limit the tax value of itemized deductions to 28 percent. ↩
2. This line includes all provisions not expressly listed in Table 1. ↩
3. We previously incorporated this donut hole tax into our analysis of Biden's Social Security plan. The Biden campaign appears to also view the donut hole tax as part of their "tax plan," and so we include it

here. However, since it is common to both analyses, the reader should not simply add up our projected macroeconomic effects across his tax and Social Security plans. ↩