MACROECONOMIC ANALYSIS OF FORMER VICE PRESIDENT BIDEN'S TAX PROPOSALS

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November 10, 2020

***NOTE**: This is a corrected version of the analysis originally published October 29, 2020.*[1]

The Tax Policy Center (TPC) has analyzed the macroeconomic effects of former vice president Joe Biden's tax proposals. We find the tax proposals would boost US gross domestic product (GDP) 0.2 percent in 2021, reduce GDP 0.3 percent in 2030, and increase GDP by small but rising amounts by 2040 and beyond. The resulting net decrease in economic output over the first decade would reduce the net revenue generated from the proposals by $161 billion from 2021 to 2030 (around 8 percent of the 10-year total). In the following decade, macroeconomic feedback on output would reduce the net revenue increase by $90 billion. Biden's spending proposals would also have important effects on the overall economy, but TPC has not estimated those.

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[1] This version incorporates revised estimates of the revenue effects of Biden's tax proposals. Those revisions stemmed from correcting an error and making some technical changes; for details about the revisions and the revenue estimates see the TaxVox blog post "TPC Revises Its Revenue Estimate of Biden's Tax Plan Downward to $2.1 Trillion Over 10 Years" and the Brief "An Updated Analysis of Former Vice President Biden's Tax Proposals". Because the revision makes the reduction in after-tax incomes from the proposals smaller, aggregate demand falls by less than in the original analysis and the negative short-term effects on output are slightly smaller. Because the revision makes the reduction in federal budget deficits smaller than in the original analysis, there is less crowding in of private investment, and the longer-run effects on output are slightly more negative (or less positive in the much longer-run).

Former vice president Joe Biden's tax plan would increase income and payroll taxes for high-income individuals and increase income taxes for corporations. His plan would also expand tax credits for middle- and lower-income individuals and for new investments in domestic manufacturing. On net, his proposals would increase federal revenues by $2.1 trillion over the next decade, before accounting for their macroeconomic effects.

TPC has analyzed the macroeconomic effects of the tax proposals. We find the following:

- The proposals would increase GDP relative to baseline projections by 0.2 percent in 2021 but would reduce GDP in each year for the remainder of the decade. By 2040 the impact of these tax proposals on GDP would again be positive, and that positive effect would increase over time.
- The decrease in output would reduce revenues over the first decade, offsetting about 8 percent of the net revenue increase projected under the proposals without accounting for macroeconomic feedbacks.
- Macroeconomic effects would, on net, also reduce the projected gain in revenues slightly over the second decade.

EFFECTS ON OUTPUT

The tax proposals would affect output primarily through their influence on aggregate demand, labor supply, and saving and investment.

Aggregate Demand

The proposals would increase aggregate demand in 2021 but would reduce it in later years. TPC assumes that the tax increases included in the plan would not be effective until January 1, 2022, but a proposed temporary increase in the child tax credit would reduce taxes in 2021. Therefore, the proposals in the aggregate would increase after-tax incomes in 2021 but reduce them in subsequent years. (A variety of tax credits would continue to reduce taxes for lower-income households after 2021, but that effect would be more than offset by much larger tax increases on higher-income households and corporations.) Households would spend some of their additional income in 2021, increasing demand for goods and services, but aggregate incomes and demand would be reduced in later years. TPC assumes the effect on demand in 2021 would be attenuated somewhat by the effects of the pandemic on spending behavior, but it would also be enhanced because benefits from the child tax credit flow disproportionately to lower-income households, who spend a larger share of any increases in income than higher-income households. By contrast, almost all tax increases in the following years would flow to high-income households, who spend a smaller share of any increases in after-tax income than lower-income households; these tax increases, per dollar change, would therefore have a smaller effect on demand. Through the first several years, the changes in demand would have larger effects on output than usual because, with high unemployment and uncertainty from the pandemic, the Federal Reserve is projected to maintain interest rates at very low levels irrespective of changes in tax policy. (In a more normal economic environment, the Federal Reserve would offset part of the macroeconomic effects of changes in tax policy by changing interest rates).

Labor Supply

For some taxpayers, the proposals would increase effective tax rates on labor income (i.e., wages and salaries for employees and self-employment income for others), primarily by increasing payroll tax rates for many higher-income workers. The resultant reduction in the after-tax wage rate would reduce labor supply. Most households, however, would see no change to the effective tax rates on their labor income.

Saving and Investment

The proposals would increase marginal tax rates on investment income, largely by increasing the corporate income tax rate and tax rates on individual income, capital gains, and dividends for high-income households. (That impact would be partially offset by a tax credit for investment in domestic manufacturing.) The increased tax rates would tend to discourage saving and investment.

Although the tax proposals would reduce incentives to save and invest, they would also substantially reduce federal budget deficits after 2021. Lower budget deficits would free up funds that would otherwise be used to purchase government bonds for use in private investment activities. That effect increasingly offsets the impact of reduced saving incentives associated with higher marginal tax rates as the effects of greater revenues on the federal budget compound, eventually turning positive the net impact on aggregate private investment.

Output

Accounting for all these effects, we estimate that the proposals would boost GDP 0.2 percent in fiscal year 2021, mostly because of their effect on aggregate demand (table 1). By 2022, the effect on demand turns negative as net aggregate tax increases take effect, reducing incomes. Further, higher tax rates discourage working and saving. The negative impact on output diminishes after the first few years as the effects on aggregate demand fade and the reduced federal budget deficits begin to boost private investment. The net impact on GDP becomes positive in 2040 and grows larger in later years.

TABLE 1

Dynamic Effects on GDP of Former Vice President Biden's Tax Proposals

Billions of dollars, fiscal years 2021–40

	Fiscal Year										
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2040
	GDP ($ billions)										
Before macroeconomic feedback	20,997	22,077	22,975	23,956	25,011	26,130	27,287	28,462	29,591	30,732	43,826
After macroeconomic feedback	21,032	21,984	22,809	23,806	24,916	26,052	27,208	28,376	29,506	30,649	43,838
	Percentage change in GDP caused by macroeconomic feedback										
	0.2	-0.4	-0.7	-0.6	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	0.0

Source: The GDP forecast through 2030 is from CBO, *An Update to the Economic Outlook: 2020 to 2030* (Washington, DC: CBO, 2020); for 2031 to 2040 it is from CBO, *The 2020 Long-Term Budget Outlook* (Washington, DC: CBO, 2020); macroeconomic feedback is estimated using TPC's macroeconomic models.
Notes: CBO = Congressional Budget Office; GDP = gross domestic product.

Former vice president Biden has also proposed several measures that would increase federal spending, but TPC's macroeconomic analysis includes only the effects of his tax proposals. If the spending increases had been included in the analysis, the estimated effect on output would have been more positive (or less negative) over the first few years, because higher spending would increase aggregate demand. But the estimated effect on output in later years would be more negative because if additional revenues from the tax measures were spent, federal budget deficits would not decline by as much, reducing the funds available for private investment. (Some of the spending proposals, however, such as those for infrastructure investment or education, would add to the economy's productivity, offsetting some of the adverse effect of greater spending on federal budget deficits and private investment.)

EFFECTS ON THE BUDGET

The effects on output from the tax proposals would alter taxable incomes for individuals and businesses. That would in turn affect the impact of the proposals on aggregate revenues. After a small boost in 2021, the macroeconomic effects of the proposals would reduce the projected increase in revenues by a net total of $161 billion between 2021 and 2030 and by $90 billion between 2031 and 2040 (table 2). Macroeconomic feedback effects would reduce the increase in federal revenues from the plan about 8 percent over the first decade and very slightly over the second decade. By 2040, however, the annual impact of the tax proposals on federal revenues would be positive and continue to increase.

TABLE 2

Revenue Effects of former Vice President Biden's Tax Proposals

Billions of dollars, fiscal years 2021–40

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2021–30	2031–40
Change in revenues without macroeconomic feedback	-37	28	150	271	295	267	254	271	288	304	2,092	4,297
Impact of macroeconomic feedback on revenues	5	-15	-29	-27	-18	-15	-15	-16	-16	-16	-161	-90
Change in revenues with macroeconomic feedback	-32	14	122	244	278	253	239	255	271	288	1,931	4,206

Sources: Urban-Brookings Tax Policy Center macroeconomic models, Microsimulation Model (version 0920-1), and Tax Policy Center estimates.

REFERENCE

Mermin, Gordon B., Janet Holtzblatt, Surachai Khitatrakun, Chenxi Lu, Thornton Matheson, and Jeffrey Rohaly. 2020. "An Updated Analysis of Former Vice President Biden's Tax Proposals." Washington, DC: Urban-Brookings Tax Policy Center.

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