Insight

Assessing the Biden Promises: Infrastructure, Taxes, and Growth

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Executive Summary

The American Action Forum (AAF) commissioned Tax Policy Advisers LLC (TPA) to assess the macroeconomic implications of the tax and infrastructure proposals in then- presidential candidate Joe Biden's Build Back Better (BBB) plan. The results inform the desirability of the proposed American Jobs Plan (AJP), as it is drawn from the BBB plan.

See the full study here.

- In its study, TPA used techniques similar to those of the Joint Committee on Taxation and Congressional Budget Office, with complete autonomy on the data and necessary assumptions in the analysis. The BBB plan raises a net $3.3 trillion in new taxes (over 10 years) and is assumed to spend the same amount on traditional
- In the base case, (see Summary Table 1) the higher taxes' negative impacts on growth outweigh the impacts of infrastructure on productivity, despite the significant increase (ultimately 16 percent) in public The net impact after 10 years is to lower gross domestic product (GDP) by 0.2 percent, and household spending by 1.2 percent.
- In the "high productivity" case, where public capital is assumed to have productivity effects 150 percent larger than typically found in the literature, it is possible for the BBB plan to raise GDP after 10 years (See Summary Table 1).
- These results have important implications for the desirability of the AJP. The AJP raises roughly 1/2 as much in taxes, but it spends perhaps 1/6 as much on high- productivity traditional infrastructure – a mix that these results indicate is likely to have a negative macroeconomic

These results suggest that it is theoretically possible to develop an efficient set of tax increases to finance a highly productive public investment program that, on balance, improves the macroeconomic outlook, but that the AJP deviates from the mix needed to make such a proposal pro-growth.

Summary Table 1

(Percentage changes in aggregate variables, relative to steady state with no reform)

	Year					
Base Case	**2**	**5**	**10**	**20**	**50**	**Long Run**
GDP	0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Private consumption	-0.4	-1.3	-1.2	-0.4	-0.4	-0.3

Total public capital stock	0.5	2.1	10.1	16.0	16.0	16.0
High Productivity Case						
GDP	0.3	0.2	0.4	0.9	1.0	1.1
Private consumption	-0.1	-0.8	-0.5	0.7	0.8	0.9
Total public capital stock	0.5	2.1	10.1	16.0	16.0	16.0

Introduction

The Build Back Better (BBB) plan was a centerpiece of the Biden presidential campaign. The BBB proposed to raise numerous taxes (and expand some tax expenditures), for a net total of $3.3 trillion in revenue over 10 years in this analysis, and to invest heavily in infrastructure. There was widespread agreement that in isolation the tax increases would be a drag on economic growth, productivity, and real wages – the only question was how large. Proponents of the BBB plan, however, insisted that the revenues would be spent on infrastructure whose productivity benefits would outweigh the drag from taxes. The goal of this study is to investigate the plausibility of this scenario. The results inform the desirability of the proposed American Jobs Plan (AJP), as it is drawn from the BBB plan.

Conduct of the Study

AAF commissioned TPA to conduct this study. It chose TPA because its approach to modeling the macroeconomic impacts is based on the same methods as those used at the Joint Committee on Taxation and the Congressional Budget Office. In this way, it sheds light on the likely analysis of legislation based on the BBB plan. In addition, TPA was given complete autonomy in its analysis of the proposals, data used in the analysis, and key assumptions – especially the productivity impacts of spending on infrastructure.

Key Results

TPA based it analysis on a Tax Foundation estimate of a revenue gain of $3.3 trillion over the 10-year period 2021-2030. In the study, all of the net $3.3 trillion in raised revenues finances federal investment, which increases the public capital stock. The modeling of investment most closely reflects the effects of spending on traditional infrastructure. In this regard, the key issue is the productivity increase resulting from additional infrastructure.

TPA summarizes these impacts by the elasticity of output (GDP) with respect to public capital. After surveying the research literature, it concludes that this elasticity is 0.05 in the base case. In an alternative scenario, it investigates the implications setting the elasticity much higher at 0.12.

The results for the base case are shown in Table 1, reproduced from TPA. (FSK refers to “Firm Specific Capital,” which one can think of as like intellectual property.) The enormous public capital increase raises productivity of labor and wages, but depresses investment, drives capital out of the United States, and results in a net negative impact on the size of the economy (GDP) and standards of living (private consumption).

Table 1: Macroeconomic Effects of 10-Year Tax-Financed Public Investment Plan – *qG* =0.05

(Percentage changes in aggregate variables, relative to steady state with no reform)

Variable % Change in Year:	**2**	**5**	**10**	**20**	**50**	**LR**
GDP	0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Private consumption	-0.4	-1.3	-1.2	-0.4	-0.4	-0.3
Private investment in ordinary *K* in United States	-1.2	-4.8	-5.3	-2.5	-2.5	-2.5
Stock of ordinary *K* in United States	0.0	-0.6	-1.3	-2.0	-1.5	-1.4
Stock of *FSK* in United States	-1.6	-3.5	-2.9	-2.0	-1.7	-1.5
Employment (hours worked)	0.8	1.0	1.0	0.8	0.8	0.7
Labor compensation	0.8	1.4	1.3	0.9	1.2	1.3
Real wage	-0.1	0.4	0.3	0.1	0.5	0.5
Total public capital stock	0.5	2.1	10.1	16.0	16.0	16.0

The results for the "high productivity" case are shown in Table 2. These results are much like the base case, with the exception that the productivity assumptions allow the improved labor productivity to ultimately outweigh the negative impacts on the investment climate in the United States and raise both output and the standard of living.

Table 2: Macroeconomic Effects of 10-Year Tax-Financed Public Investment Plan – *qG* =0.12

(Percentage changes in aggregate variables, relative to steady state with no reform)

Variable % Change in Year:	**2**	**5**	**10**	**20**	**50**	**LR**
GDP	0.3	0.2	0.4	0.9	1.0	1.1
Private consumption	-0.1	-0.8	-0.5	0.7	0.8	0.9
Private investment in ordinary *K* in United States	-1.9	-5.1	-5.2	-1.5	-1.3	-1.3
Stock of ordinary *K* in United States	-0.1	-0.7	-1.4	-1.6	-0.6	-0.3
Stock of *FSK* in United States	-1.6	-4.0	-3.7	-3.0	-2.7	-2.4
Employment (hours worked)	0.8	0.9	0.9	0.8	0.7	0.7

Labor compensation	0.6	1.6	1.9	2.3	3.0	3.1
Real wage	-0.2	0.6	1.0	1.5	2.2	2.3
Total public capital stock	0.5	2.1	10.1	16.0	16.0	16.0

Tax Policy Assumptions

TPA surveyed extant revenue estimates for the Biden campaign's tax plan and observed significant variation in analysts' results. For the purposes of this analysis, TPA relied upon static revenue estimates from the Tax Foundation because those estimates roughly equal the average of available analyses and include a detailed year-by-year breakdown of the revenue flows. The policies, gross revenue increases and decreases, and net revenue effects are detailed in Table 3.

Table 3: Static Revenue Effects of Tax Policies Assumed in the BBB Plan

Revenue Increases	**Revenue Reductions**
Social Security payroll taxation at a rate of 12.4 percent on earnings in excess of $400,000	An expansion of the child tax credit to a maximum of $3,000 with a $600 bonus for children under the age of 6 and full refundability
An increase in the top personal income tax rate from its current level of 37 percent back to the pre-Tax Cuts and Jobs Act rate of 39.6 percent	An expansion of the child and dependent care tax credit to a maximum value of $8,000 with up to 50 percent refundability
Reintroduction of the "Pease limitation" on itemized deductions for incomes in excess of $400,000	The introduction of a first-time home buyer tax credit of up to $15,000
Taxation of capital gains and dividends at personal income tax rates for incomes in excess of $1,000,000 and the replacement of step-up of basis for capital gains transferred at death with carryover of basis	Miscellaneous credit expansions
Limiting the tax benefit of itemized deductions to 28 percent of the value of the deduction for incomes in excess of $400,000	
Phasing out of the 20 percent of qualified business income deduction for pass-through business entities for incomes in excess of $400,000	
An increase in the corporate income tax rate to 28 percent from its current level of 21 percent	
The imposition of a 15 percent corporate minimum tax on financial income	
The doubling of the effective tax rate on global intangible low-taxed income (GILTI) to 21 percent, coupled with the elimination of the exemption of a deemed 10 percent return on qualified business asset investments, and the imposition of GILTI on a country-by-country basis	

Subtotal: $3,818 billion	*Subtotal: $485 billion*
Net Tax Increase (2021-2030): $3,333 billion	

Implications for the American Jobs Plan

These results cast doubt on the growth proposition of the AJP. In both scenarios there is a $3.3 trillion spending program on highly productive infrastructure. As has been widely discussed, the AJP has over a trillion dollars in Medicaid expansion, housing upgrades, federal facilities, drinking water, childcare and other categories of spending that are likely to be far less productivity-enhancing (if at all). On the tax side, the AJP focuses on the most distortionary and anti-growth elements of the tax proposals, namely the corporation income tax proposals. Thus, one would expect even less impact than the mix in the base case, which had overall negative growth implications.