Budget Model

The Macroeconomic Effects of the August 2021 Senate Budget Reconciliation Package

Key Points

- Drafting a budget from the August 2021 Senate reconciliation framework that satisfies the Senate rules of reconciliation ("Byrd Rule") will require a decrease in new outlays or a large increase in revenues (or both) after the standard 10-year budget window.

- One such potential reduction in spending would allow the new non-healthcare related discretionary spending provisions to expire after 2031.

- With this reduced spending in 2031, we project that the reconciliation package will decrease GDP by 4.0 percent in 2050. Without this spending decrease (and where the Byrd Rule is not satisfied), we project a 4.8 percent fall in GDP in 2050.

Introduction

On August 9th, 2021, the Senate Budget Committee released a budget resolution that provides the framework for a proposal to be passed with the budget reconciliation process that includes $3.5 trillion in new spending over a decade, up to $1.75 trillion of which is deficit financed. In this analysis, PWBM analyzes the macroeconomic effects of a policy package consistent with the budget resolution, building on an earlier analysis of potential budgetary offset and drawing on previous proposals from the Biden administration.

The instructions provide for $3.5 trillion in new outlays over a decade. Spending provisions range from investments in physical capital to new and expanded social spending programs focused on health, poverty, education, childcare, and more. Suggested tax increases focus on multinational corporations, capital income of wealthy households, enforcement of existing laws, and more. In addition to these budgetary proposals, the instructions also call for lawful legal status for qualified unauthorized immigrants.

We evaluate the reconciliation proposal under two scenarios. In the first scenario, PWBM assumes that the non-health spending provisions expire at the end of the 10-year budget window. Reducing spending is consistent with satisfying the Byrd Rule, which is a requirement for the budget to be passed under the reconciliation process.

Reducing *non-health* spending specifically is more consistent with its annual appropriation ("discretionary spending") nature relative to changes in, for example, "mandatory spending" including new Medicare benefits. In this scenario, we find that federal debt increases by 8.9 percent, and GDP will fall by 4.0 percent in 2050 relative to the current baseline.

Under the second scenario, we extend the proposals indefinitely beyond the 10-year budgetary window. In this scenario, we find that government debt increases by 16.4 percent in 2050 and GDP declines by 4.8 percent in the same year.

New Spending Proposals

To model the effects of the reconciliation proposal, we construct an illustrative policy package consistent with the Senate's budget resolution. PWBM has previously estimated the effects of a number of these policies including preschool and childcare programs and legalization of unauthorized immigrants. Our current projection methodology is consistent with our earlier estimates when possible. For budgetary offsets, we model the policies contained in the "Medium" scenario from our previous analysis of reconciliation funding options. For some other policies, we rely on estimates from the literature and the Congressional Budget Office.

To remain within the $3.5 trillion budget and keep the committee level spending consistent with the Senate proposal, we do not include the effects of all policies on the budget. In particular, we either underfund or discontinue policies under the Finance Committee in order to be consistent with the Senate resolution.[1]

To evaluate the economic effects of the different spending programs, we break up the spending proposal into transfers and tax expenditures, labor productivity boosting spending, productivity increasing public infrastructure investments, health expenditures, and other federal spending.

Table 1 shows the distribution of spending by model input.

Table 1. Budget Reconciliation Spending by Model Input Classification

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Spending Category	**Total 10-Year Spending (billions)**
Public Infrastructure Investment	$349
Labor Productivity Boosting	$468
Health Expenditures	$1,149
Transfers & Tax Expenditures	$1,100
Other Spending	$484
Total	**$3,550**

Health expenditures are the largest spending category and capture 32.4 percent of the new spending within the budget window. Health expenditures include the expansion of Medicare benefits, lowering of the Medicare eligibility age, expansion of the Affordable Care Act (ACA), and enactment of prescription drug price controls. Approximately 31.0 percent of the proposed spending enters the model through transfers and tax expenditures, which includes policies such as public housing investments, energy subsidies, and the Earned Income Tax Credit and Child Tax Credit extensions. Spending that boosts labor productivity, which includes human capital investment policies such as preschool and childcare, is the next largest input category, receiving 13.2 percent of the $3.5 trillion of new spending over the 10-year budget window. Investment in public infrastructure, which includes investments in research and development, infrastructure, workplace and job development, and other similar policies, receives 9.8 percent of the new spending. We attribute the remaining 13.6 percent to other federal spending, which includes provisions such as investments in rehabilitating and electrifying federal buildings and the federal vehicle fleet, upgrades to Veterans Affairs facilities, and agriculture conservation, drought, and forestry programs.

We consider two scenarios. In the first scenario, all healthcare-related spending continues as projected under the policy, but all other categories of spending revert to their baseline levels at the end of the 10-year window. This scenario stabilizes the conventional estimate of the primary deficit to grow approximately at the pre-policy rate. In the second scenario, all new spending proposals are projected to extend past the 10-year budget window.

The Macroeconomic Effects of the Reconciliation Proposal

Each of the components of the budget reconciliation proposal contributes differently to the proposal's overall effect on the U.S. economy.

Programs such as new investments in public housing and increased Medicare benefits are transfers or payments to households. By themselves, these transfers increase federal debt and crowd-out productive private capital. Lower private capital—computers, equipment, factories, buildings, and other productive assets that are used to produce goods and services—leads to a decline in GDP. In addition, some of the transfer programs such as housing benefits reduce households' incentives to work, which accelerates the decline in GDP.

However, some programs increase labor productivity. Universal preschool programs and childcare provide education at an earlier age and assist with childcare for lower income parents. These childcare and educational programs lead to a small increase in labor productivity as caregivers gain flexibility to work more hours in a greater variety of jobs. Furthermore, additional preschool education leads to increases in productivity when affected children eventually enter the workforce.

Like other kinds of government spending, public infrastructure investment leads to higher government debt and crowds out productive private capital. However, as explained in PWBM's previous analysis of the effects of public infrastructure investment, infrastructure increases productivity. Additional public infrastructure makes both workers and private capital more productive, which leads to higher wages and higher GDP.

The remaining spending proposals lead to higher government spending and higher government debt. As before, higher government debt crowds out investment in productive private capital. Less private capital leads to lower wages as workers become less well-equipped to do their jobs effectively.

The reconciliation proposal also contains many provisions to raise revenue. In this case, higher revenues decrease government debt, which offsets some of the negative effects on wages and GDP. On the other hand, higher tax rates on wages discourage households from working. Immigration reform provides a path to authorized status for a large majority of unauthorized immigrants currently residing in the United States. This policy provides additional work opportunities for these immigrants who would have otherwise been unauthorized to work; therefore, these immigrants' productivity increases. With higher pay and more opportunities, these immigrants work more, earn additional income, and begin paying additional taxes. This leads to lower government debt, which crowds in private capital. More hours worked and more productive capital leads to higher GDP.

Expanding Medicare to include dental, vision, and hearing benefits increases consumption for current retirees and decreases the need for the currently young to save for those expenses. Lowering the Medicare age to 60 and making the ACA subsidies more generous lower households' financial risk, so they save and work less. Reducing Medicare drug prices lowers retiree out-of-pocket spending and leads to lower savings and hours worked. All these policies increase federal deficits by varying amounts, except for the provision reducing Medicare drug prices. The savings on prescription drugs covers a portion of the spending in the other programs but ultimately debt increases and private capital decreases. Together, the healthcare provisions decrease hours worked, private capital, and GDP.

Table 2 shows the combined effects from these different components when the non-health spending expires at the end of the 10-year budget window to satisfy the budget requirements for reconciliation. Overall, the proposal leads to higher government debt and a drop in private capital. Government debt increases by 8.5 and 8.9 percent in 2040 and 2050, respectively. Private capital declines by 4.2 and 6.1 percent in the same years.

Table 2. Macroeconomic Effects Under Reconciliation Budget Rules

Percent Change from Baseline

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Year	GDP	Capital Stock	Hourly Wage	Hours Worked	Government Debt
2031	-2.4	-2.8	0.7	-3.8	8.4
2040	-3.0	-4.2	-1.2	-2.4	8.5
2050	-4.0	-6.1	-2.1	-2.4	8.9

Although lower private capital makes workers less productive—which results in lower wages—some of the provisions in the reconciliation proposal decrease labor supply (by 2.4 percent in both 2040 and 2050), which makes labor more valuable. More scarce labor leads to higher wages. The net effect is that wages increase in the short run. Wages increase by 0.7 percent in 2031. However, as the decline in private capital grows over time, labor productivity continues to decline, which lowers the wage. By 2050, the hourly wage declines by 2.1 percent relative to baseline. The drop in the labor supply and private capital leads to a fall in GDP of 3.0 and 4.0 percent in 2040, and 2050, respectively.

Table 3 shows the macroeconomic effects for the reconciliation proposal in which PWBM assumes that all spending is projected to continue at similar rates of growth beyond the 10-year budget window. Government debt increases by 12.2 and 16.4 percent in 2040 and 2050 respectively. Relative to baseline, GDP declines by 3.4 and 4.8 percent in the same years. While debt increases by almost twice as much as in Table 2, GDP falls by just an additional 0.8 percent in 2050 relative to Table 2---from 4.0 percent to 4.8 percent---because of the inclusion of productivity-enhancing spending.

Table 3. Macroeconomic Effects Under Continued Spending Scenario

Percent Change from Baseline

DOWNLOAD DATA

Year	GDP	Capital Stock	Hourly Wage	Hours Worked	Government Debt
2031	-2.5	-2.9	0.7	-3.9	8.4
2040	-3.4	-5.2	-0.3	-3.6	12.2
2050	-4.8	-8.5	-1.6	-3.7	16.4

This analysis was produced by PWBM staff. Report was written by Jon Huntley, Maddison Erbabian, and John Ricco. Prepared for the website by Mariko Paulson.

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1. To abide by the Senate Finance Committee's $1.8 trillion allocation for new spending, we omit the economic effects from long-term care for seniors and people with disabilities, SALT cap relief, and paid family and medical leave. Including these policies would increase debt and tend to reduce household saving and labor supply for precautionary motives, retirement and other lifecycle events. ↩