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Budget Model

Inflation Reduction Act: Preliminary Estimates of Budgetary and Macroeconomic Effects

Click here for analysis of Senate-passed version of this Act.

Summary: PWBM estimates that the Inflation Reduction Act would reduce non-interest cumulative deficits by $248 billion over the budget window with no impact on GDP in 2031. The impact on inflation is statistically indistinguishable from zero. An illustrative scenario is also presented where Affordable Care Act subsidies are made permanent. Under this illustrative alternative, the 10-year deficit reduction estimate falls to $89 billion.

Key Points

- PWBM estimates that the Inflation Reduction Act, as written, would reduce cumulative deficits by $248 billion over the budget window.

- The Act would very slightly increase inflation until 2024 and decrease inflation thereafter. These point estimates are statistically indistinguishable from zero, thereby indicating low confidence that the legislation will have any impact on inflation.

- We project no impact on GDP by 2031 and an increase in GDP of 0.2 percent by 2050. These estimates include the impact of debt and carbon reduction as well as capital and labor supply distortions from rising tax rates.

- As written, the Inflation Reduction Act contains a sunset for the Affordable Care Act (ACA) subsidies provision at the end of 2025. Under an illustrative scenario where that provision was extended indefinitely, the 10-year deficit reduction estimate falls to $89 billion. The impact on GDP remains zero through 2040.

Introduction

On Wednesday July 27th, Senate Democrats released legislative text for the Inflation Reduction Act of 2022 to be passed under FY2022 budget reconciliation instructions. In this brief, PWBM offers a preliminary analysis of the budgetary and macroeconomic effects of the bill.

The Act provides for new spending and tax incentives related to the adoption of clean energy technology, both at the industrial and consumer level. It extends a temporary expansion of Affordable Care Act (ACA) health insurance subsidies for an additional two years. To offset these deficit-increasing initiatives, the bill implements a new minimum tax on large corporations' book income, limits a tax preference for "carried interest" income, and reduces government outlays on prescription drugs through several pricing reforms. The Act also provides for additional IRS funding which PWBM estimates would increase revenue collections in excess of new outlays.

In addition to modeling the effects of the bill as written, we analyze an illustrative scenario in which the temporary extension of ACA subsidies is made permanent. PWBM will provide additional updates as the legislative text evolves over time.

Provision Descriptions and Estimated Budgetary Effects

The Act proposes the following policy changes:

- **Extension of expanded ACA subsidies.** Extends the temporary expansion of Premium Tax Credits through 2025. The expansion, which offers eligibility to households above 400 percent of the poverty line, is scheduled to expire at the end of 2022 under current law.

- **Climate and energy provisions.** Includes tax rebates and credits to lower energy costs for households; tax credits, research, loans, and grants to increase domestic manufacturing capacity for wind turbines, solar panels, batteries, and other essential components of clean energy production and storage; tax credits to reduce carbon emissions; programs to reduce the environmental impact of agriculture; and more.

- **Minimum tax on corporations' book income.** Creates a new 15 percent corporate alternative minimum tax based on the financial statement income of corporations with at least $1 billion in such income. A recent PWBM webinar with Alan Auerbach (Berkeley), Michelle Hanlon (MIT) and Kent Smetters (Wharton) discusses the minimum corporate book income tax in detail, including potential issues with implementation.

- **Carried interest tax reform.** Lengthens the holding period required for managers of certain investment funds to receive preferential tax treatment for a portion of their compensation known as "carried interest". Applies only to taxpayers with income exceeding $400,000.

- **Prescription drug price reforms.** Allows Medicare to negotiate the price of certain prescription drugs; limits Medicare and commercial price growth of certain drugs to inflation; repeals the implementation of a "rebate rule" scheduled to increase drug-related Medicare outlays beginning in 2027; redesigns Medicare Part D benefit formula and caps out-of-pocket costs for beneficiaries. (See a previous PWBM estimate here.)

- **IRS funding.** Appropriates approximately $80 billion over the next decade for IRS enforcement activities including the hiring and training of new auditors, IT systems modernization, and taxpayer services.

Table 1 presents PWBM's estimate of conventional budgetary effects over the 10-year budget window defined in the FY2022 reconciliation instructions. We estimate the Act would reduce cumulative noninterest deficits by $248 billion from FY2022 through FY2031. In the alternative scenario where the ACA subsidies provision is made permanent, the net 10-year deficit reduction number is instead $89 billion.

Table 1. Conventional Budget Estimates of the Inflation Reduction Act, FY2022-2031

Billions of Dollars, Change from Current-Law Baseline

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Provision	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**Budget window**
Extension of expanded ACA subsidies	0.0	-16.9	-23.5	-24.3	-4.9	0.0	0.0	0.0	0.0	0.0	-69.5
Under illustrative permanent extension scenario	*0.0*	*-16.9*	*-23.5*	*-24.3*	*-25.0*	*-26.0*	*-26.9*	*-27.7*	*-28.5*	*-29.6*	*-228.4*
Climate and energy provisions	0.0	-19.7	-35.7	-45.9	-50.9	-48.0	-40.8	-42.9	-43.7	-41.5	-369.0
Minimum tax on book income of certain corporations	0.0	32.5	28.3	23.0	22.0	23.1	27.0	31.3	34.9	38.1	260.2
Carried interest tax reform	0.0	1.3	1.6	1.5	1.4	1.4	1.4	1.5	1.5	1.5	13.1
Prescription drug pricing reforms	0.0	2.1	2.8	16.5	14.1	41.3	43.2	46.7	48.7	51.0	266.4
IRS funding	0.0	-3.4	-0.8	5.6	11.8	16.6	22.4	26.6	31.3	36.5	146.6
Total	**0.0**	**-4.0**	**-27.3**	**-23.6**	**-6.5**	**34.4**	**53.3**	**63.1**	**72.7**	**85.6**	**247.8**
Addendum: Total under illustrative permanent extension scenario	*0.0*	*-4.0*	*-27.3*	*-23.6*	*-26.6*	*8.4*	*26.4*	*35.4*	*44.2*	*56.0*	*88.9*

Estimated Inflationary Effects

PWBM previously provided estimates of the Build Back Better Act (H.R. 5376) on inflation. Estimating the impact of the current Inflation Reduction Act on inflation is challenged by the smaller size of the program's spending and taxes relative to the overall U.S. economy. For these estimates, PWBM uses an "impulse response" model that is standard in economics and subject to its own model limitations. We measure inflation as the Personal Consumption Expenditures (PCE) price index. We estimate that the Inflation Reduction Act will produce a very small increase in inflation for the first few years, up to 0.05 percent points in 2024. We estimate a 0.25 percentage point fall in the PCE price index by the late 2020s. These point estimates, however, are not statistically different than zero, thereby indicating a very low level of confidence that the legislation will have any impact on inflation.

Other Macroeconomic Effects

Table 2 presents PWBM's projections of the long-run macroeconomic effects of the Inflation Reduction Act, as written, including the sunset of ACA subsidies at the end of 2025.

Table 2. Macroeconomic Effects of the Inflation Reduction Act

Percent change from baseline

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Year	GDP	Capital Stock	Hourly Wage	Hours Worked	Government Debt
2031	0.0	0.1	0.1	-0.1	-0.4
2040	0.1	0.3	0.1	-0.1	-4.0
2050	0.2	0.7	0.3	-0.1	-8.4

A decrease in spending on prescription drugs combined with increases in revenues from personal income taxes and business taxes lead to a decrease in government debt, which declines by 8.4 percent by 2050. This decrease in government debt *crowds-in* investment in productive private capital. Nonetheless, this effect is offset by the effects of higher personal and business taxes, which discourage saving and investment. The net result is that private capital increases by 0.3 percent in 2040 and 0.7 percent in 2050. This increase in private capital makes each worker more productive, which is reflected in higher wages. Wages increase by 0.1 and 0.3 percent in 2040 and 2050 respectively.

Each of the spending provisions in the Inflation Reduction Act has different economic effects. For example, the additional ACA subsidy benefits are transfers or payments to households, which reduces the incentive to work. This effect contributes to the 0.1 percent decline in hours worked in 2031, 2040, and 2050. PWBM also accounts for the positive economic effects of programs like infrastructure investment and carbon abatement associated with certain clean energy provisions, as described in a previous brief. These provisions lead to a slight increase in productivity.

Overall, all the provisions taken together lead to an increase in GDP of 0.1 percent in 2040 and 0.2 percent in 2050.

Table 3 offers estimates under an alternative, illustrative scenario wherein the ACA subsidies expansion—scheduled to expire in 2025 under the Act—is extended permanently with no revenue offset. In this scenario, long-run deficits fall relative to baseline, though the degree of reduction is smaller than under the act as written.

Table 3. Macroeconomic Effects Under Illustrative Permanent Extension Scenario

Percent change from baseline

DOWNLOAD DATA

Year	GDP	Capital Stock	Hourly Wage	Hours Worked	Government Debt
2031	0.0	0.1	0.0	-0.1	-0.1
2040	0.0	0.2	0.1	-0.1	-3.2
2050	0.2	0.5	0.2	-0.1	-7.1

Extending the ACA subsidies expansion permanently leads to higher government spending. In this illustrative scenario, higher government spending leads to a smaller decline in government debt, which falls by 7.1 percent by 2050. The effect on investment in private capital is a bit smaller. Private capital increases by 0.2 and 0.5 percent in 2040 and 2050. The increase in private capital, which is smaller than it is under the baseline Inflation Reduction Act, leads to slightly smaller increases in GDP. GDP does not change in 2040 but increases by 0.2 percent in 2050.

Future Work

As noted above, a recent PWBM webinar with Alan Auerbach (Berkeley), Michelle Hanlon (MIT) and Kent Smetters (Wharton) discusses the minimum corporate book income tax in detail, including potential issues with implementation. Except for a brief period following the 1986 Tax Reform Act, a minimum corporate tax based on financial statement income would be novel for the United States. There is also very little international evidence that closely matches the Act and market setting. The economic projections herein are not adjusted for potential changes in the quality of financial statement reporting by impacted corporations and the concomitant potential impact on capital market efficiency and the economy. Future work is needed to examine this issue.

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