

CBO's Estimates of the 2017 Tax Act: Growth and Revenues

September 18, 2025

Presentation at the 40th Annual National Bureau of Economic Research
Tax Policy and the Economy Conference

Phillip L. Swagel
Director

Introduction

The next edition of the Congressional Budget Office's *Budget and Economic Outlook* will reflect the impacts of the 2025 reconciliation act (Public Law 119-21) on the economy, spending, and revenues. That law extends many provisions of the 2017 tax act (Public Law 115-97) that had been scheduled to expire at the end of 2025.

To enhance its future projections, CBO regularly evaluates the accuracy of its past projections. In this presentation, CBO examines the accuracy of its projections from April 2018, which were the first to fully reflect the anticipated impacts of the 2017 tax act, and explores the reasons for differences between those projections and actual outcomes from 2018 to 2024.¹

1. All years referred to in describing revenue projections are federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end. Years referred to in describing economic projections are calendar years.

Revenues in 2018 and 2019

CBO's April 2018 projections of revenues in 2018 and 2019 were remarkably accurate.

Actual federal revenues in 2018 and 2019 were 99.8 percent and 99.2 percent of the amounts that CBO projected. In other words, CBO was very slightly overoptimistic about revenues in the years after enactment of the 2017 tax act, and the agency's revenue projection errors for those years were much smaller than average.

In April 2018, CBO did not anticipate the advent of the global coronavirus pandemic or the policy response, which meant that economic conditions from 2020 on were quite different from what the agency projected.

Revenues in 2020 and Beyond

Revenues fell sharply in 2020, reflecting both the economic disruptions caused by the pandemic and the consequences of legislation enacted in response to it. Revenues in 2020 were 93.0 percent of what CBO had projected in April 2018.

In 2021, revenues began to exceed CBO's April 2018 projections. Differences in 2021, 2023, and 2024 were similar in magnitude to typical projection errors. In 2022, the error was larger, with transitory factors causing revenues to be 122.1 percent of what CBO had projected.

Two important reasons for those strong revenues were high inflation and a surge in immigration, both of which began in 2021. High inflation boosted nominal income and, thus, nominal tax revenues. The immigration surge increased the labor force and, thus, the level of real gross domestic product (GDP).¹

In CBO's assessment, the 2017 tax act did not cause the high inflation or the immigration surge, so CBO does not attribute the increased revenues resulting from those factors to that law.

1. Real GDP is adjusted to remove the effects of inflation.



The Accuracy of CBO's April 2018 Projections

Why Focus on CBO's April 2018 Projections?

The projections in *The Budget and Economic Outlook: 2018 to 2028*, published in April 2018, accounted for the effects of the 2017 tax act, which was enacted in December 2017.¹ Those projections were the first to reflect changes in revenues and outlays and macroeconomic impacts stemming from the tax legislation.

In a similar way, *The Budget and Economic Outlook: 2026 to 2036*, to be published early next year, will reflect the effects of the 2025 reconciliation act as well as other policy developments, such as increases in tariff rates and changes to immigration policies.²

Budget and economic projections made after the passage of major legislation are especially uncertain. CBO carefully tracks subsequent budgetary and economic outcomes to understand how and why they differ from those early projections.

1. Congressional Budget Office, *The Budget and Economic Outlook: 2018 to 2028* (April 2018), www.cbo.gov/publication/53651.
2. For an explanation of how CBO projects budgetary outcomes, see Congressional Budget Office, *CBO Explains How It Develops the Budget Baseline* (April 2023), www.cbo.gov/publication/58916. For details on how administrative and judicial actions are reflected in CBO's projections, see Congressional Budget Office, *CBO Explains How It Incorporates Administrative and Judicial Actions When Updating Its Baseline Projections and Preparing Cost Estimates* (December 2024), www.cbo.gov/publication/60846. For a description of how CBO produces its 10-year economic forecast, see Robert W. Arnold, *How CBO Produces Its 10-Year Economic Forecast*, Working Paper 2018-02 (Congressional Budget Office, February 2018), www.cbo.gov/publication/53537.

How Accurate Were CBO's Economic Projections Following the 2017 Tax Act?

CBO's April 2018 projections incorporated the positive effects of the 2017 tax act on investment and economic growth.¹

The macroeconomic effects incorporated in those projections have been broadly consistent with the findings of recent research on the effects of specific provisions of the 2017 tax act, including work using tax data by Chodorow-Reich and colleagues and Kennedy and colleagues.²

Revisions to underlying economic data showed that nominal GDP in 2017 was higher than was known in April 2018. As a result, CBO's projections of nominal GDP for 2018 and 2019 were too low.³ Real GDP growth was consistent with CBO's projections. In April 2018, CBO projected that real GDP growth over 2018 and 2019 would average 2.8 percent annually. Actual growth over those two years averaged 2.7 percent.

1. Congressional Budget Office, *The Budget and Economic Outlook: 2018 to 2028* (April 2018), Appendix B, www.cbo.gov/publication/53651.
2. Gabriel Chodorow-Reich and others, *Tax Policy and Investment in a Global Economy*, Working Paper 32180 (National Bureau of Economic Research, March 2024), www.nber.org/papers/w32180; Patrick J. Kennedy and others, "The Efficiency-Equity Tradeoff of the Corporate Income Tax: Evidence From the Tax Cuts and Jobs Act" (draft, University of California, Berkeley, March 2024), <https://tinyurl.com/yw6pvcu5>.
3. Congressional Budget Office, "How the 2017 Tax Act Has Affected CBO's GDP and Budget Projections Since January 2017," *CBO Blog* (February 28, 2019), www.cbo.gov/publication/54994.

How Accurate Were CBO's Revenue Projections Following the 2017 Tax Act?

CBO's April 2018 projections for revenues in 2018 and 2019 were slightly overoptimistic but very close to actual values.

- In 2018, actual revenues were \$3,330 billion, or 99.8 percent of CBO's projection of \$3,338 billion.
- In 2019, actual revenues were \$3,463 billion, or 99.2 percent of CBO's projection of \$3,490 billion.

Beginning in 2020, unanticipated events—including the pandemic and legislative responses, higher-than-anticipated inflation, and the surge in immigration—caused budgetary and economic outcomes to differ significantly from what CBO had projected in April 2018.

How Did Revenues Over the 2018–2024 Period Compare to CBO’s Projections?

Billions of dollars

	2018	2019	2020	2021	2022	2023	2024	2018–2024
Actual revenues	3,330	3,463	3,421	4,047	4,897	4,441	4,918	28,518
CBO’s April 2018 revenue projections	3,338	3,490	3,678	3,827	4,012	4,228	4,444	27,015
Difference	-8	-26	-256	221	885	213	474	1,503
Actual revenues relative to CBO’s April 2018 projections (percent)	99.8	99.2	93.0	105.8	122.1	105.0	110.7	105.6

Total revenues over the 2018–2024 period exceeded CBO’s April 2018 projections by \$1.5 trillion (or 5.6 percent). That difference is more than accounted for by higher-than-expected revenues from 2021 on, reflecting high inflation, the immigration surge, and other factors after the pandemic.

Why Were Revenues Over the 2018–2024 Period \$1.5 Trillion Higher Than CBO Projected in April 2018?

Two key factors explain why revenues have exceeded CBO's projections:

- **High inflation** that started in 2021 increased nominal revenues by about \$900 billion relative to CBO's April 2018 projections. CBO did not anticipate that high inflation in 2018 and does not attribute it to the 2017 tax act.
- **Real economic output**, especially from 2022 onward, was also higher than projected, which increased revenues by roughly \$900 billion. The reasons for that greater output include the surge in immigration and fiscal and monetary stimulus provided in the wake of the pandemic.

Other factors had offsetting effects on revenues. Legislation (including COVID-19-related tax relief) reduced revenues by almost \$600 billion. Customs duties from new tariffs increased revenues by about \$250 billion, and a rise in capital gains realizations and changes in Federal Reserve remittances contributed to (but do not fully explain) a spike in revenues in 2022.¹

How Did Higher-Than-Expected Inflation Increase Revenues?

Starting in 2021, nominal income was higher than projected because of the high inflation that began in March 2021. High inflation increases nominal income, which translates into higher revenues—even if the same percentage of income is collected in taxes.

Inflation permanently increases the percentage of income collected in taxes as well. That occurs because certain elements of the tax system, including the child tax credit and calculations for capital gains and depreciation, are not indexed (that is, adjusted) for inflation. As a result, an increase in inflation boosts the effective tax rates on many households and businesses, again causing revenues to be higher than they otherwise would have been.

Inflation has an additional temporary positive effect on the percentage of income collected in taxes. That effect, which was reflected in revenue collections in 2021 and 2022, occurs because adjustments to tax brackets and other elements of the tax system that are indexed are based on the prior year's inflation. Tax liabilities are pushed up until those adjustments capture the more recent rise in inflation.

Why Has Real Output Been Higher Than CBO Projected?

In each year after 2020, real GDP has been higher than CBO projected in April 2018. The reasons for that higher output are not fully understood but include two factors that CBO could not have anticipated in April 2018:

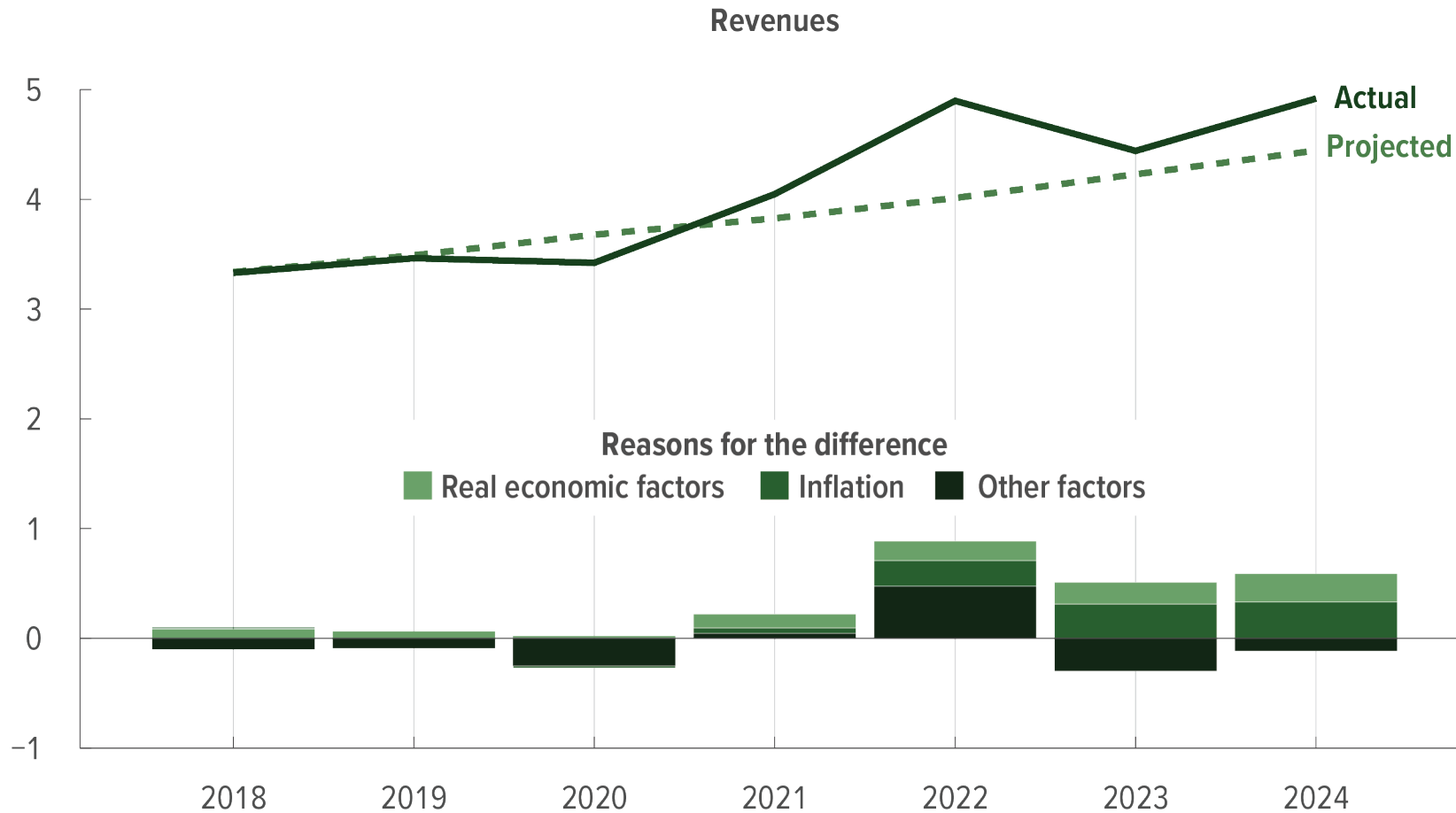
- **The surge in immigration**, which boosted the size of the labor force and, in turn, output.¹ In CBO's estimation, the immigration surge increased real GDP by 0.1 percent in 2021, with that effect increasing to 0.7 percent in 2024. Because income (including wages and salaries and corporate profits) closely tracks total output, those increases generated additional revenues—a total of \$80 billion over the 2021–2024 period.
- **Fiscal and monetary stimulus** in the wake of the pandemic. In 2020, CBO estimated that pandemic-related legislation would increase real GDP by 4.7 percent in 2020, by 3.1 percent in 2021, and by smaller amounts in 2022.²

1. Congressional Budget Office, *Effects of the Immigration Surge on the Federal Budget and the Economy* (July 2024), www.cbo.gov/publication/60165.

2. Congressional Budget Office, *The Effects of Pandemic-Related Legislation on Output* (September 2020), www.cbo.gov/publication/56537. For more information about the effects of monetary stimulus, see *How the Federal Reserve's Quantitative Easing Affects the Federal Budget* (September 2022), www.cbo.gov/publication/57519.

How Much Did Various Factors Contribute to the Differences Between Actual Revenues and CBO's April 2018 Projections?

Trillions of dollars (nominal)



Inflation and real economic factors largely explain why actual revenues since 2021 have exceeded CBO's April 2018 projections.

Other transitory factors, including increased capital gains realizations, were important contributors to the spike in revenues in 2022.



Conclusions

How Accurate Were CBO's Projections of the 2017 Tax Act?

Overall, CBO's estimates of the effects of the 2017 tax act were consistent with observed outcomes in 2018 and 2019. CBO projected with great accuracy both the stronger economic growth resulting from the 2017 tax act and federal tax revenues following the act's enactment.

Higher-than-anticipated inflation and higher-than-projected real output have caused revenues since 2021 to exceed the values CBO projected in April 2018.

The level of real output has exceeded CBO's April 2018 projections in most years. Those differences were especially large after 2021, when the immigration surge markedly increased the size of the U.S. population, expanding the labor force and boosting aggregate demand as the households and the employers of new immigrants increased their spending.

How Will the Effects of the 2025 Reconciliation Act Be Reflected in CBO's Future Work?

The *2026 Budget and Economic Outlook* will incorporate the budgetary and macroeconomic effects of the 2025 reconciliation act. The effects incorporated will build on CBO and the Joint Committee on Taxation's cost estimates and will reflect CBO's updated understanding of how the policy changes are being implemented.¹

That report will reflect all changes in the economy, legislation, and regulations that have occurred since CBO last published its baseline projections in January 2025. As a result, the new baseline projections will reflect the net effects on the economy and budget of the 2025 reconciliation act, increased tariff rates, and lower projected immigration.

1. For the conventional estimate for the enacted version of the bill, see Congressional Budget Office, "Estimated Budgetary Effects of Public Law 119-21, to Provide for Reconciliation Pursuant to Title II of H. Con. Res. 14, Relative to CBO's January Baseline" (July 21, 2025), www.cbo.gov/publication/61570. For dynamic analyses of earlier versions of the act, see Congressional Budget Office, cost estimate for H.R. 1, the One Big Beautiful Bill Act (Dynamic Estimate) (June 17, 2025), www.cbo.gov/publication/61486, and Joint Committee on Taxation, *Macroeconomic Analysis of the Tax Provisions of the Budget Reconciliation Legislative Recommendations Related to Tax as Ordered Reported by the Committee on Ways and Means on May 14, 2025*, JCX-25-25 (May 22, 2025), www.jct.gov/publications/2025/jcx-25-25.

How Will CBO Assess the Accuracy of Its Analysis of the Effects of the 2025 Reconciliation Act?

The projections that CBO publishes in early 2026 will reflect the net effects of the 2025 reconciliation act and several other significant policy developments—some of which will have offsetting effects. For example:

- The reconciliation act will reduce total revenues relative to CBO's January 2025 projections; higher tariff rates will increase total revenues.
- The reconciliation act included provisions that will increase economic output relative to CBO's January 2025 projections; the effects of tariffs and slower population growth will reduce economic output.

In the coming years, CBO will analyze how and why actual spending and revenues differ from its projections. Although it will be challenging to isolate the budgetary and economic effects of the individual policies, CBO will use available data, academic research, and updated information about how policies have been implemented to assess their effects and update its models of the budget and the economy.