HOUSE OF REPRESENTATIVES
119TH CONGRESS—*1st Session*

THE 2025 JOINT ECONOMIC REPORT

R E P O R T

OF THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

ON THE

2025 ECONOMIC REPORT OF THE PRESIDENT

CHAIRMAN'S VIEWS

CHAIRMAN DAVID SCHWEIKERT

MARCH 3, 2025

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LETTER OF TRANSMITTAL

March 3, 2025

HON. MIKE JOHNSON
Speaker, U.S. House of Representatives
Washington, DC

DEAR MR. SPEAKER:

Pursuant to the requirements of the *Employment Act of 1946*, as amended, I hereby transmit the 2025 Joint Economic Report. The analyses and conclusions of this Report are to assist the several Committees of the Congress and its Members as they deal with economic issues and legislation pertaining thereto.

Sincerely,

David Schweikert
Chairman

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119TH CONGRESS
1st Session

HOUSE OF REPRESENTATIVES

REPORT
119–9

THE 2025 JOINT ECONOMIC REPORT

MARCH 3, 2025.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. SCHWEIKERT, from the Joint Economic Committee, submitted the following

R E P O R T

Report of the Joint Economic Committee on the 2025 Economic Report of the President

CHAIRMAN'S VIEWS

"The Joint Economic Committee has been a major force in shaping American economic policy," wrote Senate Historian Richard Baker in 1952. Indeed, as the country struggled to emerge from the economic challenges of the 1970s, which were marked by growing federal deficits, uneven growth, and inflation, the JEC shaped the economic policy that supported American dominance into the next century. The Committee called for tax simplification in the *1980 Joint Economic Report* and developed novel models to assess the effects of supply-side tax policy. Its work was instrumental in gaining support for the 1986 tax reforms.

Four decades later, the United States is again at a critical juncture for American economic policy. The country must again rein in growing federal deficits driven by social spending and

demographics, accelerate growth, and cool inflation. I am honored to have been chosen to be the Committee's Chairman as the country navigates these challenges. The Committee will underscore the destructive nature of increasing debt, propose novel solutions to increase growth and decrease deficits, and explore the role technological innovation and disruption can play in achieving American prosperity. Above all, it will approach its mission with a steadfast commitment to intellectual honesty, for math is neither Democratic nor Republican—it's math.

The United States faces a challenging fiscal picture. In 2024, the U.S. borrowed about 6.4 percent of the size of the economy to finance soaring federal spending—an amount only seen during wars and in the aftermaths of recessions and pandemics. Mandatory programs alone demanded over $4 trillion last year, about double the amount seen just ten years ago. Importantly, revenues have remained within historic levels. It is demographic-driven spending that is shackling our future generations with debt.

These unsustainable spending habits have had a disastrous cumulative effect. In just the past two decades, we have seen an over five-fold increase in publicly held debt, which now stands at over $28.8 trillion, and an increase in intragovernmental borrowing to more than $7.3 trillion. The federal government has now borrowed almost as much as the size of the entire economy, and that figure is only projected to grow in the coming decades. Just servicing that debt cost more in 2024 than did national defense, forcing expenditure of tax dollars with no current or future benefit for the public. The moment demands immediate action to prevent an irreversible fiscal crisis.

The Joint Economic Committee is charged with evaluating recommendations made by the President in the Economic Report

and making recommendations it deems advisable. The 2025 Economic Report of the President (the *Report*) is misguided in its emphasis.

The *Report* reviews the recent rise of remote work and its effects on the economy. It appropriately examines innovation's impact on productivity and labor force participation. However, instead of limiting the analysis of these factors to remote work and relegating them to the periphery, the *Report* should have made them and other determinants of growth its focus. As debt-to-GDP projections continue to climb, increasing growth must be a priority.

The *Report* touts the Global Tax Deal as one way to increase revenue but fails to call it what it is: an investment-killing tax regime that would sidestep national taxing rights and stifle American ingenuity. The best way to stop overseas profit shifting and increase revenue is to make the U.S. the most attractive place in the world to do business.

The *Report's* review of healthcare policy focuses on insurance. Rather than exploring ways to lower healthcare costs through the development of new approaches and technologies, it looks to financing and government control as the answer. Far too often, health policymakers focus on who pays—for an ever-increasing bill—instead of asking, "How do we make healthcare overall cost less?" Even worse, the *Report* neglects the deeply immoral underpinnings of current policy. We have incentivized unhealthy living, and we prioritize government-funded healthcare over prevention in pursuit of a truly healthy society. The fruits of such policies are killing Americans, whose life expectancy has fallen, and our nation's finances.

Unfortunately, the *Report's* approaches to energy and the environment are similarly misguided. It ignores the existing supply-side, regulatory barriers that hinder the development of an efficient all-of-the-above energy strategy. We must prioritize market-based solutions while building a tax code that incentivizes research and development.

The *Report* recognizes the profound long-term impact of access to quality K-12 education on our economy. However, it fails to consider that the acute fiscal situation places severe constraints on federal resources available for that education. As federal spending on education continues to decline relative to GDP, we must address the spending on other programs that divert critical resources away from building tomorrow's workforce. Policymakers should also consider how education should change in response to demographics, particularly a shrinking share of school-aged Americans.

Many recent policies have not only failed to alleviate but exacerbated the problems we face. A different approach is needed. Instead of government directing economic activity and increasing spending, we should look to the private sector's innovations for solutions. Instead of policies that protect incumbents, we should adapt to innovations that would improve lives. The Republican section of the *2025 Joint Economic Report* (the *Response*) delivers its findings and recommendations in five chapters.

Chapter 1, "The U.S. Must Address its Growing Spending," illustrates the urgency of confronting the nation's ballooning fiscal shortfall. At the core of the problem are rising costs in programs most directly related to the country's health and demographic landscape. Longer life expectancies mean about 40 percent of the population will live past the age of 90 by the end of the century.

By the second half of the century, there will be only about two workers per Social Security beneficiary. With modest reforms, a modernizing of the regulatory landscape in healthcare, and a data-driven overhaul to root out waste, fraud, and abuse within the government, we can partially offset these demographic headwinds, reduce inefficiency, and do more with fewer taxpayer dollars. While some solutions like closing tax loopholes may unlock more revenue, reducing outlays and improving efficiency remain the clearest paths to fiscal solvency.

Chapter 2, "The Arrogance of Industrial Policy," examines the return of subsidies, tax incentives, and trade barriers to policy discourse. Using such industrial policy to command outcomes in the economy assumes that "government knows best." This arrogance is harmful to the efficient operation of our economy. Such an approach not only distorts the market but also requires massive amounts of spending by the federal government, with some recent legislation carrying a price tag of more than $1 trillion over ten years. Redistributing dollars from innovative firms to the most politically connected is no way to lead the nation through the 21st century. Instead, we must examine and eliminate the current barriers to production and stop wasteful transfers that create worse outcomes.

Chapter 3, "The Threat of Rising Interest Rate Sensitivity," presents the grave challenges posed by rising interest costs. It reviews the recent history of movements in interest rates, the state of American monetary policy, and the implications for fiscal health. Exorbitant interest costs are the result of a large debt profile, in addition to rising interest rates. Because of the level of our debt, even small increases in interest rates have a significant impact on deficits. Only by correcting course now can we avoid a catastrophic debt spiral.

Chapter 4, "An Update on Obesity Trends," builds on estimates in the *2024 Response* that obesity will result in $8.2 to $9.1 trillion in excess medical expenditures by 2034. The Chapter provides an update to last year's findings with new data and examines the impact of the rise of anti-obesity medications on trends in obesity. Beyond the benefits of curbing immense federal spending, reducing obesity would improve the health and well-being of Americans.

Chapter 5, "The Economics of Skilled and Unskilled Migration," analyzes the disparate economic impacts of low- and high-skilled immigration. The primary driver of our debt is demographics. A critical shortage of projected workers relative to retirees complicates the long-run math. However, not all additions to the labor force have the same fiscal impact: high-skilled immigrants contribute more. The U.S. should not waste the advantage it holds in attracting the most promising individuals to study at our world-class institutions and work in our high-productivity industries. While reform is needed to root out waste, fraud, and abuse in our immigration system, retaining and continuing to welcome talent can boost labor productivity, increase growth, and improve our fiscal situation. However, the recent and unprecedented surge of low-skilled, illegal immigration presents a significant challenge—estimated to cost the federal government over $1 trillion over the migrants' lifetimes. To ensure America remains a global leader in an era of fierce international competition for talent, and to address its dire fiscal outlook, immigration policy must prioritize those who will offer the greatest economic benefits.

Central to these five chapters is a critical point: the prosperity of our nation is on borrowed time. Now, as every dollar that Congress votes on is borrowed, we must exercise the intellectual resolve to

confront the looming fiscal crisis. Stopping excessive spending is necessary to ensure future generations of Americans are not burdened by our current excess. It is time to implement economic policy that cements American prosperity into the next century and beyond.

Chapter 1: The U.S. Must Address its Growing Spending

The Republican Responses in the *2023* and *2024 Joint Economic Reports* (*Responses*) have outlined the framework for putting the United States on a sustainable fiscal path based on research from Olivier Blanchard's presidential address to the American Economic Association.[1] In his research, Blanchard outlines a path to debt stabilization based on four macroeconomic variables:[2]

$$\frac{d}{dt}\left(\frac{Debt_t}{GDP_t}\right) = (i - g - \pi)\frac{Debt_t}{GDP_t} + \frac{p_t}{GDP_t}$$

As this equation implies, if the growth of the economy is larger than its budget deficit, the U.S. can stabilize the debt-to-GDP ratio at current levels. The fiscal situation continues to deteriorate. Policymakers must be pragmatic about growth expectations and address the primary driver of our deficit, which is demographic-driven spending. Alternatively, we can express this equation as:

$$\frac{d}{dt}\left(\frac{Debt_t}{GDP_t}\right) = (\Delta_t - g - \pi)\frac{Debt_t}{GDP_t}$$

Where Δ_t is the rate of growth of the debt. This means that the debt-to-GDP ratio grows at the rate at which the public debt grows minus the rate of nominal GDP growth.[3] Figure 1-1 shows high

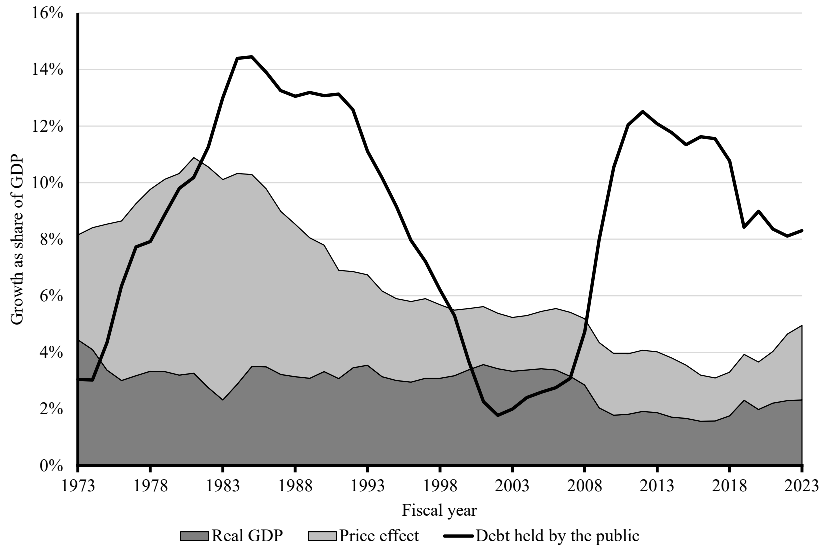
[1] Olivier Blanchard, "Public Debt and Low Interest Rates," *American Economic Review* 109, no. 4 (2019): 1197–1229, https://doi.org/10.1257/aer.109.4.1197.

[2] Where i is the nominal interest rate, g is the real GDP growth rate, π is the change in prices and p_t is the primary deficit. This is derived from the equation on page 1205 of "Public Debt and Low Interest Rates."

[3] Note that this equation requires making some simplifying assumptions. For example, the inclusion of crowding out effects would make g endogenous.

inflation rates, not real GDP growth, have been responsible for slowing the growth of debt relative to GDP.

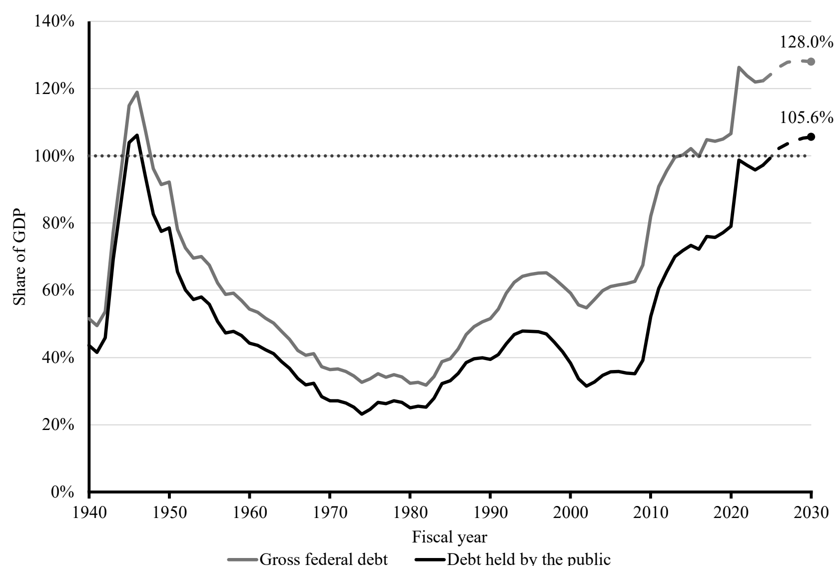
Figure 1-1: Comparing Economic Growth and Public Debt Growth as a Share of GDP



Source: Office of Management and Budget;[4] JEC Republicans calculations

[4] All variables are shown as a 10-year moving average. Office of Management and Budget, "Table 7.1—Federal Debt at the End of Year: 1940–2029," Historical Tables, https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/03/hist07z1_fy2025.xlsx; Office of Management and Budget, "Table 10.1—Gross Domestic Product and Deflators Used in the Historical Tables: 1940–2029," Historical Tables, https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/03/hist10z1_fy2025.xlsx.

Figure 1-2: Federal Debt as a Share of GDP



Source: Office of Management and Budget[5]

The last time the ratio of debt held by the public to GDP exceeded 100 percent was at the end of World War II, when the U.S. borrowed heavily to finance the war. Eighty years later, the U.S. is expected to pass this same threshold during a time of peace and relative economic stability.[6]

Figure 1-3 shows the leading cause of the increase in the projected deficit is not declining revenues, but a dramatic increase in outlays. While the dollar value of discretionary spending has

[5] Projections start in 2024. Office of Management and Budget, "Table 7.1."

[6] A large debt-to-GDP ratio slows down the economy through the crowd-out effect and leads to increased inflation expectations. For more on this, see: Joint Economic Committee Republicans, *2023 Joint Economic Report, Republican Response* (U.S. Congress Joint Economic Committee, 2023), https://sen.gov/LVQYY; Congressional Budget Office, "How the Expiring Individual Income Tax Provisions in the 2017 Tax Act Affect CBO's Economic Forecast," CBO presentation (December 2024), https://www.cbo.gov/publication/60986.

increased over the past decades,[7] it has steadily declined relative to mandatory spending. Most of the increase in outlays arose from automatic increases to existing entitlement programs, most having an outdated design from an era with much different demographics. America is getting older.[8] Social Security and Medicare are the most significant contributors to the increase in spending, which rose from 27 percent of all outlays in 1965 to 60 percent in 2024.[9]

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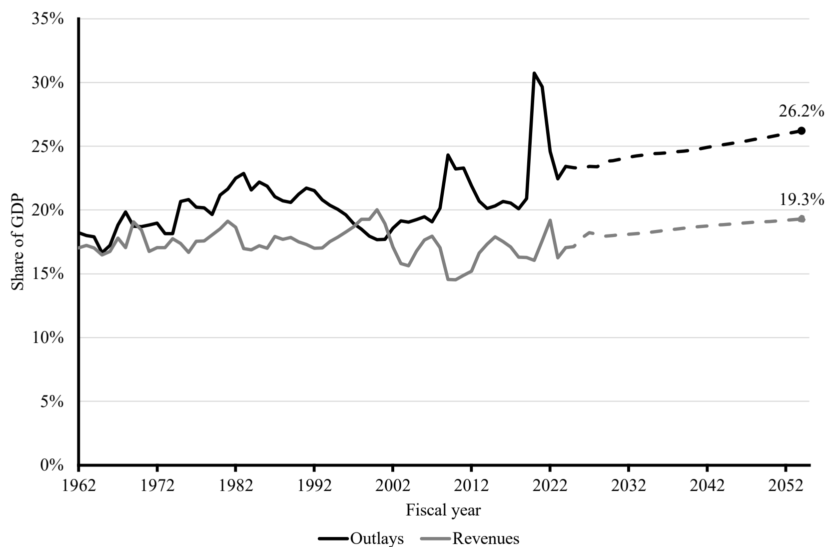
[7] Sometimes disguised as emergency spending when there is no real "emergency." Romina Boccia and Dominik Lett, "Curbing Federal Emergency Spending," Cato Institute Policy Analysis no. 966 (January 9, 2024), https://www.cato.org/policy-analysis/curbing-federal-emergency-spending-government-spending-grows-excessive-wasteful.

[8] For more on this, see: Joint Economic Committee Republicans, "Chapter 2: Demographics and the Deficit," in *The 2024 Joint Economic Report, Republican Response* (U.S. Congress Joint Economic Committee, 2024), https://www.jec.senate.gov/public/vendor/_accounts/JEC-R/jer-chapters/2024JERChapter2.pdf.

[9] Outlays are net of offsetting receipts. Congressional Budget Office, "Historical Data and Economic Projections," Budget and Economic Data, January 2025, https://www.cbo.gov/system/files/2025-01/51134-2025-01-Historical-Budget-Data.xlsx; Congressional Budget Office, "10-Year Budget Projections," Budget and Economic Data, January 2025, https://www.cbo.gov/system/files/2025-01/51118-2025-01-Budget-Projections.xlsx.

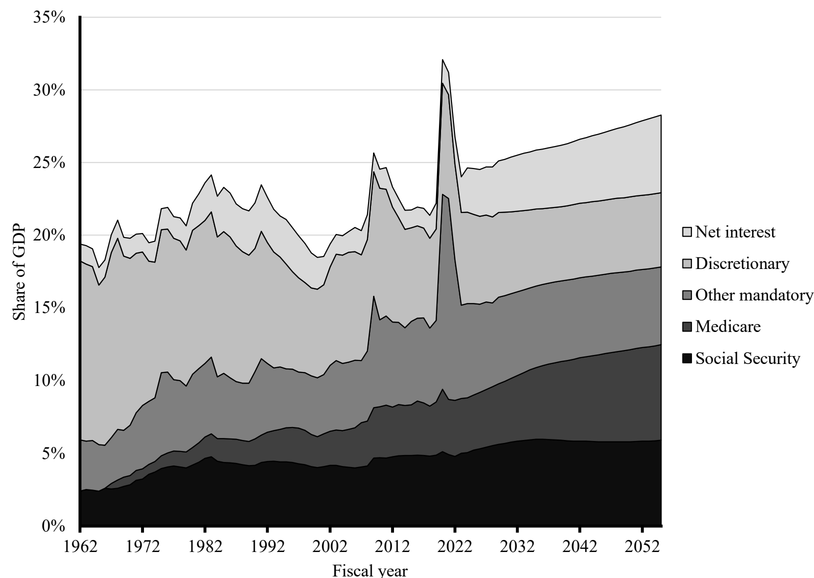
Figure 1-3: Revenues and Outlays as a Share of GDP



Source: Congressional Budget Office[10]

[10] Projections start in 2024. Congressional Budget Office, "Historical Data and Economic Projections," January 2025; Congressional Budget Office, "Long-Term Budget Projections," Budget and Economic Data, January 2025, https://www.cbo.gov/system/files/2025-01/51119-2025-01-LTBO-budget.xlsx.

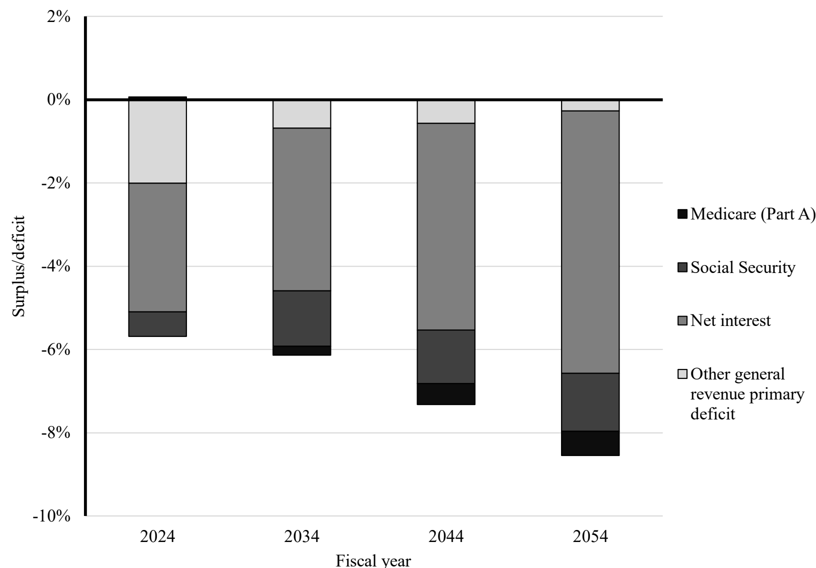
Figure 1-4: Composition of Federal Spending as a Share of GDP



Source: Congressional Budget Office[11]

[11] Projections begin in FY2025. "Other mandatory" and "Medicare" do not include offsetting receipts. Congressional Budget Office, "Historical Data and Economic Projections," January 2025; Congressional Budget Office, "10-Year Budget Projections," January 2025; Congressional Budget Office, "Long-Term Budget Projections," Budget and Economic Data, January 2025, https://www.cbo.gov/system/files/2025-01/51119-2025-01-LTBO-budget.xlsx.

Figure 1-5: Key Drivers of Deficit Growth



Source: Congressional Budget Office[12]

The largest federal program is Social Security, which represents more than one in five dollars spent by the federal government.[13] It is a pay-as-you-go system; the Social Security taxes of current workers pay for the benefits of current retirees, and future workers will pay for current workers' benefits when they retire.[14] In 1960, there were 5.1 workers per beneficiary. That number has dropped

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[12] Medicare only includes Part A. All data are projections from March 2024. Congressional Budget Office, "Long-Term Budget Projections," Budget and Economic Data, March 2024, https://www.cbo.gov/system/files/2024-03/51119-2024-03-LTBO-budget.xlsx.

[13] Fiscal Data, "How much has the U.S. government spent this year?" U.S. Department of the Treasury, accessed February 16, 2025, https://fiscaldata.treasury.gov/americas-finance-guide/federal-spending/.

[14] Payroll tax is not the only source of revenue for the program. A smaller part comes from taxes on benefits and net interest. Social Security Administration, "Table III.A1—Operations of the OASI Trust Fund, Calendar Year 2023," *The 2024 OASDI Trustees Report* (2024), https://www.ssa.gov/oact/tr/2024/III_A_cyoper.html.

to 2.7 and is projected to reach 2.1 in the second half of this century.[15] This change is driven in part by longer life expectancies. The Office of the Chief Actuary at the Social Security Administration (SSA) projects that by the year 2100, more than 70 percent of the population will reach the age of 80 and more than 40 percent will pass the age of 90.[16] Over the past 43 years, the average age of Old Age recipients grew from 63.9 for men and 63.5 for women in 1980 to 65.2 for both genders in 2023.[17] In addition to longer lifespans, declining labor force participation and fertility rates also contribute to Social Security's deteriorating finances.[18]

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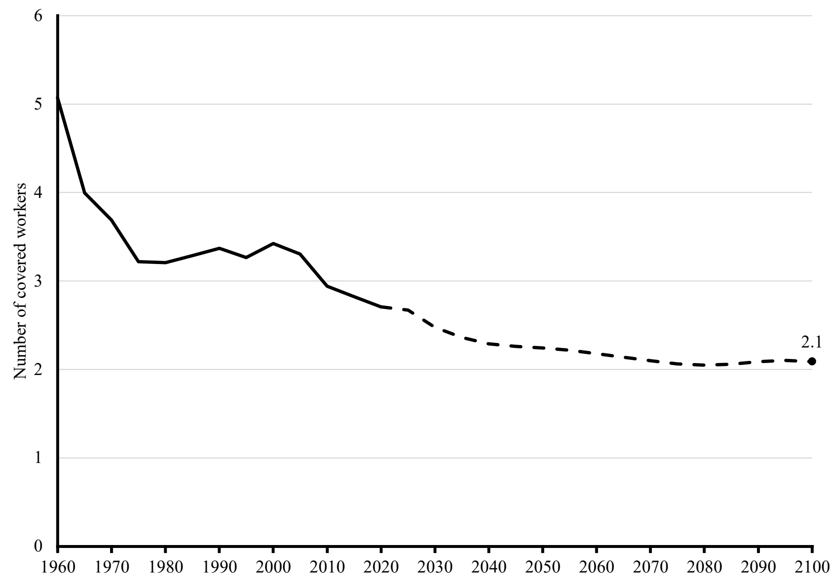
[15] Social Security Administration, "Table IV.B3—Covered Workers and Beneficiaries, Calendar Years 1945-2100," *The 2024 OASDI Trustees Report* (2024), https://www.ssa.gov/oact/tr/2024/IV_B_LRest.html.

[16] Office of the Chief Actuary, "Period Life Tables" (Social Security Administration, 2024), https://www.ssa.gov/oact/HistEst/PerLifeTables/2024/PerLifeTables2024.html.

[17] Social Security Administration, "Table 6.B5—Number and average age of retired-worker awardees, and percentage distribution by age: By sex and year of award action, selected years 1940–2023," *Annual Statistical Supplement to the Social Security Bulletin, 2024*, SAA Publication no. 13-11700 (December 2024), https://www.ssa.gov/policy/docs/statcomps/supplement/2024/6b.pdf.

[18] The program's finances deteriorated despite its tax rate increasing. In 1960, Social Security tax rate was 4.5 percent and now it is 12.4 percent. Joint Economic Committee Republicans, "Chapter 2: Demographics and the Deficit;" Social Security Administration, "Table V.A1—Fertility and Mortality Assumptions, Calendar Years 1940–2100," *The 2024 OASDI Trustees Report* (2024), https://www.ssa.gov/oact/tr/2024/V_A_demo.html; Office of the Chief Actuary, "Social Security & Medicare Tax Rates," Office of the Chief Actuary, https://www.ssa.gov/oact/progdata/taxRates.html.

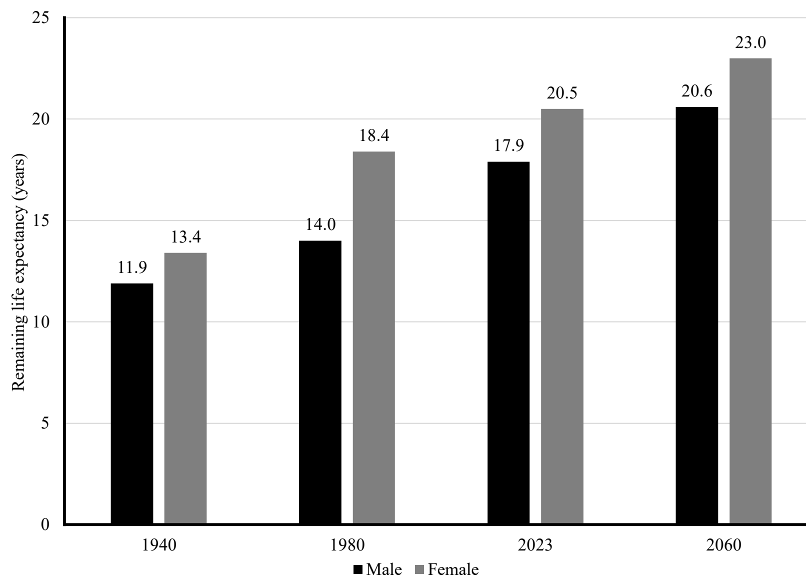
Figure 1-6: Covered Workers per OASDI Beneficiary



Source: Social Security Administration[19]

[19] Data is reported in 5-year intervals. Projections begin in 2025. Social Security Administration, "Table IV.B3."

Figure 1-7: Remaining Life Expectancy at Age 65



Source: Social Security Administration[20]

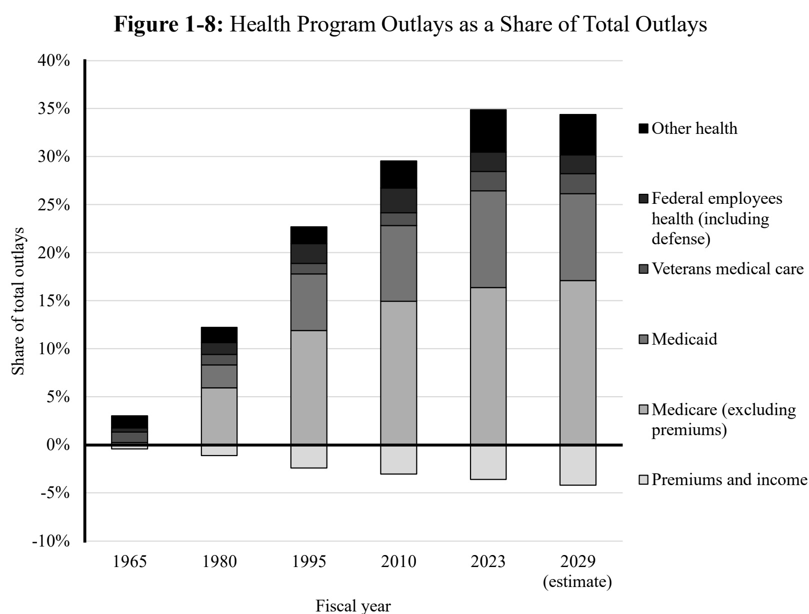
Government spending on healthcare is positively correlated with age and has also risen significantly, rising from 12 percent of all government expenditures in 1980 to almost 35 percent in 2023.[21] The rise in healthcare outlays is associated with a general increase in healthcare spending as a share of GDP, rising from

[20] Using intermediate projections. Social Security Administration, "Table V.A4—Period Life Expectancy," *The 2024 OASDI Trustees Report* (2024), https://www.ssa.gov/oact/tr/2024/V_A_demo.html.

[21] These are gross values, not offsetting for premiums and other receipts. Note that premiums are "hidden" taxes on the elderly and would reach 1.4 percent of GDP by 2054, higher than the projected corporate tax collections. Office of Management and Budget, "Table 15.1—Outlays for Health Programs: 1962–2029," Historical Tables, https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/03/hist15z1_fy2025.xlsx; Congressional Budget Office, "Long-Term Budget Projections," Budget and Economic Data, January 2025, https://www.cbo.gov/system/files/2025-01/51119-2025-01-LTBO-budget.xlsx.

approximately 6 percent in 1969 to 18 percent in 2023.[22] As almost half of all healthcare expenditures are sponsored by a government program, such as Medicare and Medicaid, and close to one in three Americans is covered by at least one type of government insurance,[23] the federal government has borne much of the increase in healthcare costs.

Figure 1-8: Health Program Outlays as a Share of Total Outlays



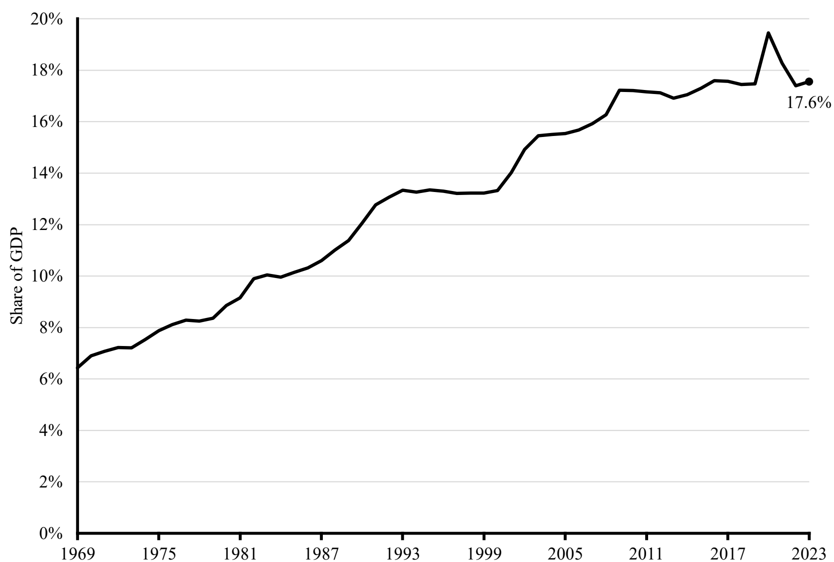
Source: Office of Management and Budget;[24] JEC Republicans calculations

[22] U.S. Centers for Medicare & Medicaid Services, "Table 01: National Health Expenditures; Aggregate and Per Capita Amounts," National Health Expenditure Tables, https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/historical.

[23] U.S. Centers for Medicare & Medicaid Services, "Table 17: Durable Medical Equipment Expenditures," National Health Expenditure Tables, https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/historical.

[24] Office of Management and Budget, "Table 15.1."

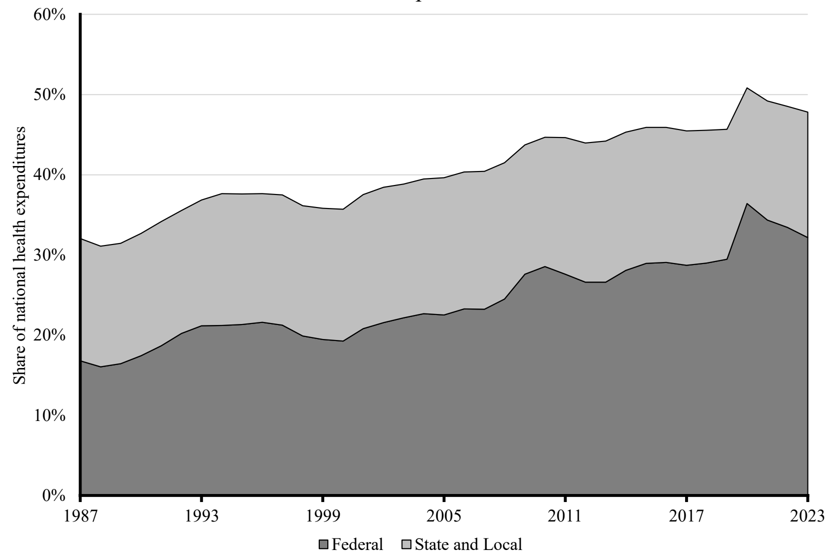
Figure 1-9: National Health Expenditures as a Share of GDP



Source: U.S. Centers for Medicare & Medicaid Services[25]

[25] National health expenditures include personal expenditures, government expenditures, and investment. U.S. Centers for Medicare & Medicaid Services, "Table 01."

Figure 1-10: Government Health Expenditures as a Share of National Health Expenditures



Source: U.S. Centers for Medicare & Medicaid Services[26]

These trends have transformed the federal government from a government primarily focused on national defense—which constituted more than half of on-budget outlays in 1962[27]—to one whose primary function is making payments to individuals, as shown in Figure 1-11.[28] Since 1960, payments to individuals have risen from slightly below 30 percent of primary spending to almost

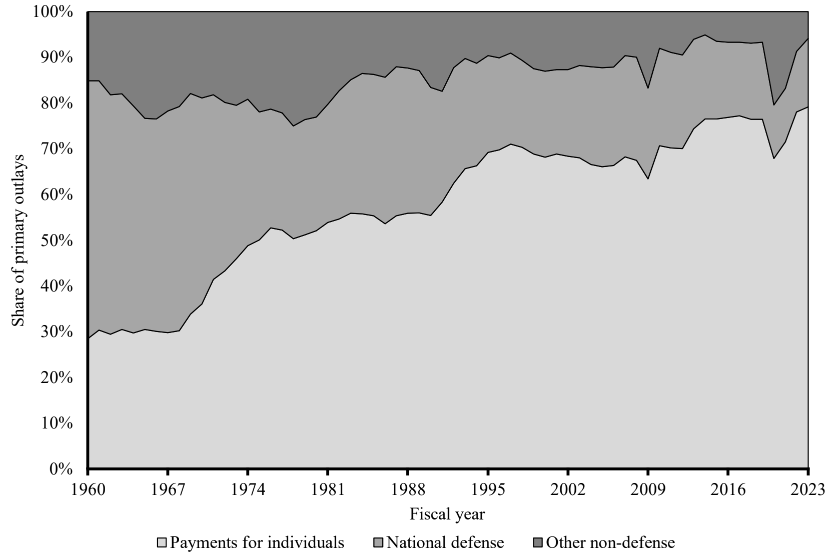
[26] U.S. Centers for Medicare & Medicaid Services, "Table 05: National Health Expenditures by Type of Sponsor," National Health Expenditure Tables, https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/historical.

[27] Office of Management and Budget, "Table 3.2."

[28] An increasing proportion of these payments are going toward older people, reaching, on average, nearly $35,000 per retiree by the time they reach 85. Chris Pope, "The Overextended Retirement State," Manhattan Institute report (August 15, 2024), https://manhattan.institute/article/the-overextended-retirement-state.

80 percent.[29] The country finances these payments with borrowing, robbing future generations to pay for current excess.

Figure 1-11: Composition of Distributed Primary Outlays for Payments

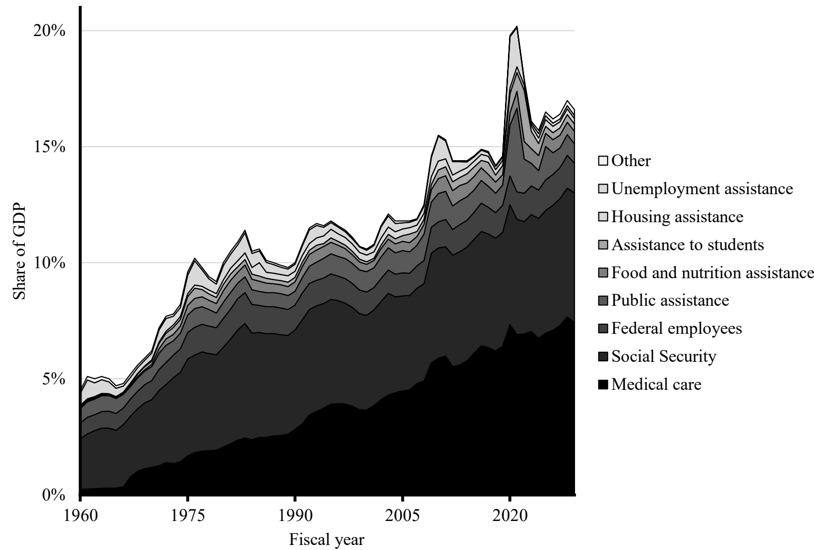


Source: Office of Management and Budget[30]

[29] Office of Management and Budget, "Table 6.1—Composition of Outlays: 1940–2029," Historical Tables, https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/03/hist06z1_fy2025.xlsx.

[30] National defense includes a small amount of grants to state and local governments and direct payments to individuals. Office of Management and Budget, "Table 6.1."

Figure 1-12: Outlays for Payments for Individuals by Category as a Share of GDP



Source: Office of Management and Budget[31]

Options to reduce the deficit

Outlays

Modest reforms to Social Security could provide significant long-run deficit reduction. Social Security was originally designed to protect elderly individuals from poverty.[32] However, according to

[31] Outlays in the legend are sorted smallest-to-largest by their 2024 values. Office of Management and Budget, "Table 11.3—Outlays for Payments for Individuals by Category and Major Program, 1940–2029," Historical Tables, https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/03/hist11z3_fy2025.xlsx.

[32] "We can never insure one hundred percent of the population against one hundred percent of the hazards and vicissitudes of life, but we have tried to frame a law which will give some measure of protection to the average citizen and to his family against the loss of a job and against poverty-ridden old age." Social Security Administration, "Presidential Statement Signing the Social Security Act," August 14, 1935, https://www.ssa.gov/history/fdrsignstate.html.

the Internal Revenue Service (IRS), about one in three tax returns filed by individuals reporting taxable Social Security benefits has overall earnings of $100,000 or more, and almost 2.5 million of those filings report an adjusted gross income above $200,000.[33] Brian Riedl has proposed canceling the Cost-of-Living Adjustment (COLA) or phasing out benefits for high-income retirees to help stabilize the program's finances.[34] Riedl conservatively estimates that canceling upper-income COLAs could save at least $100 billion over a decade.[35] Policymakers should evaluate whether the country should deficit-finance payments to wealthy Americans with future generations paying the bill.[36]

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[33] This is in line with survey reports showing that a large portion of seniors report most of their income as coming from sources other than Social Security paychecks. Internal Revenue Service, "Table 1—Individual Income Tax Returns: Selected Income and Tax Items," SOI tax stats - Individual income tax returns (2022), https://www.irs.gov/pub/irs-soi/22in01pl.xls; Mark J. Warshawsky, "Better Measurement of Income of the Elderly and Its Broader Implications," American Enterprise Institute AEIdeas, November 25, 2024, https://www.aei.org/economics/better-measurement-of-income-of-the-elderly-and-its-broader-implications/.

[34] Attempting to reduce Social Security's deficit by removing the taxable income cap might be counterproductive. Also note that the taxable earnings cap activates at a similar income where the personal income tax jumps from 24 to 32 percent. Since both taxes have a similar base, when also adding the state taxes, some households' marginal tax rate would increase to above 50 percent. U.S. Census Bureau, "2023 ACS 1-Year PUMS," https://data.census.gov/app/mdat/ACSPUMS1Y2023; Brian Riedl, "Cut Spending For The Rich Before Raising Their Taxes," Manhattan Institute report (May 20, 2021), https://manhattan.institute/article/cut-spending-for-the-rich-before-raising-their-taxes; Brian Riedl, "A Comprehensive Federal Budget Plan to Avert a Debt Crisis," Manhattan Institute report (June 27, 2024), https://manhattan.institute/article/a-comprehensive-federal-budget-plan-to-avert-a-debt-crisis-2024.

[35] Riedl, "Cut Spending For The Rich Before Raising Their Taxes."

[36] Elderly poverty can be partially explained for reasons foreign to the program. For more on this, see: Andrew G. Biggs, "Social Security and the Poverty Line," American Enterprise Institute AEIdeas, September 26, 2022,

Relatively minor changes to the nation's healthcare entitlement programs, too, could help reduce deficits. The costs of Medicare and Medicaid are influenced by the overall costs of healthcare. A full analysis of cost-reducing reforms to healthcare markets is beyond the scope of this report. However, excessive bureaucracy and administrative overhead consume far too much of every dollar spent.[37] A 2017 report calculated that complying with regulations had cost almost $39 billion per year—an estimated $1,200 for each patient admitted.[38] Figure 1-13, first published by Joint Economic Committee Republicans in the 111th Congress, shows the complexity of the resulting healthcare system after the passage of the *Affordable Care Act*. Regulatory changes that increase competition and incentivize cost-saving medical technologies could reduce public healthcare costs.

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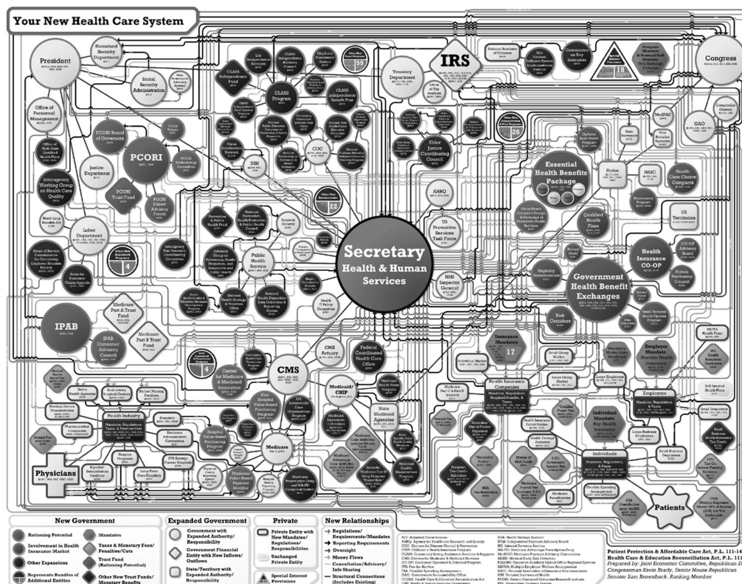
https://www.aei.org/economics/social-security-and-the-poverty-line/; Romina Boccia, "Social Security Pays Excessive Benefits to the Highest-Income Earners: A UK Comparison," *Cato at Liberty*, February 15, 2024, https://www.cato.org/blog/social-security-pays-excessive-benefits-highest-income-earners-uk-comparison.

[37] James C. Capretta, "National Health Expenditures in 2023 and the Implications for Further Reform," American Enterprise Institute AEIdeas, January 10, 2025, https://www.aei.org/health-care/national-health-expenditures-in-2023-and-the-implications-for-further-reform/.

[38] A poorly designed regulatory framework is a significant reason why the U.S. government spends more per covered individual than any other industrialized nation. Robert E. Moffit, "How to End the Overregulation of Medical Care," The Heritage Foundation commentary, August 4, 2020, https://www.heritage.org/health-care-reform/commentary/how-end-the-overregulation-medical-care; Organisation for Economic Co-operation and Development, "Health Spending Projections to 2030," OECD Health Working Paper no. 110 (May 24, 2019), https://doi.org/10.1787/5667f23d-en.

Figure 1-13: The Complexity of the Affordable Care Act



The federal government can also reduce outlays by operating more efficiently. The Government Accountability Office (GAO) has estimated that the federal government loses between $233 billion and $521 billion annually due to fraud.[39] Improper payments accounted for at least $160 billion lost in 2024.[40] Developments in quantitative methods and statistical algorithms could help provide

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[39] U.S. Government Accountability Office, "Fraud Risk Management: 2018–2022 Data Show Federal Government Loses an Estimated $233 Billion to $521 Billion Annually to Fraud, Based on Various Risk Environments," GAO-24-105833 (April 16, 2024), https://www.gao.gov/products/gao-24-105833.

[40] This number excludes fraud, uncaught errors, and programs that do not track improper payment. Rachel Greszler, "How Congress Can Help DOGE Reduce Improper Payments: Hundreds of Billions of Taxpayer Dollars Wasted on Improper Payments," Economic Policy Innovation Center report (February 3, 2025), https://epicforamerica.org/social-programs/how-congress-can-help-doge-reduce-improper-payments/; U.S. Government Accountability Office, "Improper Payments and Fraud: How They Are Related but Different," GAO-24-106608 (December 7, 2023), https://www.gao.gov/products/gao-24-106608.

significant savings by processing more data and in more depth than can human analysts.[41] Akoglu, Leder-Luis, and Shekhar designed an unsupervised machine-learning algorithm to detect Medicare hospitalization fraud, including red flags for fraudulent overpayments.[42] The same mechanism can also be used for other areas of Medicare, Medicaid, and other agencies.[43]

Box 1-1: The Federal Government is in Dire Need of Better Data Management

Waste and fraud in federal programs are partially caused by a deficient data architecture, particularly because the data is siloed across different offices, which is a vulnerability easy to exploit. GAO has repeatedly recommended inter-agency data collaboration to reduce the amount of fraud and improper payments.[44] Access to IRS and SSA data could have prevented the Small Business Administration from transferring pandemic relief funds to fraudulent recipients. GAO estimates around 3.7 million

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[42] Shubhranshu Shekhar, Jetson Leder-Luis, and Leman Akoglu, "Can Machine Learning Target Health Care Fraud? Evidence from Medicare Hospitalizations" (April 9, 2024), https://sites.bu.edu/jetson/files/2024/09/Anomaly_JPAM.pdf.

[43] During the pandemic, the unemployment insurance fraud ranged between $100 billion and $135 billion; Yanlei Ma, Jessica Phelan, Kathleen Yoojin Jeong, et al., "Medicare Advantage Plans With High Numbers Of Veterans: Enrollment, Utilization, And Potential Wasteful Spending," *Health Affairs* 43, no. 11 (November 2024), https://doi.org/10.1377/hlthaff.2024.00302; U.S. Government Accountability Office, "Unemployment Insurance: Estimated Amount of Fraud During Pandemic Likely Between $100 Billion and $135 Billion," GAO-23-106696 (September 12, 2023), https://www.gao.gov/products/gao-23-106696.

[44] U.S. Government Accountability Office, "Countering Illicit Finance and Trade: Better Information Sharing and Collaboration Needed to Combat Trade-Based Money Laundering," GAO-22-447 (December 13, 2021), https://www.gao.gov/products/gao-22-447.

recipients had shown warning signs.[45] Moreover, partially due to poor data management, the federal government has disbursed almost $3 trillion in improper payments since 2003, consisting of overpayments and unknown payments, either by error or fraud.[46]

Furthermore, at the federal level, more than 100 anti-poverty programs across several agencies disburse more than $1.1 trillion annually.[47] Measuring the effectiveness of these programs in fighting poverty has been difficult, but it can now be accomplished more easily with modern data and statistical methods. With the appropriate data architecture,[48] effective welfare programs can be consolidated and streamlined.[49] Simplification will result not only in efficiency, reduced administrative costs, and better fraud detection, but also reduced complexity for beneficiaries.[50]

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[45] U.S. Government Accountability Office, "COVID Relief: Fraud Schemes and Indicators in SBA Pandemic Programs," GAO-23-105331 (May 18, 2023), https://www.gao.gov/products/gao-23-105331.

[46] U.S. Government Accountability Office, "Improper Payments: Information on Agencies' Fiscal Year 2023 Estimates," GAO-24-106927 (March 26, 2024), https://www.gao.gov/products/gao-24-106927.

[47] Michael D. Tanner, "Poverty and Welfare," *Cato Handbook for Policy Makers* 9, no. 77 (2022), https://www.cato.org/sites/cato.org/files/2022-12/cato-handbook-9th-edition-77.pdf.

[48] Including merging longitudinal data across several agencies.

[49] About 20 percent of transfers go to households who pay the same amount in taxes. Judge Glock, "Robbing Peter to Pay Peter: Netting Taxes and Transfers to U.S. Households," Manhattan Institute report (January 18, 2024), https://manhattan.institute/article/netting-taxes-and-transfers-to-u-s-households.

[50] Many people are unaware of many of these programs. For example, according to the FCC only 22 percent of eligible families for their Lifeline program were enrolled in September 2024. Universal Service Administrative Company, "Lifeline Participation Rate," September 2024, https://www.usac.org/wp-content/uploads/lifeline/documents/Data/20241119_SEP2024.xlsx; Elias Ilin and Alvaro Sanchez, "Mitigating Benefits Cliffs for Low-Income Families: District of Columbia Career Mobility Action Plan as a Case Study," Federal Reserve Bank of Atlanta Community and Economic Development

Adopting these quantitative and algorithmic developments is not without challenges. One challenge is setting the same data standards across agencies so that information can be shared seamlessly.[51] Another prevalent issue is privacy concerns, as the increase in the number of offices accessing the same personal information increases the risk of leakage. However, data can be analyzed without transferring it to accessible storage.[52] For example, the algorithm could access and process the data, keeping the output but deleting its cache memory after the process ends.

Modernizing the state's information management to address waste and fraud will not fully resolve the fiscal problem, but it is moral to take steps to reduce the burdens the country will impose on its future generations. In Chapters 4 and 5, we examine how a healthier society and high-skilled immigration provide additional solutions to the fiscal problem.

Receipts

In the *2023* and *2024 Responses*, JEC Republicans extensively analyzed the Biden Administration's tax proposals, debunking

Discussion Paper no. 23-1 (September 2023), https://www.atlantafed.org/-/media/documents/community-development/publications/discussion-papers/2023/01-a-case-study-mitigating-benefits-cliffs-in-the-district-of-columbia.pdf.

[51] For instance, consistency in the formatting of data, meaning of variable names, etc. Natalie R. Ortiz, "Federal Data Management: Issues and Challenges in the Use of Data Standards," Congressional Research Service no. R48053 (April 29, 2024), https://crsreports.congress.gov/product/pdf/R/R48053/2.

[52] There are several ways to preserve privacy, especially when individual information is not important but microdata analysis. The example described in the text is a simple idea. For other techniques, see: P. Ram Mohan Rao, S. Murali Krishna, and A.P. Siva Kumar, "Privacy Preservation Techniques in Big Data Analytics: A Survey," *Journal of Big Data* 5, no. 33 (2018): https://doi.org/10.1186/s40537-018-0141-8.

claims that the American tax system is not progressive enough.[53] There are potential changes to tax policy that would improve the U.S.' fiscal trajectory as measured by changes in debt-to-GDP, but several popular proposals should be taken with caution.

Policymakers should evaluate tax expenditures, such as credits, exclusions, and deductions.[54] There are about 170 tax expenditures,[55] amounting to 7.6 percent of GDP.[56] This is equivalent to almost all personal income tax collections. Reducing tax expenditures would not increase marginal rates and would increase economic efficiency by eliminating distortions.[57] Part of

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[53] Joint Economic Committee Republicans, *The 2024 Joint Economic Report, Republican Response* (U.S. Congress Joint Economic Committee, 2024), https://sen.gov/LVQNL; Joint Economic Committee Republicans, *2023 Republican Response*.

[54] Tax expenditures are defined as "revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability." *Congressional Budget and Impoundment Control Act of 1974*, Public Law 93–344, § 3, https://www.govinfo.gov/content/pkg/COMPS-10356/pdf/COMPS-10356.pdf.

[55] William McBride, "Cleaning Up the Tax Code Could Raise Trillions for Tax Reform," Tax Foundation blog, February 6, 2025, https://taxfoundation.org/blog/tax-credits-expenditures-spending-offset-tax-cuts/; Office of Tax Analysis, "Tax Expenditures," U.S. Department of the Treasury (March 11, 2024), https://home.treasury.gov/system/files/131/Tax-Expenditures-FY2025.pdf.

[56] Note that, in practice, combining provisions might not equal the sum of their values. Congressional Budget Office, *The Budget and Economic Outlook: 2025 to 2035* (January 2025), https://www.cbo.gov/publication/60870.

[57] Martin Feldstein, "The 'Tax Expenditure' Solution for Our National Debt," *The Wall Street Journal*, July 20, 2010, https://scholar.harvard.edu/feldstein/publications/tax-expenditure-solution-our-national-debt.

President Reagan's tax cuts included slashing tax expenditures by about 3 percent of GDP.[58]

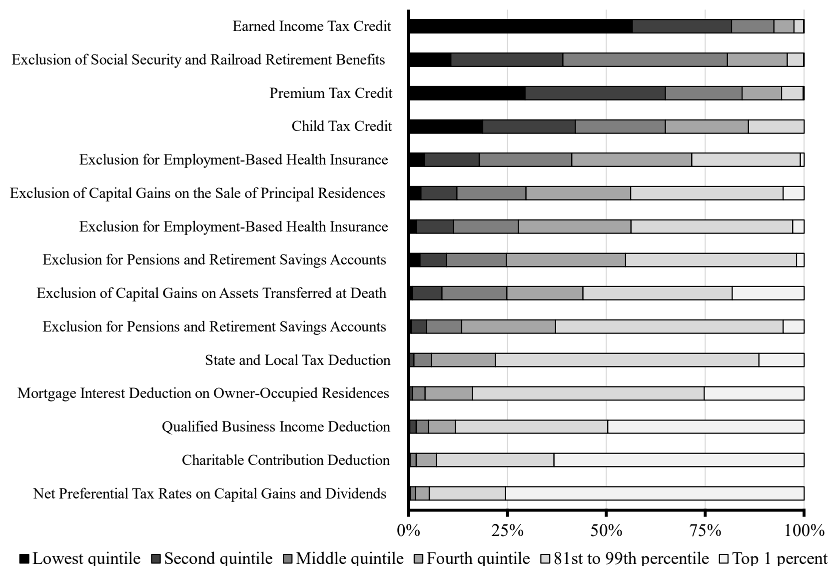
In addition to tax expenditures, there are also loopholes that can be exploited by complex tax schemes. For example, Cooper et al. were unable to link all income of more than 20,000 "circular" partnerships to non-partnership owners.[59] These partnerships represented less than 1 percent of all partnerships but issued about 40 percent of all K-1s, and their effective tax rate was half of that for the remaining partnerships. Eliminating such provisions would close some of these loopholes.[60]

[58] According to Yale's Budget Lab, eliminating the provisions contributing to this gap between statutory and effective rates, particularly for those at the highest end of the income spectrum, could raise $560 billion in 2026. The Budget Lab, "Who Is Paying Their Fair Share of Taxes? A New Analysis and Interactive Tool" (Yale University, September 30, 2024), https://budgetlab.yale.edu/research/who-paying-their-fair-share-taxes-new-analysis-and-interactive-tool; Feldstein, "The 'Tax Expenditure' Solution for Our National Debt."

[59] Michael Cooper, John McClelland, James Pearce, et al., "Business in the United States: Who Owns it and How Much Tax Do They Pay?" NBER Working Paper no. 21651 (October 2015), https://doi.org/10.3386/w21651.

[60] Chris Edwards, Romina Boccia, and Tom Schatz, "Cut Corporate Taxes and Corporate Welfare," Cato Institute commentary, February 3, 2017, https://www.cato.org/commentary/cut-corporate-taxes-corporate-welfare.

Figure 1-14: Share of Major Tax Expenditures by Income



Source: Congressional Budget Office[61]

Eliminating special interest tax credits and loopholes provide one solution to paying for a pro-growth tax code.[62] While the *2023* and *2024 Responses* analyzed the negative effects of the tax proposals made by the White House, JEC Republicans have not yet examined two proposals that have been part of public tax policy discussions over the past few years. These are the Value-Added Tax (VAT) and the Border Adjustment Tax (BAT).

In a VAT system, each step of the supply chain pays the tax on the added value of the product, but the consumer ultimately pays the

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[61] Congressional Budget Office, *The Distribution of Major Tax Expenditures in 2019*, CBO report (October 27, 2021), Table 2, https://www.cbo.gov/publication/57413.

[62] Adam N. Michel, "Slashing Tax Rates and Cutting Loopholes," Cato Institute Policy Analysis no. 975 (June 17, 2024), https://www.cato.org/policy-analysis/slashing-tax-rates-cutting-loopholes.

full tax.[63] The main argument of its proponents is its potential as a source of revenue. It is the largest source of revenue for European countries.[64] According to CBO, a 5 percent VAT can reduce the deficit by 1.1 percent of GDP.[65] Yale's Budget Lab estimated that a 10 percent VAT would raise slightly less than 3 percent of GDP. However, they also estimated that it would result in a loss of income of 4 to 6 percent across all quintiles.[66] The VAT is also a regressive tax that represents a tax increase on all households.[67] Additionally, there are high administrative costs associated with the tax, requiring record keeping in every stage of the supply chain.[68] Finally, its effects would be uncertain since it would compound with the existing sales tax.

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[63] Donald J. Marples, "Consumption Taxes: An Overview," Congressional Research Service no. R44342 (January 24, 2023), https://crsreports.congress.gov/product/pdf/R/R44342.

[64] Tax Foundation, "Value-Added Tax (VAT)," https://taxfoundation.org/taxedu/glossary/value-added-tax-vat/.

[65] Most European countries have rates above 20 percent. Congressional Budget Office, "Impose a 5 Percent Value-Added Tax," in *Options for Reducing the Deficit: 2025 to 2034*, CBO report (December 12, 2024), https://www.cbo.gov/budget-options/60961.

[66] The Budget Lab, "Modeling the Revenue and Distributional Implications of a Value Added Tax" (Yale University, June 25, 2024), https://budgetlab.yale.edu/research/modeling-revenue-and-distributional-implications-value-added-tax.

[67] Thomas Blanchet, Lucas Chancel, and Amory Gethin, "Why Is Europe More Equal than the United States?" *American Economic Journal: Applied Economics* 14, no. 4 (2022): 480–518, p. 504, https://doi.org/10.1257/app.20200703.

[68] Fraud is not a small issue in several countries using VAT. Also, estimates suggest that administrative and compliance costs could amount to 0.44 percent of GDP. Stephen C. Smith and Michael Keen, "VAT Fraud and Evasion: What Do We Know, and What Can be Done?" IMF Working Paper no. 2007/031 (February 1, 2007), https://www.imf.org/en/Publications/WP/Issues/2016/12/31/VAT-Fraud-and-Evasion-What-Do-We-Know-and-What-Can-be-Done-20215; Randall G. Holcombe, "The Value Added Tax: Too Costly For The United States," Mercatus Center (September 2010), https://www.mercatus.org/sites/default/files/d7/publication/vat.special_study._holcombe.pdf.

Since this form of tax would likely be an effective source of revenue, the ease of raising receipts by a large amount from small increases in the tax rate would provide a temptation for policymakers.[69] In 2009, President Obama proposed cap-and-trade fees on greenhouse gas emissions to reduce the deficit, a tax similar to a VAT. Before even being implemented, the proposed revenue was allocated to new spending programs.[70] Because of the broad-based income loss and distributional effects, a VAT should be avoided.

Another proposed form of tax that should be approached with caution is the Border Adjustment Tax (BAT), which is a destination-based cash-flow tax, as opposed to the current system, which is origin-based.[71] Under a BAT, all goods and services sold domestically are taxed, while exports and profits overseas are not,[72] meaning that multinational companies lose the ability to shift their profits abroad.[73] This would result in either American corporations repatriating some of their subsidiaries or eliminating

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[69] Daniel J. Mitchell, "No to the Value-Added Tax," Cato Institute commentary, November 13, 2015, https://www.cato.org/commentary/no-value-added-tax.

[70] Veronique de Rugy, "The Wrong Policy at the Wrong Time," *Reason*, March 4, 2010, https://reason.com/2010/03/04/vat/.

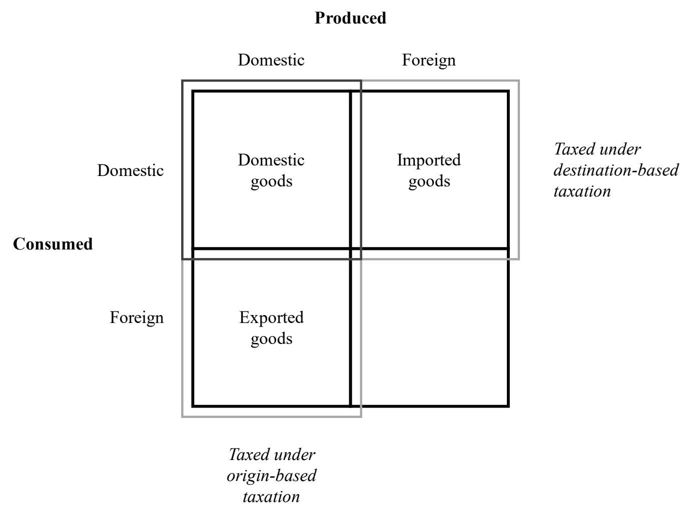
[71] There is no unique way to apply this tax. In 2016, a BAT on corporate income was proposed.

[72] Kyle Pomerleau, "Understanding the House GOP's Border Adjustment," Tax Foundation (February 15, 2017), https://taxfoundation.org/research/all/federal/understanding-house-gop-border-adjustment/.

[73] Some believe that because of this, BAT would increase progressivity. For a more thorough description of profit shifting and the possible consequences of its elimination to investment, see the *2023* and *2024 Responses*. Kyle Pomerleau, "What is the Distributional Impact of a Destination-Based Cash-Flow Tax?" Tax Foundation blog, January 18, 2017, https://taxfoundation.org/blog/what-distributional-impact-destination-based-cash-flow-tax/.

the practice of transfer-price manipulation.[74] Since imports are subject to the tax, the BAT offers an alternative approach to tariffs, with some of the same effects.

Figure 1-15: Incidence of a Border Adjustment Tax



There are several downsides to the BAT. There is limited empirical evidence on the consequences of a BAT, and there are disagreements on whether it would increase or decrease tax

[74] For example, a company exports to a foreign subsidiary in a low-tax country for a smaller (transfer) price and imports from that subsidiary at an inflated (transfer) price. Gary Clyde Hufbauer and Zhiyao (Lucy) Lu, "Border Tax Adjustments: Assessing Risks and Rewards," Peterson Institute for International Economics Policy Brief no. PB 17-3 (January 2017), https://www.piie.com/sites/default/files/documents/pb17-3.pdf; Alan J. Auerbach and Douglas Holtz-Eakin, "The Role of Border Adjustments in International Taxation," American Action Forum (November 30, 2016), https://www.americanactionforum.org/research/14344/.

revenue.[75] Economic theory predicts that the exchange rate should adjust to compensate for the change in relative prices, making this tax trade-neutral. However, a significant number of economists are skeptical that the exchange rate would adjust fully, or at least do so immediately.[76] The corporate BAT is only trade-neutral under very special circumstances and otherwise would lead to a drop in both exports and imports.[77] This is because of two reasons. First, exchange rate markets are dominated by vast portfolio flows that outweigh trade flows.[78] Second, only half of the world's GDP employs floating exchange rates, including the U.S.' 15 percent, which limits the degree of dollar appreciation in real terms.[79] Sectors with high levels of imports are particularly exposed to imperfect appreciations of the dollar, which will create an

[75] Grant A. Driessen and Mark P. Keightley, "Border-Adjusted Consumption Taxes and Exchange Rate Movements: Theory and Evidence," Congressional Research Service no. R44821 (April 18, 2017), https://crsreports.congress.gov/product/pdf/R/R44821.

[76] Adam N. Michel, "Reviewing the Case Against a Border-Adjusted Corporate Income Tax," *Cato at Liberty*, October 17, 2024, https://www.cato.org/blog/reviewing-case-against-border-adjusted-corporate-income-tax; Jason J. Fichtner, Veronique de Rugy, and Adam N. Michel, "Border Adjustment Tax: What We Know (Not Much) and What We Don't (All the Rest)," Mercatus Center Policy Brief (February 23, 2017), https://www.mercatus.org/research/policy-briefs/border-adjustment-tax.

[77] Omar Barbiero, Emmanuel Farhi, Gita Gopinath, and Oleg Itskhoki, "The Macroeconomics of Border Taxes," *NBER Macroeconomics Annual* 33 (2018): 395–457, https://www.jstor.org/stable/26860124.

[78] Jason Furman, "Destination Basis with Border Adjustment as Tax Policy and as Macroeconomic Policy," Peterson Institute for International Economics commentary (April 2017), https://www.piie.com/commentary/speeches-papers/destination-basis-border-adjustment-tax-policy-and-macroeconomic-policy.

[79] Michael Cembalest, "A mercifully brief note on destination based taxation," J.P. Morgan Eye on the Market (December 20, 2016), https://privatebank.jpmorgan.com/content/dam/jpm-wm-aem/global/pb/en/insights/eye-on-the-market/eotm-dbtcf.pdf.

incentive for rent-seeking.[80] Moreover, appreciation of the dollar can have very negative consequences for some individuals. About 85 percent of U.S. foreign liabilities are dollar-denominated, but only 30 percent of U.S. foreign assets are. The net loss would amount to about $2.5 trillion, or almost $8,000 per American.[81] The possible negative consequences associated with implementing the BAT are not limited to the ones listed above.[82]

Nevertheless, focusing on taxes to fix the spending problem is the incorrect approach. It is outlays that have been growing, while receipts have remained fairly stable.[83] Moreover, as discussed in the *2024 Response*, there is ample evidence that fiscal consolidation through spending cuts is more effective and will

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[80] Furman, "Destination Basis with Border Adjustment as Tax Policy and as Macroeconomic Policy;" Fichtner, de Rugy, and Michel, "Border Adjustment Tax."

[81] Stan A. Veuger, "Adjusting to the Border Adjustment Tax: Imperfections and Unintended Consequences," Mercatus on Policy (March 2017), https://www.mercatus.org/system/files/veuger-bat-consequences-mop-v1.pdf; Stan Veuger, "How Border Adjustment Reduces the Value of Your Scottish Golf Course," American Enterprise Institute AEIdeas, January 10, 2017, https://www.aei.org/economics/how-border-adjustment-reduces-the-value-of-your-scottish-golf-course/; Emmanuel Farhi, Gita Gopinath, and Oleg Itskhoki, "Trump's Tax Plan and the Dollar," *Project Syndicate*, January 3, 2017, https://www.project-syndicate.org/commentary/trump-tax-plan-hurts-competitiveness-by-emmanuel-farhi-et-al-2017-01.

[82] It could lead to an increase in prices, difficulties in implementing credits to exporters, and non-compliance with WTO, among others. For more on this, see: Institute on Taxation and Economic Policy, "Regressive and Loophole-Ridden: Issues with the House GOP Border Adjustment Tax Proposal," ITEP report (February 22, 2017), https://itep.org/regressive-and-loophole-ridden-issues-with-the-house-gop-border-adjustment-tax-proposal/; William G. Gale, "A quick guide to the 'border adjustments' tax," Brookings Institution commentary, February 7, 2017, https://www.brookings.edu/articles/a-quick-guide-to-the-border-adjustments-tax/; Pomerleau, "Understanding the House GOP's Border Adjustment;" Hufbauer and Lu, "Border Tax Adjustments."

[83] For a short literature review regarding the benefits of spending side fiscal consolidation, see the *2024 Response*.

lead to higher long-term growth than through tax increases.[84] Chapter 2 of the *2025 Response* evaluates the shortcomings of trying to direct the business sector through public spending.

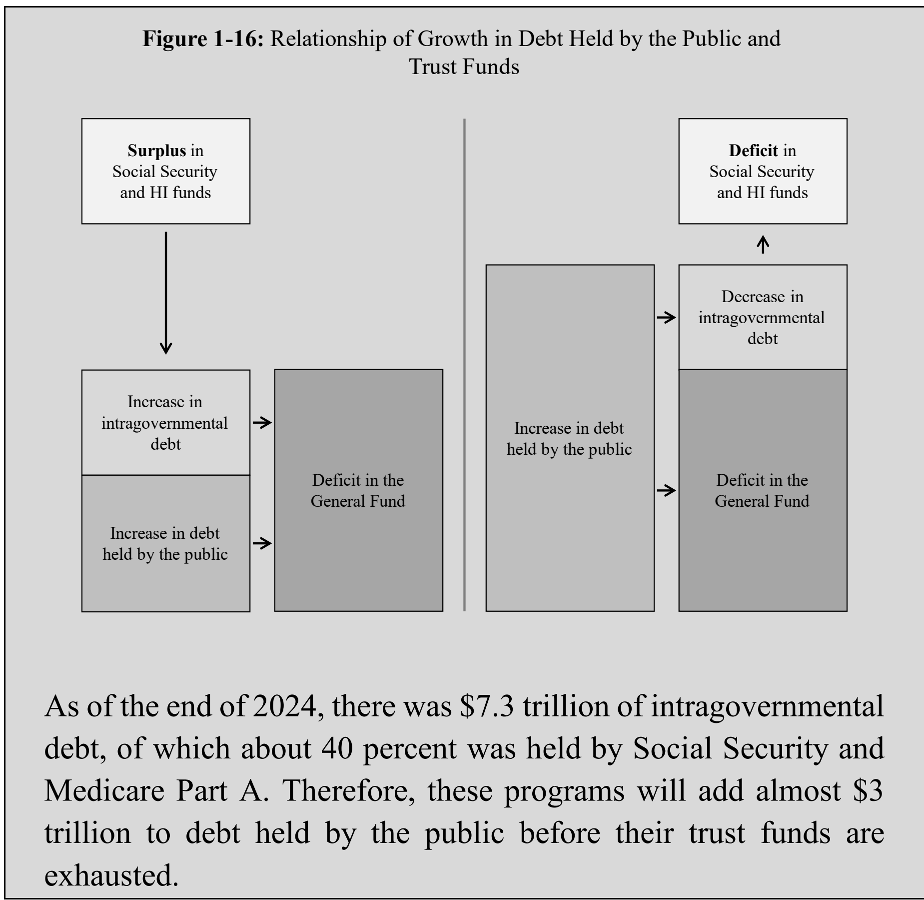
Box 1-2: The Social Security Trust Fund is Commonly Misperceived

Over the past decades, Social Security and Medicare Part A have been accumulating surpluses in their respective trust funds. These trust funds are not stored in a vault or invested in high-yield markets, rather in non-marketable government bonds that were used to finance past deficits for the rest of the federal government.[85] Therefore, debt held by the public grew at a slower pace than the deficit accumulation over the same period would have predicted. Now, as these mandatory programs are also in a deficit, a reduction of their trust funds, part of intragovernmental debt, results in additional debt held by the public.

[84] Veronique de Rugy and Jack Salmon, "Flattening the Debt Curve: Empirical Lessons for Fiscal Consolidation," Mercatus Center (July 22, 2020), https://www.mercatus.org/research/research-papers/flattening-debt-curve-empirical-lessons-fiscal-consolidation.

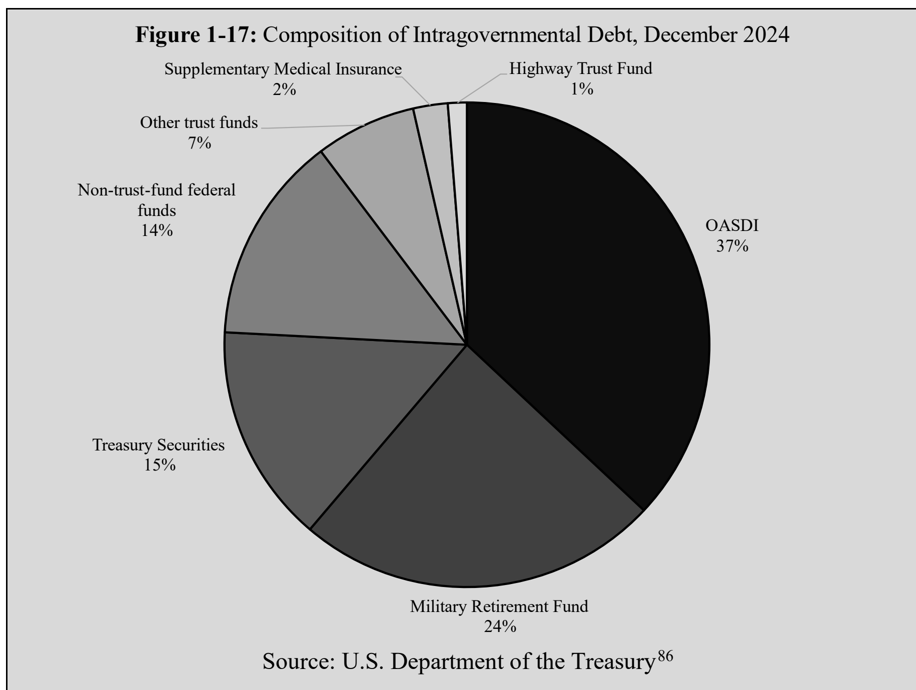
[85] It is important to remember that programs like Social Security are a pay-as-you-go system, closer to a Ponzi scheme than a retirement savings program. Romina Boccia, "Social Security Is a Legal Ponzi Scheme," *Cato at Liberty*, October 23, 2024, https://www.cato.org/blog/truth-about-social-security-legal-ponzi-scheme.

Figure 1-16: Relationship of Growth in Debt Held by the Public and Trust Funds



As of the end of 2024, there was $7.3 trillion of intragovernmental debt, of which about 40 percent was held by Social Security and Medicare Part A. Therefore, these programs will add almost $3 trillion to debt held by the public before their trust funds are exhausted.

Figure 1-17: Composition of Intragovernmental Debt, December 2024



Source: U.S. Department of the Treasury[86]

[86] Bureau of the Fiscal Service, "Table 6. Schedule D—Investments of Federal Government Accounts in Federal Securities, December 2024 and Other Periods," *Monthly Treasury Statement* (U.S. Department of the Treasury, December 2024), https://fiscaldata.treasury.gov/static-data/published-reports/mts/MonthlyTreasuryStatement_202412.pdf.

CHAPTER 2: THE ARROGANCE OF INDUSTRIAL POLICY

In recent years, subsidy-driven industrial welfare policy has returned. In the policy discourse in Washington, D.C., and in capitals around the world, industrial policy has grown in its prominence.[87] Industrial policy is the use of government resources through means such as subsidies, tax incentives, tariff and non-tariff trade barriers, and tailored regulations to reshape the economy in an effort to achieve economic, social, or political goals.[88] The policy shift likely started and was accelerated because of the perceived decline in manufacturing and the subsequent socioeconomic consequences.[89] Policymakers' concerns over climate change, the resilience and independence of supply chains for essential goods during and following the COVID-19

[87] Project Syndicate, "Industrial Policy Is Back," Big Picture, September 28, 2023, https://www.project-syndicate.org/onpoint/industrial-policy-is-back.

[88] Anna Ilyina, Ceyla Pazarbasioglu, and Michele Ruta, "Industrial Policy is Back But the Bar to Get it Right Is High," International Monetary Fund blog, April 12, 2024, https://www.imf.org/en/Blogs/Articles/2024/04/12/industrial-policy-is-back-but-the-bar-to-get-it-right-is-high; Gary Clyde Hufbauer and Euijin Jung, "Scoring 50 Years of US Industrial Policy, 1970–2020," Peterson Institute for International Economics Briefing no. 21-5 (November 2021), https://www.piie.com/sites/default/files/documents/piieb21-5.pdf.

[89] Research suggests that manufacturing employment declined largely because of automation, which increased productivity. The net consequence is continued growth in output with fewer workers. NCCI Insights, "The Impact of Automation on Employment—Part 1," October 10, 2017, https://www.ncci.com/Articles/Pages/II_Insights_QEB_Impact-Automation-Employment-Q2-2017-Part1.aspx; Aurelia Glass and David Madland, "Communities That Lost Manufacturing Jobs Are Main Beneficiaries of Biden Administration's New Industrial Policy," Center for American Progress, March 6, 2024, https://www.americanprogress.org/article/communities-that-lost-manufacturing-jobs-are-main-beneficiaries-of-biden-administrations-new-industrial-policy/.

pandemic, and national security related to China likely also played a part.[90]

Implementing industrial policy raises several significant problems, though the sentiments that led to its revival are not new. In the 1940s, the war economy led most economists to believe that the government was able to micromanage the economy.[91] As a response, Friedrich Hayek published *The Road to Serfdom* and several other articles stating that central planning would lead to tyranny. He also asserted that central planners—analogous to those enacting industrial policy—could never acquire all the preferences and economic factors faced by the collective mass of individuals with their own unique circumstances. There is a "division of knowledge" in the economy.[92] Attempting to centrally plan all economic decisions necessarily results in an inefficient and suboptimal allocation of resources, since this knowledge exists as dispersed bits of incomplete and frequently contradictory knowledge which only separate individuals

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[90] It is worth noting that each party pursues a different goal with their industrial policy plans. Réka Juhász, Nathan J. Lane, and Dani Rodrik, "The New Economics of Industrial Policy," NBER Working Paper no. 31538 (August 2023), https://doi.org/10.3386/w31538; Naveen Siddiqui and Andrew Lautz, "Industrial Policy: Path to U.S. Competitiveness or Pitfall?" Bipartisan Policy Center, October 3, 2023, https://bipartisanpolicy.org/blog/industrial-policy-path-to-u-s-competitiveness-or-pitfall/.

[91] The prevailing economic thought of the 1940s and Hayek's response are very well explained in the introductions by Bruce Caldwell and the author's prefaces in: F.A. Hayek, *The Road to Serfdom: Text and Documents—The Definitive Edition* (London and Chicago, IL: Routledge and The University of Chicago Press, 2007).

[92] Gerald P. O'Driscoll Jr., "Monetary Policy and the Knowledge Problem," *Cato Journal* 36, no. 2 (Spring/Summer 2016): 337–352, https://www.cato.org/sites/cato.org/files/serials/files/cato-journal/2016/5/cj-v36n2-9.pdf.

possess.[93] Only individuals know the relative importance of resources and their best use for them.[94]

The foremost problem with industrial policy is that the government fails to have the information necessary to make large-scale resource allocation decisions. It almost always fails to anticipate where demand and technological innovation will be in the future, and how the market will react to shocks. This is because the economy is made up of millions of individual decision makers. The mismatch between plans and reality results in lost efficiency for public resources. The private sector in a free-market system, on the other hand, decentralizes information through the price mechanism. Prices respond to changes in supply and demand for a given product. The millions of transactions that occur and the information conveyed by the price signal do not make their way to government decision makers. However, industrial policy is not necessarily always to be avoided. There may be circumstances, such as the lack of a price mechanism, market failures, or strategic concerns regarding specific commodities, that warrant the implementation of industrial policy, or at least its consideration. But outside of specific circumstances, limited intervention in the economy produces better net outcomes. Research suggests that subsidies to high-innovation incumbent firms can reduce innovation.[95]

In addition to the knowledge problem, there are several more pitfalls to central planning and industrial policy. First, there can be

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[93] F. A. Hayek, "The Use of Knowledge in Society," *American Economic Review* 35, no. 4 (1945): 519–30, https://doi.org/10.1142/9789812701275_0025.

[94] Hayek, "The Use of Knowledge in Society."

[95] Larry D. Qiu, Xu Wei, Mohan Zhou, and Yi Zhou, "Resource, Competition, and the Equilibrium Effects of Innovation Subsidies," *Journal of Economic Behavior & Organization* 224 (2024): 297–322, https://doi.org/10.1016/j.jebo.2024.05.013.

massive fiscal costs to industrial policy, with some recent legislation estimated to cost more than $1 trillion over ten years,[96] on top of existing policy that will likely reach nearly $100 billion per year.[97] This distortionary spending reduces the availability of private capital for unsubsidized projects.[98] Second, arbitrary disbursement of funds creates incentives for crony capitalism, with lobbyists pursuing privileges for their clients, and government officials providing the greatest benefits to the most politically connected entities.[99] Public resources being used to advantage government-favored industries reduces aggregate welfare.[100] Fourth, subsidies can cause foreign countries to reactively subsidize their native industries, creating a subsidy war that can dramatically distort economic outcomes.[101] Fifth,

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[96] Travis Fisher and Joshua Loucks, "The Inflation Reduction Act after Two Years: Spending Estimates Reach New Heights, but Green New Deal Supporters Want More," *Cato at Liberty*, August 16, 2024, https://www.cato.org/blog/inflation-reduction-act-after-two-years-spending-estimates-reach-new-heights-green-new-deal.

[97] Hufbauer and Jung, "Scoring 50 Years of US Industrial Policy, 1970–2020."

[98] New subsidies are paid with additional public debt, partially financed with private capital. For more on the crowding-out effect, see: Congressional Budget Office, "CBO's Policy Growth Model," CBO presentation (April 29, 2021), https://www.cbo.gov/publication/57017.

[99] Adam Thierer, "Regulatory Capture: What the Experts Have Found," Mercatus Center expert commentary, July 19, 2010, https://www.mercatus.org/economic-insights/expert-commentary/regulatory-capture-what-experts-have-found.

[100] Especially when profits are burdened with high taxes. It is easy to see, from a theoretical perspective, that a system where companies profit more from government transfers than from business operations would lead to less innovation and would be detrimental to consumers.

[101] "Mark" Min Seong Kim, "Chip Security: Reconciling Industrial Subsidies with WTO Rules and National Security Exception," *Harvard Law School National Security Journal* (January 12, 2025), https://harvardnsj.org/2025/01/12/chip-security-reconciling-industrial-subsidies-with-wto-rules-and-national-security-exception/; Elizabeth van Heuvelen, "Subsidy Wars," IMF Finance & Development Magazine, June 2023, https://www.imf.org/en/Publications/fandd/issues/2023/06/B2B-subsidy-wars-elizabeth-van-heuvelen.

intervention in the economy, particularly at a large scale, can result in significant distortions to the business cycle and the macroeconomy generally.[102] In addition to other concerns, firms may become reliant on subsidies and thus prioritize seeking subsidies over innovating and competing in private markets, making firms more brittle.[103]

Central planning of the economy always leads to suboptimal outcomes. An economic policy framework that prioritizes industrial policy outside the most precarious national security-related circumstances should be averted.

Research shows industrial policy is often both ineffective and inefficient

Industrial policy is less effective than its advocates claim. A report by Hufbauer and Jung of the Peterson Institute for International

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[102] Michael Plante, "The Long-Run Macroeconomic Impacts of Fuel Subsidies," *Journal of Development Economics* 107 (2014): 129–43, https://doi.org/10.1016/j.jdeveco.2013.11.008; Diana H. Tsai and J.R. Norsworthy, "Measuring the Effects of Macroeconomic Policy in Industry Economic Models: Toward Assessment of Industrial Policy," *Journal of Policy Modeling* 18, no. 3 (1996): 289–333, https://doi.org/10.1016/0161-8938(95)00144-1; Salvador Barrios Cobos, Jonathan Pycroft, Andrzej Leszek Stasio, and Daniel Stoehlker, "The Macroeconomic Impact of the Energy and Climate Provisions of the US Inflation Reduction Act: Evidence for the EU," JRC Working Papers on Taxation and Structural Reforms no. 08/2023 (2023), https://hdl.handle.net/10419/299560; M. Sanchez-Martinez, C. Benedetti-Fasil, P. Christensen, and N. Robledo-Böttcher, *R & D Tax Credits and Their Macroeconomic Impact in the EU: An Assessment Using QUEST III* (Luxembourg: Publications Office of the European Union, 2017), https://doi.org/10.2760/6922.

[103] Uncertainty must be added to these distortions since, as both parties target different industries, subsidized firms anticipate the possibility of subsidy cuts after elections. Stephen D. Moore, "Welfare for the Well-Off: How Business Subsidies Fleece Taxpayers," Hoover Institution essay, May 1, 1999, https://www.hoover.org/research/welfare-well-how-business-subsidies-fleece-taxpayers.

Economics (PIIE) compiles a review of the literature on the efficacy of industrial policy approaches.[104] The authors categorize the various types of industrial policies into three main categories and measure three outcomes which are usual goals of such policies. The main results of this study are summarized in Table 2-1. It suggests that most industrial policy initiatives in the U.S., particularly those that are direct subsidy incentives to individual private firms, score relatively poorly.

Table 2-1: Effectiveness of Types of Industrial Policy, 1970–2020

	Improved competitiveness?	Jobs saved and created at a reasonable cost?	Led to technological advancement?
Trade measures	1.9 / 4.5	2.5 / 4.5	2.8 / 4.5
Targeted subsidies	2.2 / 4.5	2.5 / 4.5	1.8 / 4.5
Public and private R&D	3.6 / 4.5	3.4 / 4.5	4.1 / 4.5

Source: Peterson Institute for International Economics[105]

Certain industrial policy approaches, such as those used to fund research and development (R&D) for selective high-risk, high-reward research projects pertinent to national security through the Defense Advanced Research Projects Agency (DARPA), have provided significant returns for relatively little fiscal cost. Examples include the internet, large-scale data analysis, and weather satellites. Average R&D funding at DARPA is a little more than $3 billion per year.[106] Operation Warp Speed, which cost around $20 billion and was established during the COVID-19 pandemic to commit to large purchases and subsidize input

[104] Hufbauer and Jung, "Scoring 50 Years of US Industrial Policy, 1970–2020."
[105] The scores are averages from reviewed literature. Hufbauer and Jung, "Scoring 50 Years of US Industrial Policy, 1970–2020."
[106] Hufbauer and Jung, "Scoring 50 Years of US Industrial Policy, 1970–2020."

components of vaccines, was another example of an R&D industrial policy that had significant benefits for a reasonable fiscal cost.[107]

While highly targeted and well-structured industrial policies can be successful, particularly in the national security context, it is unlikely that the vast majority of industrial policy programs pass a cost-benefit test.[108] With noticeably subpar ratings for both subsidies to targeted firms and for trade measures as mechanisms for industrial policy, the authors conclude that these approaches are relatively ineffective at achieving their intended goals. Some particularly egregious examples include the following:

Synthetic Fuels Corporation: During and in response to the energy crisis of the late 1970s, the government-funded Synthetic Fuels Corporation (SFC) was inaugurated to increase shale production. The result was a largely failed venture that provided no real returns, had "saved job" costs of around three-times the prevailing wage at the time, and had numerous conflicts of interest and corruption problems.[109]

Solyndra: Solyndra was a solar business established in 2005 that received a half-billion-dollar loan guarantee from the federal government. Solar panel prices dramatically fell around 2010,

[107] Hufbauer and Jung, "Scoring 50 Years of US Industrial Policy, 1970–2020."

[108] As mentioned in chapter one, without a major restructuring of the government's data management and how the cost-benefit analysis is performed, it is difficult to efficiently evaluate government programs.

[109] Chris Edwards, "Energy Subsidies," *Downsizing the Federal Government*, December 15, 2016, https://www.downsizinggovernment.org/energy/energy-subsidies; Hufbauer and Jung, "Scoring 50 Years of US Industrial Policy, 1970–2020," pp. 55–56.

forcing Solyndra into bankruptcy and leading to a loss of nearly the whole value of the loan guarantee to the federal government.[110]

Crescent Dunes: Crescent Dunes was a solar company that used a new technology and received a federal government loan guarantee of nearly three-quarters of a billion dollars in 2011. The new technology was ineffective, and the company ceased operations in 2014, costing the government nearly half a billion dollars. Given the number of jobs "created," the cost-per-job was nearly 10-times the prevailing wage.[111]

Foxconn Wisconsin: Foxconn, a multinational cell phone maker announced a $10 billion plant in response to $3 billion in subsidies and incentives from the state of Wisconsin in 2017. As a result of environmental and cost concerns, as well as local protests, the size of both the investment and the subsidies from the state were scaled down. As of 2021, there were no jobs added from the plant, and there were no technological advancements from the plant to partially justify the cost.[112] Research suggests that economic activity in Wisconsin will be suppressed by more than the size of the subsidy.[113]

Given the precarious state of the U.S.' fiscal situation as outlined in Chapter 1, and the Republican Responses in the *2023* and *2024 Joint Economic Reports* (*Responses*), policymakers should be prudent in spending.

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[110] Hufbauer and Jung, "Scoring 50 Years of US Industrial Policy, 1970–2020."
[111] Hufbauer and Jung, "Scoring 50 Years of US Industrial Policy, 1970–2020."
[112] Hufbauer and Jung, "Scoring 50 Years of US Industrial Policy, 1970–2020."
[113] Matthew D. Mitchell, Michael D. Farren, Jeremy Horpedahl, and Olivia Gonzalez, "The Economics of a Targeted Economic Development Subsidy," Mercatus Center Research Paper (January 7, 2020), https://www.mercatus.org/research/research-papers/economics-targeted-economic-development-subsidy.

Recent examples of industrial policy illustrate its weaknesses

Recently enacted industrial policies have fiscal and distortionary costs that notably outweigh the perceived benefits. The three chief industrial policy programs signed into law under the previous Administration were the *Infrastructure Investment and Jobs Act* (IIJA), the *CHIPS and Science Act* (*CHIPS Act*), and the *Inflation Reduction Act* (IRA). While some of the programs that arose from these bills may be defensible, they each have substantial components that come with inordinate fiscal costs.

Infrastructure Investment and Jobs Act

Passed into law in November 2021, the IIJA authorized $1.2 trillion in infrastructure spending, about $550 billion of which is new spending.[114] Accounting for offsets, this legislation was projected by the Congressional Budget Office (CBO) to add about $400 billion to the deficit over ten years.[115] While a share of the new funding is for basic infrastructure that could have positive spill-over effects, the impact of other funding is more questionable. The IIJA authorizes for roads and bridges $110 billion, airports $25 billion, and water infrastructure $55 billion. Meanwhile, it also authorizes broadband funding of $65 billion, resiliency and climate-related programs of $46 billion, environmental remediation of $21 billion, and electric vehicle

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[114] Pipeline and Hazardous Materials Safety Administration, "Bipartisan Infrastructure Law (BIL) / Infrastructure Investment and Jobs Act (IIJA)," U.S. Department of Transportation, February 16, 2023, https://www.phmsa.dot.gov/legislative-mandates/bipartisan-infrastructure-law-bil-infrastructure-investment-and-jobs-act-iija.

[115] Committee for a Responsible Federal Budget, "Infrastructure Plan Will Add $400 Billion to the Deficit, CBO Finds," August 5, 2021, https://www.crfb.org/blogs/infrastructure-plan-will-add-400-billion-deficit-cbo-finds.

(EV) infrastructure of up to $7.5 billion.[116] Moreover, outlays in the IIJA come with several strings that slow program implementation and reduce their benefits.[117] While having some reasonable provisions to improve basic infrastructure, the IIJA also has numerous costly provisions that give few observable economic benefits.

CHIPS and Science Act

Enacted in August 2021, the *CHIPS Act* authorizes $280 billion in funding over ten years to semiconductor manufacturing, around $80 billion for production tax credits and incentives, and around $200 billion for scientific R&D subsidies and workforce development programs.[118] Arguments in favor of the legislation focused on the importance of a robust domestic semiconductor supply chain given concerns of over-reliance on Taiwanese chips

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[116] Union Pacific Railroad, "Understanding the Components of the U.S. Bipartisan Infrastructure Law," Track Record, February 14, 2023, https://www.up.com/customers/track-record/tr021423-bil-iija-bipartisan-infrastructure-law-basics.htm; BGR Group, "Infrastructure Investment and Jobs Act – Resiliency and Environmental Remediation," accessed February 18, 2025, https://bgrdc.com/infrastructure-investment-and-jobs-act-resiliency-and-environmental-remediation/.

[117] U.S. Department of Transportation, Federal Highway Administration, "23 CFR Part 680, National Electric Vehicle Infrastructure Standards and Requirements, FHWA Docket No. FHWA-2022-0008," *Federal Register* 88, no. 39 (February 28, 2023): 12724–57, https://www.govinfo.gov/content/pkg/FR-2023-02-28/pdf/2023-03500.pdf; Owen Minott and Erin Barry, "A Status Update on EV Charging Infrastructure Investments in the IIJA," Bipartisan Policy Center, July 26, 2022, https://bipartisanpolicy.org/blog/a-status-update-on-ev-charging-infrastructure-investments-in-the-iija/; Amy Huffman, Angela Siefer, and Josh Mimura, "NTIA Releases the Notice of Funding Opportunities for Three IIJA Programs Today," National Digital Inclusion Alliance, May 13, 2022, https://www.digitalinclusion.org/blog/ntia-releases-requirements-for-42-5b-of-bead-program-funding/.

[118] Justin Badlam, Stephen Clark, Suhrid Gajendragadkar, et al., "The CHIPS and Science Act: Here's what's in it," McKinsey & Company, October 4, 2022, https://www.mckinsey.com/industries/public-sector/our-insights/the-chips-and-science-act-heres-whats-in-it.

and potential territorial aggression from China.[119] The national security concerns may have merit, but the act's solutions are inefficient. [120]

Supply-side policy reforms to achieve the relocation of production should have been prioritized over subsidies. For example, the *National Environmental Protection Act* (NEPA) review process can be burdensome, and it often takes several years to complete.[121] This is likely one reason why there have been reports of projects being delayed, citing permitting concerns.[122] Instead of reducing supply-side barriers, the *CHIPS Act* implemented more, reducing efficacy of the legislation.[123] There are requirements to qualify for the funding, including abstention from dividends and stock buybacks, providing childcare access for workers, and an unspecified sharing of excess profits.[124] Furthermore, there is a requirement for a "skilled and diverse workforce" that adds

[119] Michelle Kurilla, "What Is the CHIPS Act?" Council on Foreign Relations, April 29, 2024, https://www.cfr.org/in-brief/what-chips-act.

[120] Note that semiconductor industries have high net profits. Aswath Damodaran, "Margins by Sector (US)" Damodaran Online, https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/margin.html.

[121] Phillip Singerman and Alexander Kersten, "Implementing CHIPS: The NEPA Permitting Challenge," Center for Strategic & International Studies, May 1, 2023, https://www.csis.org/analysis/implementing-chips-nepa-permitting-challenge.

[122] National Association of Manufacturers, "Many IRA, CHIPS Manufacturing Projects Delayed," August 13, 2024, https://nam.org/many-ira-chips-manufacturing-projects-delayed-31770/?stream=series-input-stories.

[123] Wall Street Journal editorial board, "The Chips Act Becomes Industrial Social Policy," *The Wall Street Journal*, February 28, 2023, https://www.wsj.com/articles/chips-act-subsidies-progressives-industrial-policy-gina-raimondo-joe-manchin-7da07403.

[124] Erica York, "Careful What You Wish For: CHIPS Subsidies Require "Excess Profits" Sharing," Tax Foundation blog, March 2, 2023, https://taxfoundation.org/blog/biden-semiconductor-chips-act-subsidies/.

compliance costs and makes recruiting labor more difficult.[125] Indeed, there have been reports of worker shortages in the regions where plants are being built. Moreover, the enactment of this legislation set off a subsidy war, with China and the European Union reactively launching subsidies to their microchip industries of nearly $50 billion and over $40 billion, respectively.[126] The microchip fabrication plants being built because of *CHIPS Act* dollars are an example of a current physical investment that could become outdated. If microchip technology advances such that the current processes become obsolete, the investment could go to waste.[127] This could result in billions of dollars of stranded assets. Instead of providing subsidies to achieve even national security policy aims, supply-side reforms such as streamlining regulatory frameworks should be prioritized.[128] Funding should prioritize

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[125] Martin Chorzempa, "US chip construction spending skyrocketed after US CHIPS Act passed in August 2022," Peterson Institute for International Economics, August 15, 2024, https://www.piie.com/research/piie-charts/2024/us-chip-construction-spending-skyrocketed-after-us-chips-act-passed; Stephen Miran, "Brittle Versus Robust Reindustrialization," Manhattan Institute report (February 22, 2024), https://manhattan.institute/article/brittle-versus-robust-reindustrialization.

[126] Anniek Bao, "China's ambitions for semiconductor self-sufficiency thwarted by lack of chipmaking tools," *CNBC*, September 27, 2024, https://www.cnbc.com/2024/09/27/chinas-ambitions-for-chip-self-sufficiency-thwarted-by-lack-of-tools-.html; European Commission, "European Chips Act," https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-chips-act_en.

[127] Vishnu Kannan and Jacob Feldgoise, "After the CHIPS Act: The Limits of Reshoring and Next Steps for U.S. Semiconductor Policy," Carnegie Endowment for International Peace (November 22, 2022), p. 20, https://carnegieendowment.org/research/2022/11/after-the-chips-act-the-limits-of-reshoring-and-next-steps-for-us-semiconductor-policy.

[128] The previous administration followed the subsidy approach. A better approach would have been to target industries that are highly concentrated because of the patent system making them high-risk-high-reward and to soften the costs of R&D in exchange for a reduction in the patents' term. This would encourage competition and reduce consumer prices downstream. Yifan Yu,

innovations, like in the case of DARPA, not simply capital assets for geographic relocations.

Inflation Reduction Act

The *Inflation Reduction Act* was enacted in August 2022, following passage of the *CHIPS Act* earlier the same month.[129] This legislation, while initially scored as deficit-reducing over the ten-year budget window by CBO is now anticipated to add over $1 trillion to the deficit over the same period, with the energy tax credits amounting to well over $1 trillion in total outlays.[130] The IRA is split into two main policy areas, energy and healthcare, with some tax increases included to pay for some provisions.[131] The largest share of outlays arise from tax incentives related to energy, with some outlays going to grants and loans.[132] These

"U.S. needs another CHIPS Act to lead world, says Raimondo," *Nikkei Asia*, February 22, 2024, https://asia.nikkei.com/Business/Tech/Semiconductors/U.S.-needs-another-CHIPS-Act-to-lead-world-says-Raimondo.

[129] U.S. Senate, "On Passage of the Bill (H.R. 5376, As Amended)," Roll Call Vote no. 325 (August 7, 2022), https://www.senate.gov/legislative/LIS/roll_call_votes/vote1172/vote_117_2_00325.htm; Congress.gov, "H.R.5376—117th Congress (2021–2022): Inflation Reduction Act of 2022," August 16, 2022, https://www.congress.gov/bill/117th-congress/house-bill/5376/actions.

[130] Congressional Budget Office, "Estimated Budgetary Effects of H.R. 5376, the Inflation Reduction Act of 2022," CBO cost estimate (August 3, 2022), https://www.cbo.gov/publication/58366; Goldman Sachs, "The US is poised for an energy revolution," April 17, 2023, https://www.goldmansachs.com/insights/articles/the-us-is-poised-for-an-energy-revolution.html; Fisher and Loucks, "The Inflation Reduction Act after Two Years."

[131] William McBride, Alex Muresianu, Erica York, and Michael Hartt, "Inflation Reduction Act One Year After Enactment," Tax Foundation research, August 16, 2023, https://taxfoundation.org/research/all/federal/inflation-reduction-act-taxes/.

[132] Justin Badlam, Jared Cox, Adi Kumar, et al., "The Inflation Reduction Act: Here's what's in it," McKinsey & Company, October 24, 2022,

subsidies were designed to reduce the relative cost of clean energy products, such as EVs, to reshape the U.S. economy to be less dependent on fossil fuels and reduce aggregate carbon emissions.[133]

Subsidies, tax credits, and other similar policies are rife with waste, fraud, and abuse. The IRA's provisions are no exception. Many of the tax credits are made to be transferable, and findings suggest that transferring the credit in the market results in a discount of 6 to 15 percent from its nominal value.[134] This means that the government could spend $100 to create only $85 worth of incentives. While on a micro scale this may seem insignificant, because the cumulative outlays for green energy credits in the IRA are anticipated to be well over $1 trillion over ten years, a 15 percent rate of inefficiency could amount to over $100 billion in waste. Moreover, tax credits often also result in fraud and abuse, with reports of fraudulent tax credits from biodiesel to COVID-19 relief. Within the last year, the Internal Revenue Service (IRS) uncovered an illegal scheme related to the IRA's clean energy tax credit.[135]

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https://www.mckinsey.com/industries/public-sector/our-insights/the-inflation-reduction-act-heres-whats-in-it.

[133] International Energy Agency, "Inflation Reduction Act of 2022," October 27, 2024, https://www.iea.org/policies/16156-inflation-reduction-act-of-2022.

[134] Martin Karamon, Timothy Doran, and David Mohimani, "FAQ: Inflation Reduction Act Energy Tax Credit Transfer Explained," Cherry Bekaert insight, January 22, 2025, https://www.cbh.com/insights/articles/irc-section-6418-faq-transferring-energy-tax-credits/.

[135] U.S. Treasury Inspector General for Tax Administration, "TIGTA Identifies Fraud Scheme, Alerts IRS to Prevent $3.5 Billion in Potentially Improper Pandemic Tax Credits," U.S. Department of the Treasury, April 24, 2024, https://www.tigta.gov/articles/press-releases/tigta-identifies-fraud-scheme-alerts-irs-prevent-35-billion-potentially; Internal Revenue Service, "IRS warns of new scam targeting Clean energy tax credit," IRS news release no. IR-2024-182, July 3, 2024, https://www.irs.gov/newsroom/irs-warns-of-new-

Research on previous green energy tax credit policies also suggests that most of the benefits of the IRA will go to the top quintile of income earners, with the bottom three quintiles likely receiving only around 10 percent of allocated dollars.[136] A recent study also found that about 75 percent of the EV tax credits claimed as of the time of the report had gone to consumers that would have purchased an EV regardless of the subsidy.[137] The aim of industrial policy is to change the behavior of economic actors, and the IRA not only fails at this objective but also wastes resources to do so. Even more, the IRA is projected to have little impact on emissions over the next ten years.[138]

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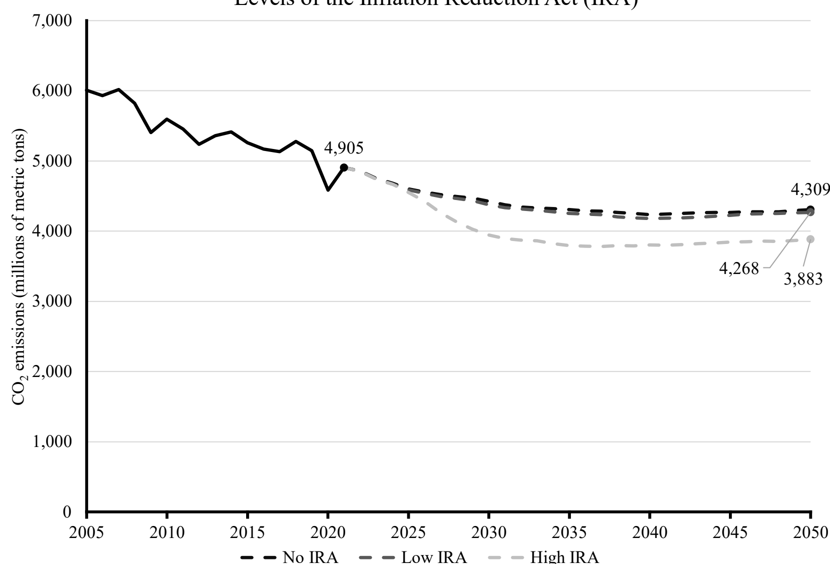
scam-targeting-clean-energy-tax-credit; Adam N. Michel, "A Case Study in Tax Credit Fraud and Manipulation, Biofuel Edition," *Cato at Liberty*, May 2, 2024, https://www.cato.org/blog/case-study-tax-credit-fraud-manipulation-biofuel-edition.

[136] Severin Borenstein and Lucas W. Davis, "The Distributional Effects of U.S. Tax Credits for Heat Pumps, Solar Panels, and Electric Vehicles," NBER Working Paper no. 32688 (July 2024), https://doi.org/10.3386/w32688.

[137] Stanford University Institute for Economic Policy Research, "Study finds EV subsidies in the Inflation Reduction Act help the climate, U.S. automakers — but at a questionable cost to taxpayers," October 7, 2024, https://siepr.stanford.edu/news/study-finds-ev-subsidies-inflation-reduction-act-help-climate-us-automakers-questionable-cost.

[138] Ben Evans, "IRA update: Buildings projected to deliver largest IRA-related emissions reductions," U.S. Green Building Council, October 24, 2023, https://www.usgbc.org/articles/ira-update-buildings-projected-deliver-largest-ira-related-emissions-reductions.

Figure 2-1: Energy-Related CO_2 Emissions Under Alternative Uptake Levels of the Inflation Reduction Act (IRA)



Source: Energy Information Administration[139]

American Rescue Plan Act

Passed in March 2021 as an additional COVID-19 stimulus package after the *CARES Act* and *Consolidated Appropriations Act, 2021* already ballooned deficits and the national debt, the *American Rescue Plan Act* (ARPA) provided an additional $1.9 trillion in aid.[140] The new deficit spending consisted of over $400

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[139] U.S. Energy Information Administration, "U.S. Energy-Related Carbon Dioxide Emissions, 2023" (April 2024), https://www.eia.gov/environment/emissions/carbon/pdf/2023_Emissions_Report.pdf; U.S. Energy Information Administration, *Annual Energy Outlook 2023* (March 16, 2023), https://www.eia.gov/outlooks/aeo/index.php.

[140] Pandemic Oversight, "Update: Three rounds of stimulus checks. See how many went out and for how much," Pandemic Response Accountability Committee, February 17, 2022, https://www.pandemicoversight.gov/data-interactive-tools/data-stories/update-three-rounds-stimulus-checks-see-how-many-went-out-and; National Association of Counties, "American Rescue Plan Act Funding Breakdown," April 12, 2021,

billion in direct cash assistance through stimulus checks, $200 billion through unemployment benefits, and over $300 billion in transfers to state and local governments for "fiscal recovery." The rest of the subsidies were allocated to education, childcare, health, transportation, and other programs.[141] Several states used the designated funds for purposes that could be classified as industrial policy, such as for broadband implementation.[142]

The fiscal expansion that occurred because of this legislation has had significant impacts on the macroeconomy. Research suggests that the enactment of the ARPA caused an increase in inflation above trend, contributing to about 3 percentage points of year-over-year inflation in late stages of the pandemic.[143] The rise in

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https://www.naco.org/resources/featured/american-rescue-plan-act-funding-breakdown; Congress.gov, "H.R.1319—117th Congress (2021–2022): American Rescue Plan Act of 2021," March 11, 2021, https://www.congress.gov/bill/117th-congress/house-bill/1319/all-actions; Marcos Dinerstein and Jon Huntley, "The Long-Run Fiscal and Economic Effects of the CARES Act," Penn Wharton Budget Model, May 5, 2020, https://budgetmodel.wharton.upenn.edu/issues/2020/5/5/long-run-economic-effects-of-cares-act.

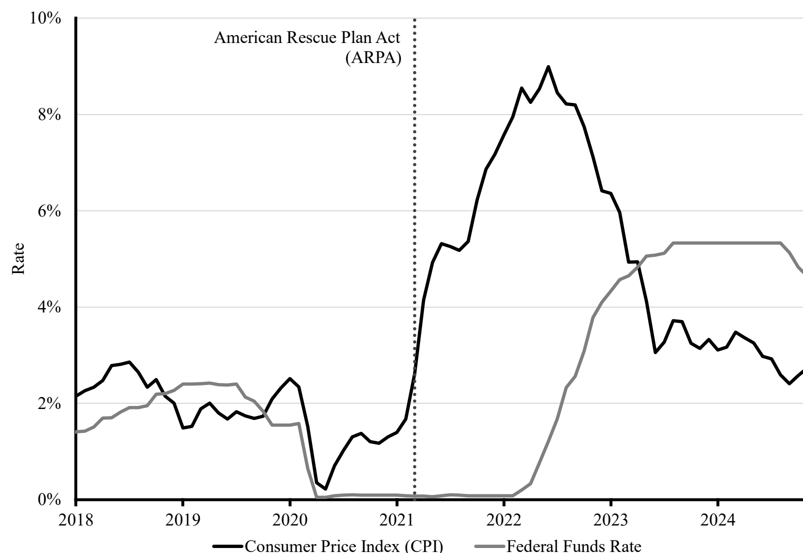
[141] National Association of Counties, "American Rescue Plan Act Funding Breakdown."

[142] National Conference of State Legislatures, "ARPA State Fiscal Recovery Fund Allocations Dashboard," updated January 2, 2025, https://www.ncsl.org/fiscal/arpa-state-fiscal-recovery-fund-allocations.

[143] As for any tax on consumption, inflation has the same regressive characteristic as such taxes. Dong Gyun Ko, "Did the American Rescue Plan Cause Inflation? A Synthetic Control Approach," *Economic Modelling* 143 (2025), https://doi.org/10.1016/j.econmod.2024.106935; Òscar Jordà, Celeste Liu, Fernanda Nechio, and Fabian Rivera-Reyes, "Why Is U.S. Inflation Higher than in Other Countries?" Federal Reserve Bank of San Francisco Economic Letter 2022-07 (March 28, 2022), https://www.frbsf.org/wp-content/uploads/el2022-07.pdf; William McBride and Alex Durante, "The 'Inflation Tax' Is Regressive," Tax Foundation blog, September 29, 2022, https://taxfoundation.org/blog/inflation-regressive-effects/.

inflation also precipitated an increase in interest rates by the Federal Reserve.[144]

Figure 2-2: Consumer Price Index (CPI) Inflation and the Federal Funds Rate



Source: Bureau of Labor Statistics;[145] Board of Governors of the Federal Reserve System[146]

Discussed in Chapter 3 of this *Response,* the compounded higher interest rates and larger debt profile have led to a substantial increase in net interest costs for the federal government. Higher

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[144] Such a response is typical for central banks. Jane Ihrig and Chris Waller, "The Federal Reserve's responses to the post-Covid period of high inflation," FEDS Notes (Board of Governors of the Federal Reserve System, February 14, 2024), https://doi.org/10.17016/2380-7172.3455; Federal Reserve Bank of Cleveland, "Why Does the Fed Care about Inflation?" https://www.clevelandfed.org/center-for-inflation-research/inflation-101/why-does-the-fed-care-start.

[145] U.S. Bureau of Labor Statistics, "Consumer Price Index for All Urban Consumers: All Items in U.S. City Average," https://fred.stlouisfed.org/series/CPIAUCSL.

[146] Board of Governors of the Federal Reserve System, "Federal Funds Effective Rate," https://fred.stlouisfed.org/series/FEDFUNDS.

net interest costs crowd out other national spending priorities and contribute to debt growth. Without the ARPA, this expansion in net interest costs may have been notably muted.

Box 2-1: The Effect of a Housing Down Payment Subsidy on Housing Prices

During the 2024 presidential campaign, a $25,000 down payment support for first-time homeowners was proposed with the aim of closing the wealth gap and increasing supply by shocking demand.[147] However, research suggests that such subsidies are effectively fully capitalized into housing prices.[148] In some cases, the increase in prices was as large as the financial aid from the government, meaning all of the aid is transferred to the sellers.

Forthcoming research by JEC Republicans estimates the effect on prices of this proposal for several metropolitan areas using the literature's standard elasticities of demand and supply for the housing sector and granular microdata on mortgage applications and households' finances.[149]

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[147] Selina Wang and Gabriella Abdul-Hakim, "Harris to propose up to $25K in down-payment support for 1st-time homebuyers," *ABC News*, August 15, 2024, https://abcnews.go.com/Politics/harris-propose-25k-payment-support-1st-time-homeowners/story?id=112877568.

[148] Carla Krolage, "The Effect of Real Estate Purchase Subsidies on Property Prices," *International Tax and Public Finance* 30 (2023): 215–46, https://doi.org/10.1007/s10797-022-09726-0; Felipe Carozzi, Christian A.L. Hilber, and Xiaolun Yu, "On the Economic Impacts of Mortgage Credit Expansion Policies: Evidence from Help to Buy," *Journal of Urban Economics* 139 (2024), https://doi.org/10.1016/j.jue.2023.103611.

[149] Albert Saiz, "The Geographic Determinants of Housing Supply," *The Quarterly Journal of Economics* 125, no. 3 (August 2010): 1253–96, https://doi.org/10.1162/qjec.2010.125.3.1253; David Albouy, Gabriel Ehrlich, and Yingyi Liu, "Housing Demand, Cost-of-Living Inequality, and the Affordability Crisis," NBER Working Paper no. 22816 (November 2016), https://doi.org/10.3386/w22816.

Preliminary estimations predict that in most markets the property prices will rise by most of the value of the subsidy. In our results, metropolitan areas are classified into deciles of property values. As expected, the percentage increase in property value is higher in the lowest deciles, and the incidence of the subsidy would likely be regressive.

This is a good example of how a well-intended industrial policy would have had a very different outcome, especially since investors and sellers anticipate the shock of subsidized demand and increase prices accordingly. Moreover, the fiscal cost of such ineffective policy on the deficit would also have a negative impact on economic growth.

Alternatives to industrial policy

Reducing costs of doing business and eliminating frictions generally provide more efficient solutions than government-directed programs. When distortions are eliminated, capital will flow to industries with higher potential for returns.[150] Instead of subsidies, supply-side barriers should first be reduced where reasonable to allow the market to facilitate capital formation and investment. These supply-side barriers include poorly designed and out-of-date regulations and excessively high business taxation.

Regulation

Regulations, when improperly constructed or no longer serve the intended purpose, can cause unnecessary barriers to economic

[150] Richard A. Williams, "The Impact of Regulation on Investment and the U.S. Economy," Mercatus Center Policy Brief (January 11, 2011), https://www.mercatus.org/research/policy-briefs/impact-regulation-investment-and-us-economy.

investment.[151] An improperly constructed regulatory framework could make investment onerously costly, dispelling activity in a sector of the economy where advocates may push for subsidization due to its relative importance.

One study finds that regulation, by distorting the investment choices that lead to innovation, has had a considerable effect on slowing economic growth over the past several decades. If the number of regulations had been constant at 1980 values, the U.S. economy would have been 25 percent larger by 2012, equivalent to additional yearly growth of 0.8 percent.[152] Another study finds a relation of almost one-to-one between annual regulatory growth and the increase of operating costs per unit of output. The average level of annual regulatory growth at 3.55 percent increases operating costs per unit of output by 3.3 percentage points per year.[153] A similar work estimates the cost of regulations to be between 1.3 to 3.3 percent of the total wage bill for firms, costing the economy about $300 billion in 2014.[154] Another recent paper uses a novel machine learning algorithm on regulatory documents and finds that an increase in regulations explains 31 to 37 percent

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[151] See Chapter 5 of the *2024 Response* for a more detailed explanation.

[152] Bentley Coffey, Patrick McLaughlin, and Pietro Peretto, "The Cumulative Cost of Regulations," Mercatus Center Working Paper (April 26, 2016), https://www.mercatus.org/research/working-papers/cumulative-cost-regulations.

[153] Tyler Richards and Richard Fullenbaum, "The Impact of Regulatory Growth on Operating Costs," Mercatus Center Working Paper (September 9, 2020), https://www.mercatus.org/research/working-papers/impact-regulatory-growth-operating-costs.

[154] Francesco Trebbi, Miao Ben Zhang, and Michael Simkovic, "The Cost of Regulatory Compliance in the United States," USC Marshall School of Business Research Paper (January 15, 2023), http://dx.doi.org/10.2139/ssrn.4331146.

of the rise in market concentration.[155] It is important to note that federal, state, and local governments impose regulatory burdens. An onerous regulatory framework reduces innovation and investment, making American companies less competitive. Poorly designed subsidies can also reduce innovation, exacerbating this trend.[156] When evaluating the costs and benefits of industrial policy, pertinent regulatory barriers should first be investigated and amended where necessary before considering subsidization.

Taxation

Taxes are a significant component of most businesses' costs, affecting operating and location decisions, even at the state and local levels.[157] Yet, not all taxes affect firm behavior in the same way. Full expensing for capital investment and R&D are often the most recommended pro-growth tax changes.[158] These provisions

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[155] The authors find that while large firms are opposed to regulations in general, they push for the passage of regulations that have an adverse impact on small firms. Moreover, besides the effect on business inequality, other studies find a regressive effect because of a tax increase on consumers. Shikhar Singla, "Regulatory Costs and Market Power," LawFin Working Paper no. 47 (February 23, 2023), http://dx.doi.org/10.2139/ssrn.4368609; Dustin Chambers and Courtney A. Collins, "How Do Federal Regulations Affect Consumer Prices? An Analysis of the Regressive Effects of Regulation," Mercatus Center Working Paper (February 23, 2016), https://www.mercatus.org/research/working-papers/how-do-federal-regulations-affect-consumer-prices-analysis-regressive.

[156] Qiu, Wei, Zhou, and Zhou, "Resource, Competition, and the Equilibrium Effects of Innovation Subsidies."

[157] Shawn Rohlin, Stuart S. Rosenthal, and Amanda Ross, "Tax Avoidance and Business Location in a State Border Model," *Journal of Urban Economics* 83 (2014): 34–49, https://doi.org/10.1016/j.jue.2014.06.003.

[158] Full expensing and R&D expensing were temporary measures of the *Tax Cuts and Jobs Act* but phased out at the end of 2022. According to the Tax Foundation, these provisions would generate the highest GDP growth for each billion dollars of forgone revenue. Erica York, Alex Durante, Huaqun Li, Garrett Watson, and William McBride, "Options for Navigating the 2025 Tax Cuts and Jobs Act Expirations," Tax Foundation research, May 7, 2024,

allow businesses to deduct the full cost of new investments in the year they are made, instead of amortizing the costs over several years.[159] Inflation erodes the value of deductions taken in future years.[160] From an economic theory perspective, expensing investment costs would tax the "normal" returns on that investment with an effective marginal rate of zero. This would make capital investment far less expensive.[161] It is more sensible to reduce tax barriers to investment in an even manner and allow companies to compete on a level field than to implement distortive business-related tax subsidies.[162] A simple tax code is a concept

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https://taxfoundation.org/research/all/federal/2025-tax-reform-options-tax-cuts-and-jobs-act/.

[159] Erica York and Alex Muresianu, "Expensing: It Pays to Be Permanent," Tax Foundation blog, January 28, 2025, https://taxfoundation.org/blog/permanent-bonus-depreciation-expensing-options/.

[160] The effect increases with the inflation rate. Adam N. Michel, "Expensing and the Taxation of Capital Investment," Cato Institute Briefing Paper no. 159 (June 7, 2023), https://www.cato.org/briefing-paper/expensing-taxation-capital-investment.

[161] These tax changes do not add complexity to the tax code, just to the timing of tax write-offs, which is applicable to all firms. Jason Furman, "How to increase growth while raising revenue: Reforming the corporate tax code," The Hamilton Project (January 28, 2020), https://www.hamiltonproject.org/wp-content/uploads/2023/01/Furman_LO_FINAL.pdf; Office of Tax Policy, "Case for Temporary 100 Percent Expensing: Encouraging Businesses to Expand Now by Lowering the Cost of Investment" (U.S. Department of the Treasury, October 29, 2010), https://www.govinfo.gov/app/details/GOVPUB-T-PURL-gpo160066; Scott Hodge, "Empirical Evidence Shows Expensing Leads to More Investment and Higher Employment," Tax Foundation blog, May 19, 2020, https://taxfoundation.org/blog/expensing-leads-to-more-investment-and-higher-employment/.

[162] Adam N. Michel, "Slashing Tax Rates and Cutting Loopholes," Cato Institute Policy Analysis no. 975 (June 17, 2024), https://www.cato.org/policy-analysis/slashing-tax-rates-cutting-loopholes; Veronique de Rugy, "Tax Extenders: Don't Extend Bad Policy," Mercatus Center Policy Brief (November 11, 2016), https://www.mercatus.org/research/policy-briefs/tax-extenders-dont-extend-bad-policy.

that generally has universal agreement as it decreases costs of compliance, reduces tax evasion, and promotes growth.[163]

[163] William G. Gale, "Tax Simplification: Issues and Options," Brookings Institution commentary, July 17, 2001, https://www.brookings.edu/articles/tax-simplification-issues-and-options/; Jason J. Fichtner, Veronique de Rugy, Matthew D. Mitchell, Angela Kuck, and Adam N. Michel, "'Fixing' the Tax Code: Key Principles for Successful, Sustainable Reform," Mercatus Center Policy Brief (May 25, 2016), https://www.mercatus.org/students/research/policy-briefs/fixing-tax-code-key-principles-successful-sustainable-reform.

CHAPTER 3: THE THREAT OF RISING INTEREST RATE SENSITIVITY

The U.S. is approaching an urgent sovereign debt crisis. As explained in Chapter 1, as well as throughout the Republican Responses in the *2023* and *2024 Joint Economic Reports* (*Response*), the U.S. is in a dire fiscal situation. The main driver of its debt growth is unsustainable spending, primarily in outlays related to entitlement programs. In FY2024, outlays on Social Security, Medicare, and Medicaid amounted to $2.91 trillion, or 43.2 percent of total federal outlays. By 2035, the last year of the ten-year window in the most recent Congressional Budget Office (CBO) baseline budget projection, this is projected to rise to $5.25 trillion, or 49.7 percent of total federal outlays.[164]

Bipartisan stimulus programs during the COVID-19 pandemic and the 2007–2009 Great Financial Crisis (GFC), as well as partisan spending packages such as the *American Rescue Plan Act* (ARPA) and the *Inflation Reduction Act* (IRA), have significantly impacted recent debt growth. Since 2007, debt held by the public has increased from $5 trillion to over $28 trillion as of FY2024, rising from just 35.2 percent of GDP to 97.8 percent.[165]

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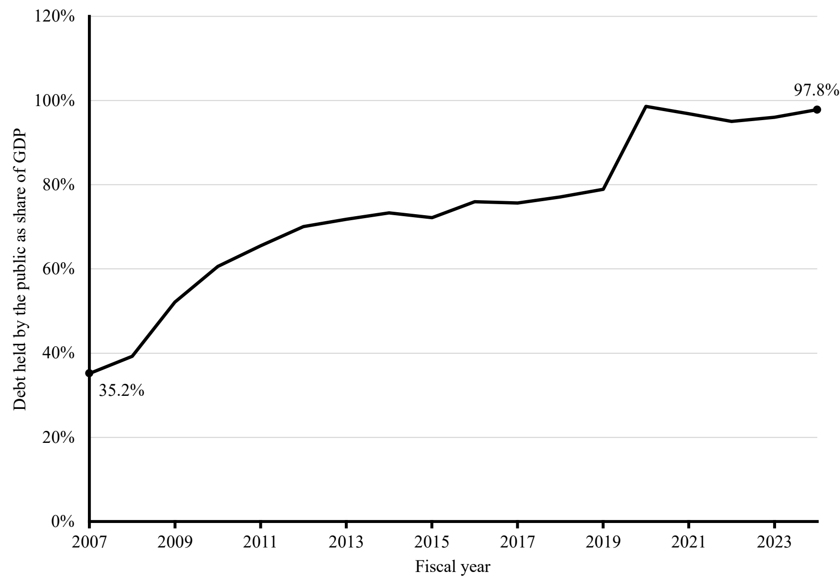
[164] Congressional Budget Office, "10-Year Budget Projections," Budget and Economic Data, January 2025, https://www.cbo.gov/system/files/2025-01/51118-2025-01-Budget-Projections.xlsx.

[165] Congressional Budget Office, "Historical Data and Economic Projections," Budget and Economic Data, January 2025, https://www.cbo.gov/system/files/2025-01/51134-2025-01-Historical-Budget-Data.xlsx.

Figure 3-1: Ratio of Debt Held by the Public to GDP



Source: Congressional Budget Office[166]

While rising primary deficits from entitlement programs and large spending packages have been the leading driver of increasing federal debt, interest costs have increasingly contributed to widening deficits and higher federal debt. Net interest costs pose a significant threat to the country's fiscal health. This Chapter reviews theories of interest rates and current fiscal policy dynamics surrounding the state of interest rates. It then examines trends in interest rates and costs, concluding with a discussion of their implications for the U.S.' fiscal health and trajectory.

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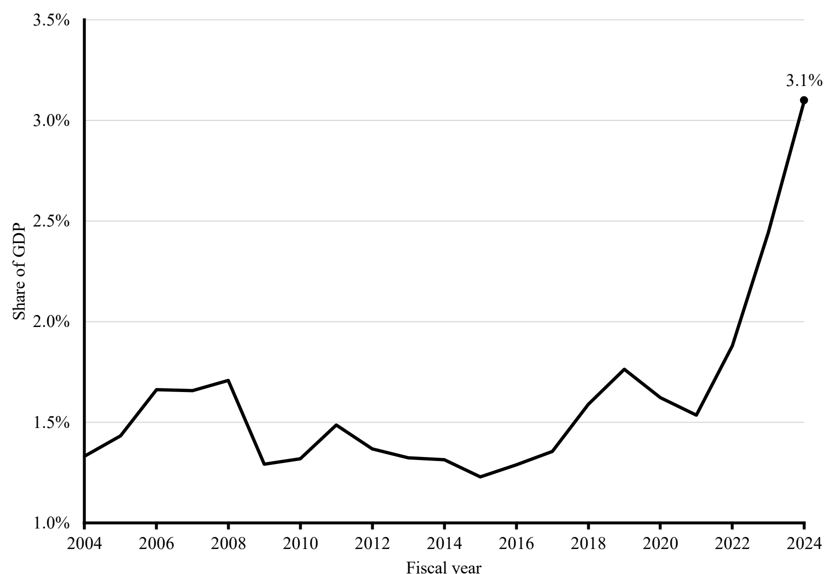
[166] Congressional Budget Office, "Historical Data and Economic Projections," January 2025.

Rising interest costs are consuming an ever-growing share of the federal budget

In FY2024, net interest costs surpassed total outlays on national defense, reaching nearly $900 billion.[167] This is the first time that this has occurred since at least 1940, the earliest year for which the White House Office of Management and Budget (OMB) has data available.[168] Furthermore, net interest costs have reached just over 13 percent of total outlays and 3.1 percent of gross domestic product (GDP), the highest since 1999 and 1995, respectively.[169]

Figure 3-2: Net Interest Costs as Share of GDP



[167] Net interest costs are the sum of interest payments on borrowed debt minus intragovernmental transfers. Congressional Budget Office, "10-Year Budget Projections," January 2025.

[168] Office of Management and Budget, "Table 3.1 – Outlays by Superfunction and Function: 1940 - 2029," Historical Tables, https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/03/hist03z1_fy2025.xlsx.

[169] Congressional Budget Office, "Historical Data and Economic Projections," January 2025.

Source: Congressional Budget Office[170]

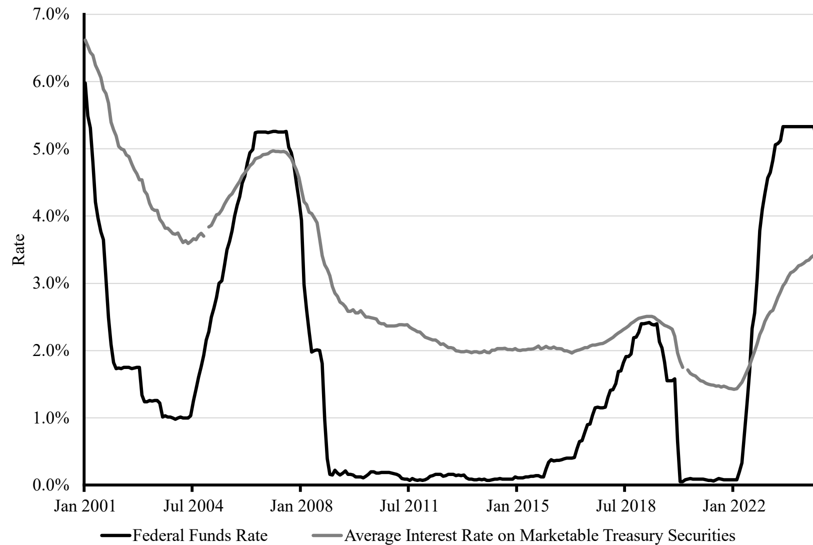
There are several reasons why the recent rapid growth of net interest costs is concerning. First, interest costs provide no value as a good or service provided by the government—they are simply payments to finance past deficits. Interest costs use revenue that could be used for other government outlays, such as national defense. Furthermore, interest costs are sensitive to changes in interest rates, and refinancing maturing debt at higher rates increases net interest costs and can contribute to additional debt growth. This makes reducing deficits and the national debt more difficult.

Nominal net interest costs are a function of the size of the debt and the level of interest rates. A simplified calculation of interest costs for explanative purposes can be made with the formula below.

$$Net\ Interest_m = D_m * \frac{\overline{IR}_m}{12}$$

[170] Congressional Budget Office, "Historical Data and Economic Projections," January 2025.

Figure 3-3: Effective Federal Funds Rate and Average Interest Rate of Marketable Treasury Securities



Source: Board of Governors of the Federal Reserve System[171]

If interest rates remain elevated above their level since the GFC, interest costs will produce a significant and extended drag on the federal budget. Rising debt, accelerated by deficit-financed partisan spending programs such as ARPA, which cost nearly $2 trillion, exacerbates the effect of elevated interest rates on net interest costs as more debt is being financed at a higher rate.[172]

How are interest rates on federal debt set?

Just as there are markets for equities and commodities, there is a market for government debt. Governments sell debt—Treasury securities, in the case of the U.S.—to finance current government

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[171] Board of Governors of the Federal Reserve System, "Federal Funds Effective Rate."

[172] Congressional Budget Office, "Estimated Budgetary Effects of H.R. 1319, American Rescue Plan Act of 2021," March 10, 2021, https://www.cbo.gov/system/files/2021-03/Estimated_Budgetary_Effects_of_HR_1319_as_passed_0.pdf.

expenditures when outlay obligations exceed revenues, a situation that results in a budget deficit.[173] Investors, in turn, purchase government debt with the expectation they will receive a return.[174] Common investors in Treasuries include depository institutions, pension funds, private investors, foreign governments, state and local governments, intragovernmental accounts, and central banks.[175] Table 3-1 shows the ownership of publicly held debt by type of lender. Figure 3-4 shows how it has changed since 2015.

Table 3-1: Ownership of U.S. Publicly Held Debt, December 2023

Investor	Amount (billions)
Federal Reserve and Government Accounts	$11,848.1
Foreign and International	$7,933.2
Other Investors	$5,887.1
Mutual Funds	$3,647.8
Depository Institutions	$1,646.8
State and Local Governments	$1,566.7
Private Pension Funds	$452.9
Insurance Companies	$444.1
State and Local Government Pensions Funds	$402.8
U.S. Savings Bonds	$171.9

Source: U.S. Department of the Treasury[176]

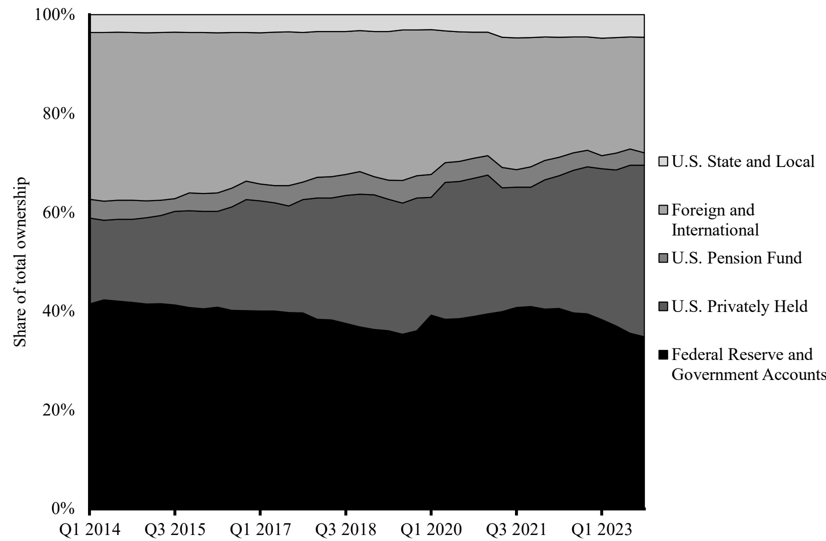
[173] Fiscal Data, "What is the national debt?" U.S. Department of the Treasury, https://fiscaldata.treasury.gov/americas-finance-guide/national-debt/.

[174] Peter G. Peterson Foundation, "What Types of Securities Does the Treasury Issue?" August 19, 2024, https://www.pgpf.org/article/how-does-the-treasury-issue-debt/.

[175] Bureau of the Fiscal Service, *Treasury Bulletin* (U.S. Department of the Treasury, December 2024), p. 63, https://fiscal.treasury.gov/files/reports-statements/treasury-bulletin/b2024-4.pdf.

[176] Bureau of the Fiscal Service, *Treasury Bulletin*.

Figure 3-4: Ownership Shares of U.S. Publicly Held Debt



Source: U.S. Department of the Treasury[177]

As in any other market, the price of Treasuries is predominantly determined by supply and demand.[178] The price of a Treasury security is inversely related to its yield, and the yield reflects the interest rate paid over a given period.[179] As demand for a particular Treasury security increases, the yield falls, and vice versa.[180] As supply increases, the yield rises, and vice versa.

As a U.S. federal government default is unprecedented—the yield on its securities is generally used as the "risk-free" interest rate—

[177] Bureau of the Fiscal Service, *Treasury Bulletin*.

[178] Egemen Eren, Andreas Schrimpf, and Fan Dora Xia, "The demand for government debt," Bank for International Settlements Working Paper no. 1105, https://www.bis.org/publ/work1105.pdf.

[179] TreasuryDirect, "Understanding Pricing and Interest Rates," https://treasurydirect.gov/marketable-securities/understanding-pricing/.

[180] Reserve Bank of Australia, "Bonds and the Yield Curve," https://www.rba.gov.au/education/resources/explainers/bonds-and-the-yield-curve.html.

Treasury yields reflect the floor for interest rates in the economy.[181] Demand for Treasuries is significant due to the size and robustness of the U.S. economy, its relative political stability and geopolitical influence, as well as the use of the dollar in about three quarters of global foreign transactions.[182]

The supply and demand for Treasuries can vary by type and maturity. Marketable Treasury securities make up 98 percent of all publicly held U.S. debt, and there are three main types of these securities: bills, notes, and bonds. Bills have a maturity of less than one year, notes have a maturity ranging from two to ten years, and bonds have maturities of over ten years. Notes represent slightly more than 50 percent of total marketable debt, and bills and bonds comprise around 20 percent each. Other securities, such as Treasury Inflation Protected Securities (TIPS), and Floating Rate Notes (FRNs) make up the remaining share.[183] Proposed securities such as "trills"—a security that pays out one trillionth of GDP each quarter—or gold convertible securities are novel financing mechanisms for the federal government that would increase investors' options.[184] These instruments should be considered.

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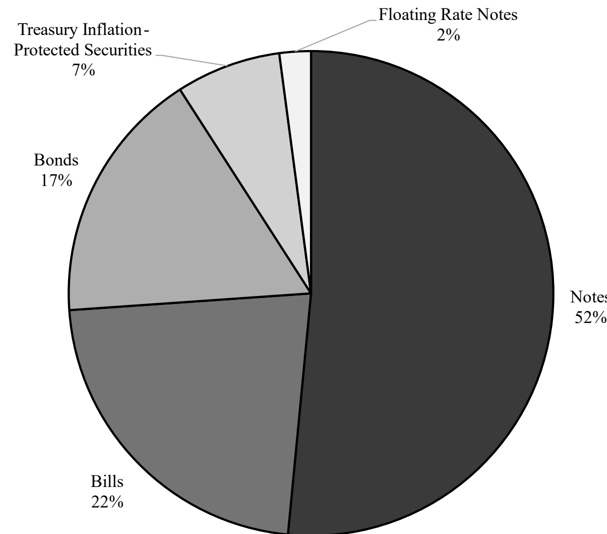
[181] Reserve Bank of Australia, "Bonds and the Yield Curve."

[182] Olivier Fines and Urav Soni, "The Dollar's Exorbitant Privilege," CFA Institute Research & Policy Center (October 2024), https://rpc.cfainstitute.org/sites/default/files/-/media/documents/survey/dollars-exorbitant-privilege-survey-report.pdf.

[183] Peter G. Peterson Foundation, "What Types of Securities Does the Treasury Issue?"

[184] Robert J. Shillerm "A Way to Share in a Nation's Growth," *The New York Times*, December 26, 2009, https://www.nytimes.com/2009/12/27/business/economy/27view.html; Mark Kamstra and Robert J. Shiller, "The Case for Trills: Giving Canadians and their Pension Funds a Stake in the Wealth of the Nation," C.D. Howe Institute commentary no. 271 (August 2008), https://cdhowe.org/wp-content/uploads/2024/04/commentary_271.pdf; USA Gold, "Reviving the Gold Standard: Judy Shelton's Proposal for a Gold-Convertible Treasury Bond," November 25, 2024, https://www.usagold.com/reviving-the-gold-standard-judy-sheltons-proposal-for-a-gold-convertible-treasury-bond/.

Figure 3-5: Composition of U.S. Marketable Debt, January 2025



Source: U.S. Department of the Treasury[185]

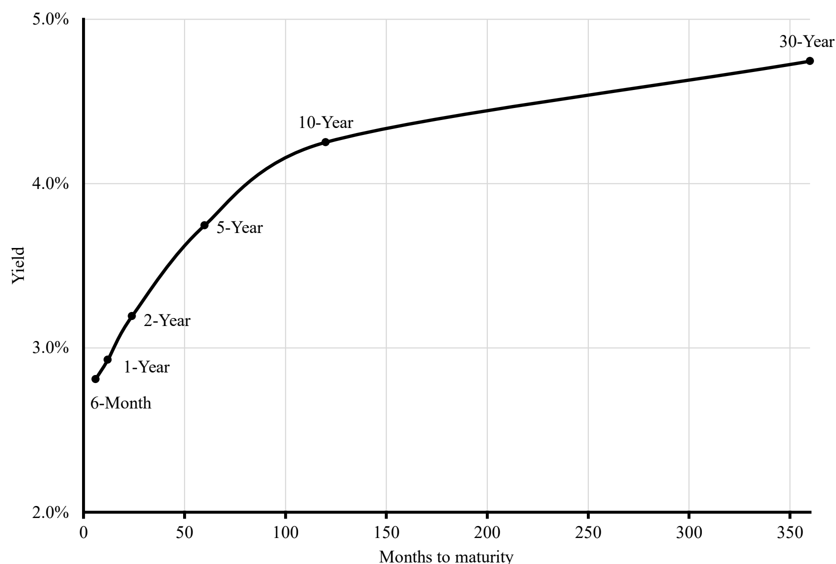
The relationship between the maturity of a security and its yield can be represented with a yield curve. Generally, the yield curve is upward sloping; the yield on a security with a longer maturity is typically higher than on those with a shorter maturity. This reflects the increased risks of locking in capital for a longer term. These risks include inflation running higher than expected, which affects the real value of the security, and interest rates rising before the security matures.[186] Based on data from 1990 to 2023, the average term spread between the 3-month and 10-year Treasury was just

[185] Fiscal Data, "U.S. Treasury Monthly Statement of the Public Debt (MSPD)," U.S. Department of the Treasury, https://fiscaldata.treasury.gov/datasets/monthly-statement-public-debt/summary-of-treasury-securities-outstanding.

[186] Federal Reserve Bank of New York, "Treasury Term Premia," https://www.newyorkfed.org/research/data_indicators/term-premia-tabs.

under 1.6 percentage points.[187] Figure 3-6 shows a yield curve depicting data of average yields from 2007 through 2023, the full period of data available for most of the major maturities.[188]

Figure 3-6: Yield Curve, Average Interest Rates by Maturity



Source: U.S. Department of the Treasury[189]

While supply and demand determine the yield of all Treasuries regardless of maturity, the yield of Treasuries at the shorter end are particularly influenced by the actions of the central bank. In the U.S., the Federal Open Market Committee (FOMC) of the Federal Reserve (Fed) has near full control over short-term interest

[187] U.S. Department of the Treasury, "Interest Rates Data CSV Archive," https://home.treasury.gov/interest-rates-data-csv-archive.

[188] Other common maturities than those denoted in the chart include the 1-month, 3-month, 3-year, 7-year, and 20-year. TreasuryDirect, "About Treasury Marketable Securities," https://treasurydirect.gov/marketable-securities/.

[189] U.S. Department of the Treasury, "Interest Rates Data CSV Archive."

rates.[190] The FOMC exercises this control by setting the Federal Funds Rate (FFR), the Fed's main policy tool. Raising the FFR increases borrowing costs, which puts downward pressure on current consumption and incentivizes savings. This tends to dampen demand in the economy, which, in turn, tends to reduce inflationary pressures.[191] The opposite occurs when the Fed lowers the FFR.[192]

In contrast, the Fed has historically exercised less direct control over long-term interest rates, such as the 10-year Treasury, compared to short-term interest rates.[193] While there is some dispute in the literature, the yield on long-term debt is largely a function of the expected path of short-term rates.[194] The path of rates is also influenced by expectations of inflation and economic growth, as well as the uncertainty of those projections, which

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[190] David Wessel and Manuel Alcalá Kovalski, "The Hutchins Center Explains: The yield curve – what it is, and why it matters," Brookings Institution commentary, December 5, 2018, https://www.brookings.edu/articles/the-hutchins-center-explains-the-yield-curve-what-it-is-and-why-it-matters/.

[191] Board of Governors of the Federal Reserve System, "How does the Federal Reserve affect inflation and employment?" https://www.federalreserve.gov/faqs/money_12856.htm.

[192] Board of Governors of the Federal Reserve System, "How does the Federal Reserve affect inflation and employment?"

[193] Nathaniel Drake, "What Determines the Rate on a 30-Year Mortgage?" Fannie Mae, December 11, 2024, https://www.fanniemae.com/research-and-insights/publications/housing-insights/rate-30-year-mortgage.

[194] N. Gregory Mankiw and Lawrence H. Summers, "Do Long-Term Interest Rates Overreact to Short-Term Interest Rates?" *Brookings Papers on Economic Activity* 15, no. 1 (1984), https://www.brookings.edu/wp-content/uploads/1984/01/1984a_bpea_mankiw_summers_weiss.pdf; David O. Lucca, Samuel Hanson, and Jonathan H. Wright, "The Sensitivity of Long-Term Interest Rates: A Tale of Two Frequencies," Federal Reserve Bank of New York, March 4, 2019, https://libertystreeteconomics.newyorkfed.org/2019/03/the-sensitivity-of-long-term-interest-rates-a-tale-of-two-frequencies/.

increases as the time horizon is extended into the future.[195] This means that longer-term rates are influenced by the central bank's policies but are also influenced by other exogenous factors. Relatively recently, the Fed has exercised more direct control over long-term interest rates as it provided liquidity to markets and stimulated economic activity in times of downturn and financial crisis.

The Fed's efforts to control interest rates

To fulfill the Fed's dual mandate of maximum employment and price stability following the GFC, the FOMC eased monetary policy to reduce borrowing costs and increase economic activity.[196] Beginning in September 2007, the Fed began a cycle of cutting the FFR, pushing yields at the short end of the yield curve near the same level.[197] The FFR reached zero by the end of 2009.[198] When short-term rates hit their lower bound, the Fed started a program of large-scale asset purchases to help stimulate economic activity by lowering long-term rates for Treasuries and other debt securities, including mortgage-backed securities

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[195] Tobias Adrian, "The Role of Inflation Expectations in Monetary Policy," International Monetary Fund, May 15, 2023, https://www.imf.org/en/News/Articles/2023/05/15/sp-role-inflation-expectations-monetary-policy-tobias-adrian.

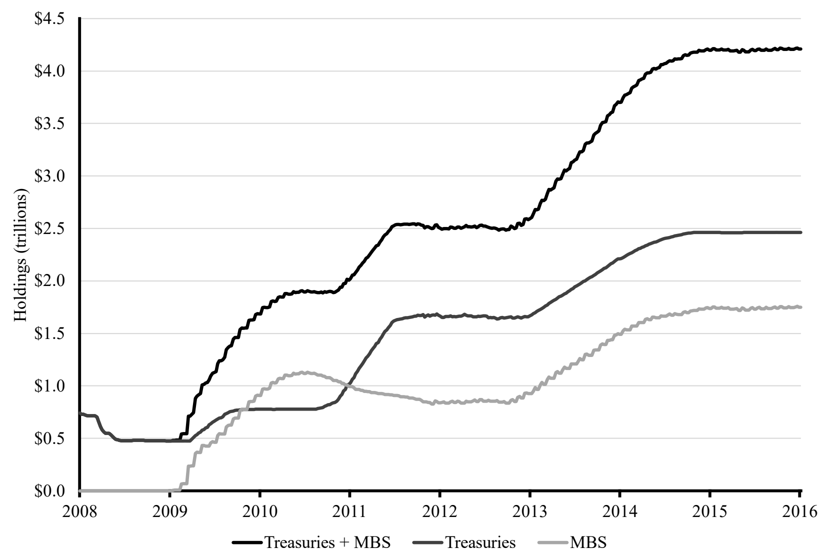
[196] Federal Reserve Bank of Chicago, "The Federal Reserve's Dual Mandate," October 20, 2020, https://www.chicagofed.org/research/dual-mandate/dual-mandate; Tax Policy Center, "What did the 2008–10 tax stimulus acts do?" The Tax Policy Briefing Book, https://taxpolicycenter.org/briefing-book/what-did-2008-10-tax-stimulus-acts-do.

[197] Board of Governors of the Federal Reserve System, "Federal Funds Effective Rate;" Marc Seidner and Pramol Dhawan, "Cuts and Consequences," PIMCO Perspectives, September 12, 2024, https://www.pimco.com/us/en/insights/cuts-and-consequences.

[198] Board of Governors of the Federal Reserve System, "Federal Funds Effective Rate;" Diamond Hill, "Historical Perspective: The Fed's Latest Rate Cut in Context," September 26, 2024, https://www.diamond-hill.com/insights/a-714/articles/historical-perspective-the-feds-latest-rate-cut-in-context/.

(MBS). More commonly referred to as quantitative easing (QE), the first iteration of this program occurred in three rounds between late 2008 and early 2015.[199] During this period, the Fed purchased nearly $2 trillion in Treasury securities and over $1.7 trillion in MBS, bringing the total balance of these two types of securities on the balance sheet from around $500 billion to over $4 trillion.[200]

Figure 3-7: Federal Reserve Balance Sheet Holdings of Treasury Securities and MBS



Source: Board of Governors of the Federal Reserve System[201]

[199] Stephan Luck and Thomas Zimmermann, "Ten Years Later—Did QE Work?" Federal Reserve Bank of New York, May 8, 2019, https://libertystreeteconomics.newyorkfed.org/2019/05/ten-years-laterdid-qe-work/.

[200] Board of Governors of the Federal Reserve System, "Assets: Total Assets: Total Assets (Less Eliminations from Consolidation): Wednesday Level," https://fred.stlouisfed.org/series/WALCL.

[201] Board of Governors of the Federal Reserve System, "Assets: Total Assets: Total Assets (Less Eliminations from Consolidation): Wednesday Level."

Research suggests that the cumulative effect of these three rounds of QE resulted in a decline in the yield of 10-year Treasury securities of up to 1.2 percentage points.[202] As the Fed's actions depressed Treasury yields, the average interest rate on the debt, and subsequently net interest costs, were also depressed.[203]

Net interest costs remained below 2 percent of GDP through 2022, extending the streak that began in 2002, notably lower than the rate in the 1980s and 1990s when the total nominal amount of debt was far lower.[204] Lower net interest costs enabled the U.S. federal government to continue deficit spending, mitigating the interest cost drag of the growth in debt. This supported deficits that averaged over 6 percent of GDP between 2009 and 2015, the period of QE.

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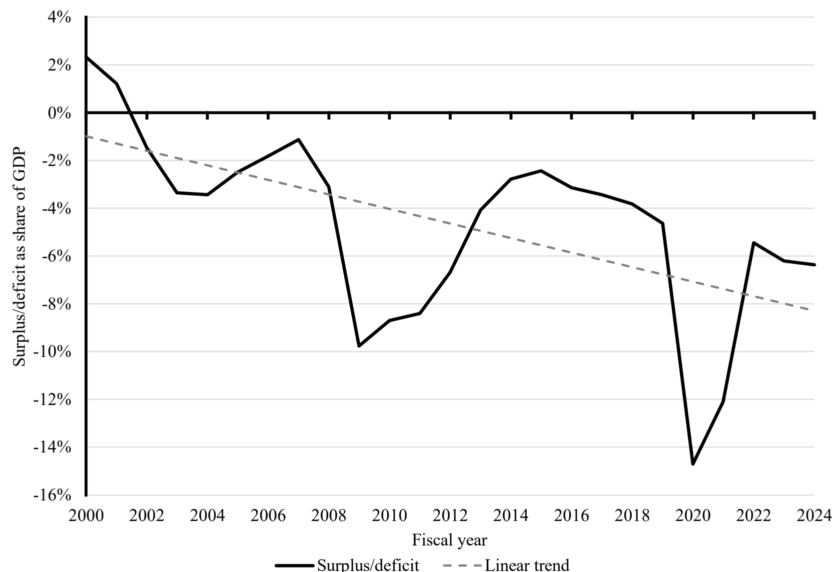
[202] Channels through which QE works include 1) signaling, 2) duration risk, 3) liquidity, 4) safety premium, 5) pre-payment risk, 6) default risk, and 7) inflation risk. Joseph E. Gagnon, "Quantitative Easing: An Underappreciated Success," Peterson Institute for International Economics Policy Brief no. PB16-4 (April 2016), p. 4, https://www.piie.com/sites/default/files/documents/pb16-4.pdf; Arvind Krishnamurthy and Annette Vissing-Jorgensen, "The Effects of Quantitative Easing on Interest Rates: Channels and Implications for Policy," NBER Working Paper no. 17555 (October 2011), https://doi.org/10.3386/w17555.

[203] Congressional Budget Office, *How the Federal Reserve's Quantitative Easing Affects the Federal Budget*, CBO report (September 8, 2022), https://www.cbo.gov/publication/58457.

[204] Congressional Budget Office, "Historical Data and Economic Projections," January 2025, Table 3a.

Figure 3-8: Surplus/deficit as Share of GDP



Source: Congressional Budget Office[205]

The outbreak of the COVID-19 pandemic and resulting economic uncertainty was followed by an immense fiscal and monetary response. As a result of the fiscal response, the federal deficit surpassed 14 percent of GDP in 2020 and remained above 10 percent of GDP in 2021. At the same time, the Fed initiated another round of rate cuts in March 2020 to bring the FFR to effectively zero and engaged in another round of QE to lower interest rates and provide liquidity to financial markets.[206] As a

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[205] Congressional Budget Office, "Historical Data and Economic Projections," January 2025.

[206] Congressional Budget Office, "Historical Data and Economic Projections," February 2024; Eric Milstein and David Wessel, "What did the Fed do in response to the COVID-19 crisis?" Brookings Institution research, January 2, 2024, https://www.brookings.edu/articles/fed-response-to-covid19/; Christina D. Romer, "The fiscal policy response to the pandemic," *Brookings Papers on Economic Activity* (March 24, 2021), https://www.brookings.edu/articles/the-fiscal-policy-response-to-the-pandemic/.

result, the Fed's balance sheet ballooned from just over $4 trillion in early 2020 to just under $9 trillion in early 2022, with the amount of Treasuries on the balance sheet rising from about $2.5 trillion to $5.7 trillion.[207]

When inflation spiked following the substantial fiscal stimulus, the Fed began raising interest rates to slow price pressures.[208] Between the spring of 2022 and the summer of 2023, the FOMC raised the FFR 11 times, amounting to a total increase of 5.25 percentage points. In 2022, the Fed also initiated quantitative tightening (QT), the process of reducing the amount of assets on its balance sheet.[209] QT involves allowing a certain number of securities that mature each month not to be re-invested and instead roll off the Fed's balance sheet.[210] Since QT began, the value of Treasuries on the balance sheet has declined by over $1.4 trillion.[211] Research suggests that given enough magnitude, the tightening effects on financial conditions and interest rates, such

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[207] Board of Governors of the Federal Reserve System, "Assets: Securities Held Outright: U.S. Treasury Securities: All: Wednesday Level," https://fred.stlouisfed.org/series/TREAST; Board of Governors of the Federal Reserve System, "Assets: Total Assets: Total Assets (Less Eliminations from Consolidation): Wednesday Level."

[208] Jane Ihrig and Chris Waller, "The Federal Reserve's responses to the post-Covid period of high inflation," FEDS Notes (Board of Governors of the Federal Reserve System, February 14, 2024), https://doi.org/10.17016/2380-7172.3455.

[209] David Wessel, "How will the Federal Reserve decide when to end 'quantitative tightening'?" Brookings Institution commentary, October 17, 2024, https://www.brookings.edu/articles/how-will-the-federal-reserve-decide-when-to-end-quantitative-tightening/.

[210] Tim Sablik, "The Fed Is Shrinking Its Balance Sheet. What Does That Mean?" Federal Reserve Bank of Richmond *Econ Focus* 27, no. 3 (Third Quarter 2022), https://www.richmondfed.org/-/media/RichmondFedOrg/publications/research/econ_focus/2022/q3/federal_reserve.pdf.

[211] Board of Governors of the Federal Reserve System, "Assets: Securities Held Outright: U.S. Treasury Securities: All: Wednesday Level."

as the 10-year Treasury, are equivalent to entire rate hikes in the FFR. Specifically, a roll-off of a little more than $2 trillion dollars amounts to a little more than one 25-basis-point hike in the FFR.[212]

By suppressing Treasury yields, and thus interest costs, the Federal Reserve effectively supported the federal government's deficit spending and rapid accumulation of debt. With much higher debt levels and rising interest rates, the U.S. is projected to face increasing interest costs, higher deficits, and even higher debt levels.[213] Higher debt levels, in turn, could push up interest rates through a rising risk premium.[214] If a country's fiscal trajectory worsens, markets may assess the government's probability of default—the loss of its ability to continue to finance its debts—to be elevated. A study of a wide selection of countries finds that government debt and other economic, governance, and fiscal performance variables have a statistically significant impact on sovereign debt ratings.[215] This can lead to the markets demanding higher yields from the government to compensate for the increased perceived risk of default. While the U.S. has attributes that act as a counterweight to its rising debt levels, such as control of the world's reserve currency, large and liquid capital markets, and the

[212] Bin Wei, "Quantifying 'Quantitative Tightening' (QT): How Many Rate Hikes Is QT Equivalent To?" Federal Reserve Bank of Atlanta (May 8, 2022), https://dx.doi.org/10.2139/ssrn.4103824.

[213] Congressional Budget Office, "10-Year Budget Projections," January 2025.

[214] For an explanation of risk-premia in the context of corporate bonds, see: John C. Hull, Mirela Predescu, and Alan White, "Bond Prices, Default Probabilities and Risk Premiums" (March 9, 2005), https://dx.doi.org/10.2139/ssrn.2173148; Cinzia Alcidi and Daniel Gros, "Public debt and the risk premium: A dangerous doom loop," Centre for European Policy Studies Policy Insights no. 2019-06 (May 2019), https://www.sipotra.it/wp-content/uploads/2019/05/Public-debt-and-the-risk-premium-A-dangerous-doom-loop.pdf.

[215] António Afonso, Pedro Gomes, and Philipp Rother, "What 'Hides' Behind Sovereign Debt Ratings?" European Central Bank Working Paper no. 711 (January 2007), https://doi.org/10.2139/ssrn.954705.

largest economy in the world in nominal terms, a deteriorating fiscal trajectory presents risks to its perceived ability to finance its debts.

Interest costs: where we are and where we used to be

While interest rates in the current period may appear high, by historical standards they are not. Between 1965 and 1990, the FFR was usually well over 5 percent, largely the result of the Fed's fight against "The Great Inflation," which lasted from the mid-1960s through the early 1980s.[216] Rising from about 2 percent year-over-year in 1965, inflation peaked at over 14 percent year-over-year in 1980.[217] In 1981, the response from the Fed, led by newly appointed Chairman Paul Volcker, brought an already elevated FFR to nearly 20 percent. In response to previous inflation, the FFR had already risen from around 4 percent in 1965 to 10 percent in 1979.[218] This spike in interest rates contributed to the recession of 1981–1982, but inflation was quelled to more normal levels, around 3 percent year-over-year, by 1983.[219] After this period,

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[216] Board of Governors of the Federal Reserve System, "Federal Funds Effective Rate;" Michael Bryan, "The Great Inflation," Federal Reserve History, as of November 22, 2013, https://www.federalreservehistory.org/essays/great-inflation.

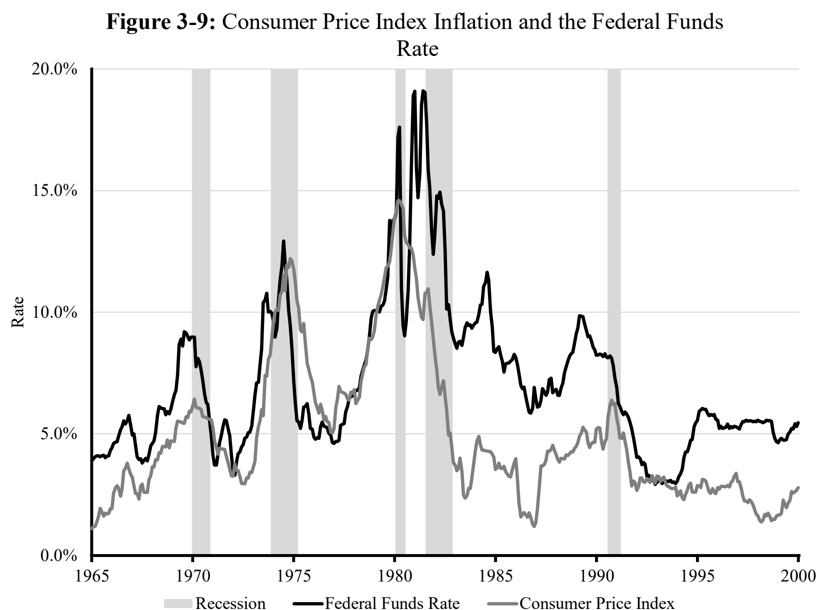
[217] U.S. Bureau of Labor Statistics, "Consumer Price Index for All Urban Consumers: All Items in U.S. City Average," https://fred.stlouisfed.org/series/CPIAUCSL.

[218] Board of Governors of the Federal Reserve System, "Federal Funds Effective Rate;" Bryan, "The Great Inflation."

[219] Tim Sablik, "Recession of 1981–82," Federal Reserve History, as of November 22, 2013, https://www.federalreservehistory.org/essays/recession-of-1981-82; Congressional Budget Office, *The Prospects for Economic Recovery*, CBO report (February 1982), p. XI, https://www.cbo.gov/publication/15329; J. A. Cacy, "Monetary Policy in 1981 and 1982," *Economic Review* 66 (December 1981), https://www.kansascityfed.org/documents/885/1981-Monetary%20Policy%20in%201981%20and%201982.pdf; John H. Cochrane, "Fiscal Histories," *The Journal of Economic Perspectives* 36, no. 4 (2022): 125–46, https://doi.org/10.1257/jep.36.4.125; U.S. Bureau of Labor Statistics, "Consumer Price Index for All Urban Consumers."

interest rates remained above modern levels due largely to relatively strong economic growth, which averaged 3.7 percent between 1983 and 2000.[220] The trend in the FFR and Consumer Price Index (CPI) inflation over the period is shown in Figure 3-9.

Figure 3-9: Consumer Price Index Inflation and the Federal Funds Rate



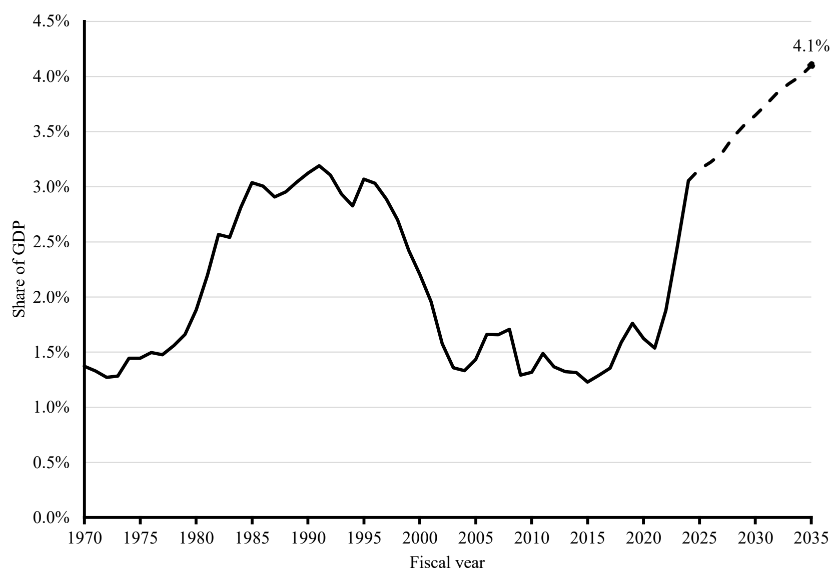
Sources: Bureau of Labor Statistics;[221] Board of Governors of the Federal Reserve System;[222] National Bureau of Economic Research[223]

As a result of the elevated interest rates of this period, between FY1980 and FY2000, net interest outlays as a share of GDP averaged 2.8 percent, still higher than the level in FY2023, and only slightly lower than the 3.1 percent of GDP reached in

[220] U.S. Bureau of Economic Analysis, "Real Gross Domestic Product," https://fred.stlouisfed.org/series/GDPC1.
[221] U.S. Bureau of Labor Statistics, "Consumer Price Index for All Urban Consumers."
[222] Board of Governors of the Federal Reserve System, "Federal Funds Effective Rate."
[223] National Bureau of Economic Research, "Business Cycle Dating," https://www.nber.org/research/business-cycle-dating.

FY2024.[224] As a share of outlays, net interest costs averaged 13.5 percent over the same span. Net interest costs as a share of GDP from 1970 to 2035, which includes the CBO forecast, are shown in Figure 3-10. While current net interest outlays as a share of GDP are not yet high relative to historical levels, CBO projects interest costs as a share of GDP will surpass 4.1 percent in 2035.[225]

Figure 3-10: Net Interest Costs as Share of GDP



Source: Congressional Budget Office[226]

Net interest costs are not out of the range of normalcy, like levels seen between 1980 and 2000.[227] However, their recent increase is

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[224] Congressional Budget Office, "Long-Term Budget Projections," Budget and Economic Data, January 2025, https://www.cbo.gov/system/files/2025-01/51119-2025-01-LTBO-budget.xlsx; Congressional Budget Office, "10-Year Budget Projections," January 2025.

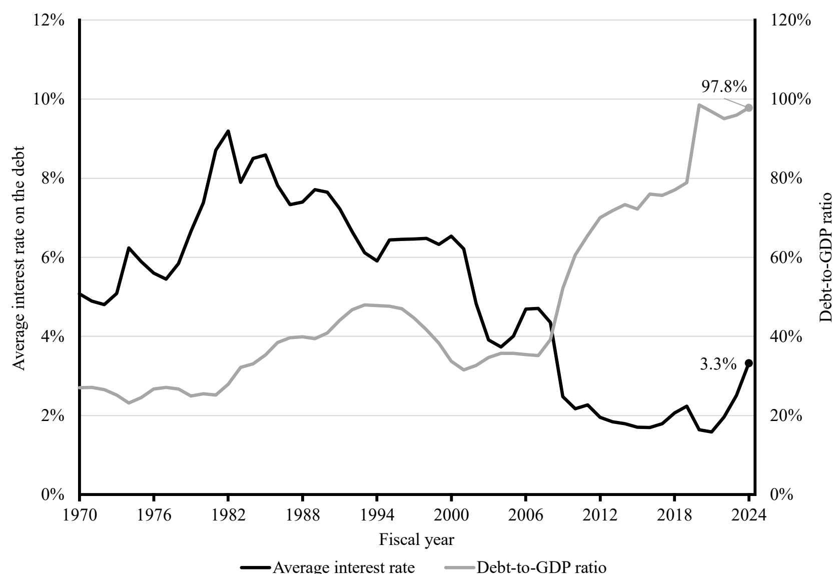
[225] Congressional Budget Office, "10-Year Budget Projections," January 2025.

[226] Congressional Budget Office, "Historical Data and Economic Projections," January 2025.

[227] Congressional Budget Office, "10-Year Budget Projections," January 2025.

concerning because the cause in this case is not historically high interest rates, rather a dramatically higher debt profile as a share of GDP. [228]

Figure 3-11: Average Interest Rate and Debt as Share of GDP



Source: Congressional Budget Office[229]

Given the rapid rise in debt, relatively small changes in interest rates by historical standards can dramatically impact net interest

[228] Congressional Budget Office, "10-Year Budget Projections," Budget and Economic Data, January 2025, Table B-1; U.S. Bureau of Economic Analysis, "Real Gross Domestic Product;" U.S. Bureau of Labor Statistics, "Consumer Price Index for All Urban Consumers;" Congressional Budget Office, "The Historical Decline in Real Interest Rates and Its Implications for CBO's Projections," CBO Working Paper no. 2020-09 (December 21, 2020), https://www.cbo.gov/publication/56891; Maurice Obstfeld and Linda Tesar, "The Decline in Long-Term Interest Rates," The Obama White House blog, July 14, 2015, https://obamawhitehouse.archives.gov/blog/2015/07/14/decline-long-term-interest-rates.

[229] Congressional Budget Office, "Historical Data and Economic Projections," January 2025.

costs by hundreds of billions of dollars. For example, if the average interest rate on the debt was the same as when it peaked in 1982, under the current debt profile, net interest costs would surpass $2.4 trillion per year. This would amount to over 50 percent of total FY2023 revenues.[230] If the ratio of debt held by the public to GDP continues rising near the pace projected by CBO, surpassing 154 percent by 2055, a mere 1 percentage point increase in the average interest rate on the debt would lead to an increase in net interest costs of over 5 percent of outlays.[231] The sensitivity of net interest costs to interest rate changes is best summarized in a matrix to see how even small changes over a few years can lead to much larger outlays over the budget window.

[230] Congressional Budget Office, "Historical Data and Economic Projections," January 2025.

[231] Congressional Budget Office, "Long-Term Budget Projections," January 2025.

Table 3-2: Net Interest Cost Representation Matrix

Additional interest outlays from 2025 to 2034 (billions)

Increase in the 10-Year Treasury interest rate, relative to baseline (%)

Years after 2024 of higher interest rates	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
1	$39	$78	$117	$155	$194	$233	$272	$311	$350	$389
2	$76	$152	$229	$305	$381	$457	$534	$610	$686	$762
3	$113	$225	$338	$450	$563	$676	$788	$901	$1,013	$1,126
4	$149	$297	$446	$594	$743	$891	$1,040	$1,188	$1,337	$1,485
5	$181	$363	$544	$725	$907	$1,088	$1,270	$1,451	$1,632	$1,814
6	$212	$424	$636	$848	$1,060	$1,272	$1,484	$1,696	$1,908	$2,120
7	$240	$481	$721	$961	$1,202	$1,442	$1,683	$1,923	$2,163	$2,404
8	$265	$529	$794	$1,058	$1,323	$1,587	$1,852	$2,116	$2,381	$2,645
9	$283	$567	$850	$1,134	$1,417	$1,701	$1,984	$2,268	$2,551	$2,834
10	$291	$583	$874	$1,166	$1,457	$1,749	$2,040	$2,332	$2,623	$2,915

Source: Congressional Budget Office;[232] JEC Republicans calculations

Implications for U.S. fiscal health

The growth of the debt and increase in net interest costs present significant adverse implications for the U.S.' fiscal health. If rising debt begets higher interest rates, and higher interest rates raise interest costs and exacerbate debt growth, a vicious cycle can form. The fiscal trajectory must be addressed.

As explained in Chapter 2 of the *2023* and Chapter 1 of the *2024 Response,* so long as real interest rates remain below the growth rate of the economy and deficits are sufficiently small, the U.S. can stabilize the growth of the debt-to-GDP ratio. This framework draws on Olivier Blanchard's 2019 presidential address to the

[232] Congressional Budget Office, "Workbook for How Changes in Economic Conditions Might Affect the Federal Budget: 2024 to 2034," CBO interactive, April 9, 2024, https://www.cbo.gov/publication/60074.

American Economic Association and considers the relationship between three macroeconomic variables presented below.[233]

1. the inflation-adjusted growth rate of the U.S. economy (“g”);
2. the inflation-adjusted interest rate on U.S. Federal debt (“r”); and
3. the primary deficit of the U.S. Federal government (“p”).

As a simplifying assumption, assume that r and g are constants, equal to their long-run averages. Where t denotes time, the growth of the debt-to-GDP ratio is given as follows.

$$\frac{\partial}{\partial t}\left(\frac{Debt_t}{GDP_t}\right) = (r - g) * \frac{Debt_t}{GDP_t} + \frac{p_t}{GDP_t}$$

While this framework highlights two levers for stabilizing debt-to-GDP, growing the economy and lowering deficits, a deteriorating fiscal trajectory raises the risk that higher interest rates will impair both levers. The first lever, growing the economy, mitigates politically infeasible spending cuts and tax hikes, but there is a ceiling to reasonable expectations of economic growth. Even a return to 1990s-era economic expansion would do little to change the trajectory of real deficit growth.[234] Faster economic growth could also raise interest rates by increasing the demand for loanable funds, slightly reducing the potential benefits of

[233] Olivier Blanchard, “Public Debt and Low Interest Rates,” *American Economic Review* 109, no. 4 (2019): 1197–1229, https://doi.org/10.1257/aer.109.4.1197.

[234] Stephen D. Oliner and Daniel E. Sichel, “The Resurgence of Growth in the Late 1990s: Is Information Technology the Story?” Finance and Economics Discussion Series (Board of Governors of the Federal Reserve System, April 2000), https://www.federalreserve.gov/pubs/feds/2000/200020/200020pap.pdf.

accelerated expansion to deficit reduction.[235] Further, rising interest rates crowd out private investment, slowing economic growth and the growth of tax revenue, worsening deficits. Servicing debt requires capital that would otherwise be used and invested in private markets. As debt increases relative to GDP, private investment is crowded out, raising marginal returns to capital. This causes rising competition for loanable funds, pushing up interest rates.[236]

To meaningfully use the second lever, decreasing primary deficits, there must be a reduction in mandatory outlays, which make up over 60 percent of total outlays and just under 70 percent of total non-interest outlays, as of FY2024.[237] As Chapter 3 of the *2023 Response* and Chapter 4 of the *2024 Response* explain, addressing Americans' physical health, for example through innovation, could alter the path of mandatory outlays. Unfortunately, the federal government has not developed a plan to materially address deficits. There may come a time when this has critical implications for monetary policy.

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[235] Alexander W. Salter, "Faster Growth and Interest Rates: Even Harder than You Think," *The Daily Economy*, March 7, 2024, https://thedailyeconomy.org/article/faster-growth-and-interest-rates-even-harder-than-you-think/.

[236] Research suggests that an increase in the federal debt-to-GDP ratio of 1 percentage point leads to an increase in interest rates of 2 to 3 basis points through this pathway. Under the long-term budget projections from CBO, the debt-to-GDP ratio is set to rise from 98 percent in FY2024 to 154 percent in FY2055. This would result in interest rates between 1.3 and 2 percentage points higher than they are currently, ceteris paribus. Kei-Mu Yi and Jing Zhang, "Real Interest Rates Over the Long Run," FOMC memo (Federal Reserve, October 13, 2015), https://www.federalreserve.gov/monetarypolicy/files/FOMC20151013memo03.pdf; Congressional Budget Office, "Long-Term Budget Projections," January 2025.

[237] Congressional Budget Office, "10-Year Budget Projections," January 2025.

Fiscal dominance is when the monetary authority is forced to cede its power of inflation management to the fiscal authority to stabilize deficits. This contrasts with a monetary dominance regime where the central bank adjusts policy to control inflation without regard to fiscal conditions or deficits, the job of the fiscal authority.[238]

Table 3-3: Monetary vs. Fiscal Dominance Regime Attributes

Behavior	**Policy Regime**	
	Monetary Policy	**Fiscal Policy**
Monetary Dominance	Active Role	Passive Role
	Determines Inflation	Stabilizes Debt
Fiscal Dominance	Passive Role	Active Role
	Stabilizes Debt	Determines Inflation

Source: Mercatus Center[239]

If debt grows to the point where the Fed changes its behavior to minimize debt growth under its financial stability mandate by keeping interest rates—and thus interest costs—low, the U.S. could fall into a fiscal dominance regime.[240] The consequence of this could be secularly higher inflation, which could destabilize

[238] Eric Leeper, "Fiscal Dominance: How Worried Should We Be?" Mercatus Center policy brief (April 3, 2023), https://www.mercatus.org/research/policy-briefs/fiscal-dominance-how-worried-should-we-be.

[239] Leeper, "Fiscal Dominance: How Worried Should We Be?"

[240] Renee Haltom and John A. Weinberg, "Does the Fed Have a Financial Stability Mandate?" Federal Reserve Bank of Richmond Economic Brief no. EB17-06, https://www.richmondfed.org/-/media/richmondfedorg/publications/research/economic_brief/2017/pdf/eb_17-06.pdf.

and deter business investment and reduce economic activity and growth.[241]

This condition has plagued several countries that allowed debt growth to surpass sustainable levels, for example Argentina. Elevated deficits and debt profiles caused many of Argentina's economic and fiscal problems, and this forced the government to change monetary policy to accommodate fiscal policy. Since the late 1800s, this has resulted in several cycles of hyperinflation and defaults, with only brief intermittent periods of macroeconomic stability and growth.[242] While factors aside from fiscal policy can affect a country's economic growth, the difference in real GDP per capita growth between the U.S. and Argentina is significant and at

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[241] Javier Andres and Ignacio Hernando, "Does Inflation Harm Economic Growth? Evidence for the OECD," NBER Working Paper no. 6062 (June 1997), https://doi.org/10.3386/w6062; John Hooley, Lam Nguyen, Mika Saito, and Shirin Nikaein Towfighian, "Fiscal Dominance and Inflation: Evidence from Sub-Saharan Africa," *Public Sector Economics* 48, no. 48 (2024): 363–91, https://doi.org/10.3326/pse.48.3.5; Jean-Claude Nachega, "Fiscal Dominance and Inflation in the Democratic Republic of the Congo," IMF Working Paper no. 05/221 (November 2005), https://ssrn.com/abstract=888090.

[242] Similarly, fiscal dominance has relatively recently plagued Turkey when in the early 2000s a high debt profile constrained the flexibility of the reaction to inflation monetary policy could have. This led to a year in 2001 when the currency was devalued by more than 50 percent and required a significant intervention and fiscal infusion from the International Monetary Fund (IMF) to stabilize the country's fiscal affairs. Hasan Ersel and Fatih Özatay, "Fiscal Dominance and Inflation Targeting: Lessons from Turkey," *Emerging Markets Finance and Trade* 44, no. 6 (2008): 38–51, https://doi.org/10.2753/REE1540-496X440603; A. Erinc Yeldan, "Turkey and the Long Decade with The IMF: 1998–2008" (June 2008), https://www.networkideas.org/news/jun2008/Turkey_IMF.pdf; María Gadea, Marcela Sabaté, and Isabel Sanz, "Long-run fiscal dominance in Argentina, 1875–1990," *Financial History Review* 19, no. 3 (2012): 311–35, https://doi.org/10.1017/S0968565012000157; Francisco J. Buera and Juan Pablo Nicolini, "The Case of Argentina," Becker Friedman Institute for Economics at the University of Chicago, https://manifold.bfi.uchicago.edu/read/case-of-argentina/section/9905ef24-8c94-42ad-adf7-068efb4d9afb.

least partially attributable to Argentina's poor fiscal management and episodes of fiscal dominance. This led to less prosperity for the citizens of Argentina.

More easily comparable are Chile and Argentina. The neighboring South American countries each liberalized their economies in the late 1970s.[243] Chile has managed its fiscal affairs better than Argentina over the period since, resulting in a significant divergence in GDP growth per capita since liberalization.[244]

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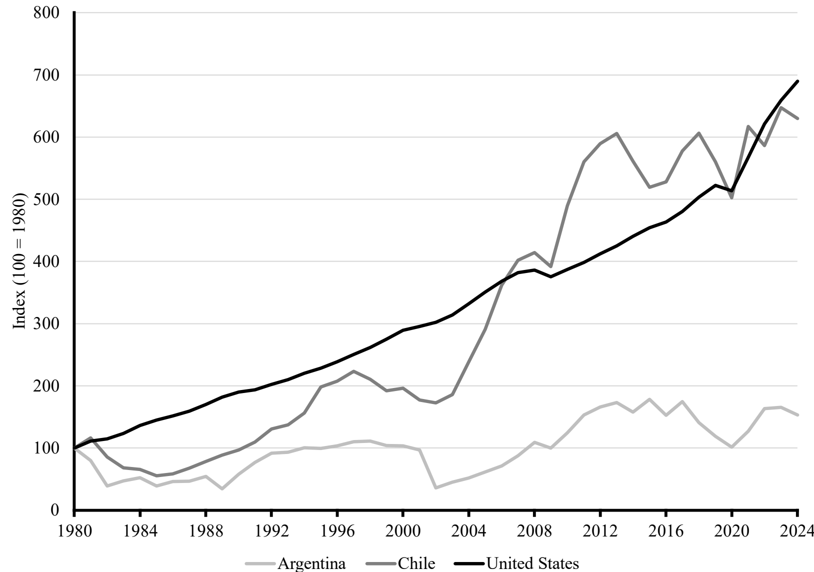
[243] D. Hachette and R. Luders, "Privatization in Argentina and Chile: Lessons from a Comparison," The World Bank Internal Discussion Paper no. IDP18 (April 1988), http://documents.worldbank.org/curated/en/619571468914752347; Michael Boskin, "Why does Chile prosper while neighbouring Argentina flounders?" *The Guardian*, November 22, 2013, https://www.theguardian.com/business/economics-blog/2013/nov/22/chile-prosper-argentina-flounders.

[244] Sean Silverthorne, "Solving an Economic Mystery Surrounding Argentina and Chile," Harvard Business School Working Knowledge, March 8, 2016, https://www.library.hbs.edu/working-knowledge/solving-an-economic-mystery-around-argentina-and-chile; Luciana Vázquez, "Surprisingly, Chile Is Still a Role Model for Argentina," *Americas Quarterly*, May 23, 2023, https://www.americasquarterly.org/article/surprisingly-chile-is-still-a-role-model-for-argentina/.

Figure 3-12: Change in Real GDP per Capita



Source: International Monetary Fund[245]

While the potential exists for the U.S. to succumb to fiscal dominance, fortunately, there is not yet a consensus among economists that the country has reached that point.[246] To avert that situation, primary deficits must shrink to achieve long-run fiscal balance. Simply relying on the Fed to lower interest rates is not a sufficient strategy. The U.S. should enact policies that would increase the rate of real economic growth, such as those outlined in Chapters 3 and 5 of the *2024 Response.* Furthermore*,* policies should address mandatory spending through appropriate reforms and innovative solutions, such as those discussed in Chapter 4 of the same report. Immediate action is required before it is too late

[245] International Monetary Fund, "GDP per capita, current prices," https://www.imf.org/external/datamapper/NGDPDPC@WEO/ARG/CHL/USA.

[246] Charles W. Calomiris, "Fiscal Dominance and the Return of Zero-Interest Bank Reserve Requirements," Federal Reserve Bank of St. Louis *Review* 105, no. 4 (Fourth Quarter 2023): 223–33, https://doi.org/10.20955/r.105.223-33.

to prevent serious damage to not only the nation's fiscal health but also its economic health and geopolitical power.

CHAPTER 4: AN UPDATE ON OBESITY TRENDS

The Republican Response in the *2024 Joint Economic Report* (*Response*) outlined the United States' dire fiscal situation. Since January 2021, the total national debt has risen by $8.5 trillion largely due to outsized spending on Social Security and Medicare and the resulting net interest costs.[247] Of the two major mandatory programs, Medicare and Social Security, Medicare has the most unpredictable long-term costs due to changing health trends and variability in the costs of Medicare services. Chapter 4 of the *2024 Response* concluded that obesity is a primary driver of our medical spending, resulting in between $8.2 and $9.1 trillion in excess medical expenditures over the next ten years for those suffering from the disease.[248] Finding innovative solutions to improve Americans' health through reductions in obesity rates would have a large impact both on Americans' well-being and our fiscal situation. Since the *2024 Response*, there have been a number of legislative and medical developments relating to obesity. This Chapter will overview and analyze these changes, as well as provide recommendations for policymakers on how best to craft fiscally responsible policies to reduce obesity.

Obesity prevalence

Since the release of the *2024 Response*, there has been a notable update to a major health survey that measures obesity prevalence, the National Health and Nutrition Examination Survey

[247] Bureau of the Fiscal Service, "Monthly Treasury Statement," U.S. Department of the Treasury (January 2025), https://www.fiscal.treasury.gov/files/reports-statements/mts/mts1224.pdf.

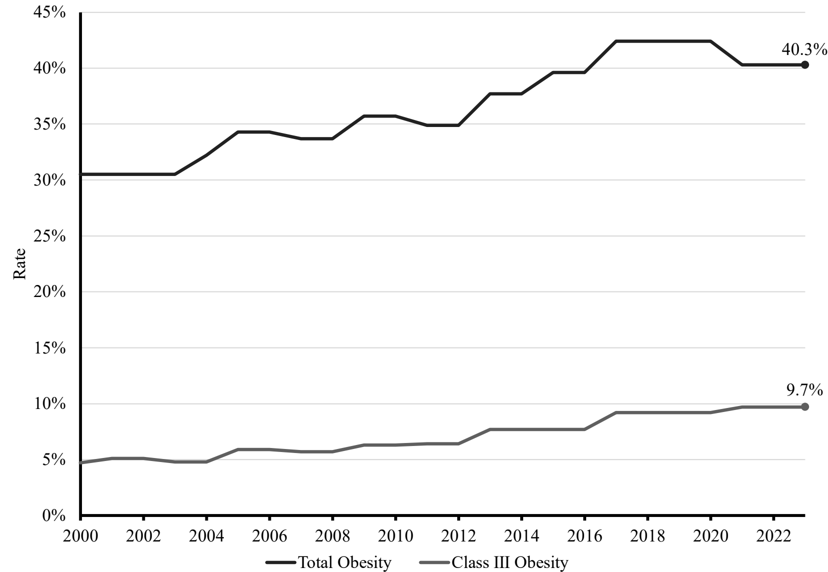
[248] Joint Economic Committee Republicans, "Chapter 4: Reaching Fiscal Solutions Through Healthcare Innovation," in *The 2024 Joint Economic Report, Republican Response* (U.S. Congress Joint Economic Committee, 2024), https://www.jec.senate.gov/public/vendor/_accounts/JEC-R/jer-chapters/2024JERChapter4.pdf.

(NHANES).[249] When the *2024 Response* was published in June 2024, the most recent data available was from 2017–2018 due to a 16-month hiatus in data collection from April 2020 to July 2021, caused by the COVID-19 pandemic. The update in September 2024 expanded the prior data period from 2017–2018 to include data from January 2019–March 2020 as well as published new data from August 2021–August 2023. The most recent data shows a plateauing of the overall adult obesity rate, with the authors of the report stating that "from 2013–2014 through August 2021–August 2023, the age-adjusted prevalence of obesity in adults did not change significantly."[250]

[249] The survey is a nationally representative sample of around 5,000 individuals and uses both interviews and examinations to assess the health status of adults and children in the U.S. The survey provides a more accurate picture of obesity prevalence than other estimates due to the fact that weight and height are observed and not self-reported by individuals. Samuel D. Emmerich, Cheryl D. Fryar, Bryan Stierman, and Cynthia L. Ogden, "Obesity and Severe Obesity Prevalence in Adults: United States, August 2021–August 2023," NCHS Data Brief no. 508 (National Center for Health Statistics, 2024), https://dx.doi.org/10.15620/cdc/159281; National Center for Health Statistics, "About NHANES," https://www.cdc.gov/nchs/nhanes/about/index.html.

[250] Emmerich, Fryar, Stierman, and Ogden, "Obesity and Severe Obesity Prevalence in Adults."

Figure 4-1: NHANES Adult (20+) Obesity Rates

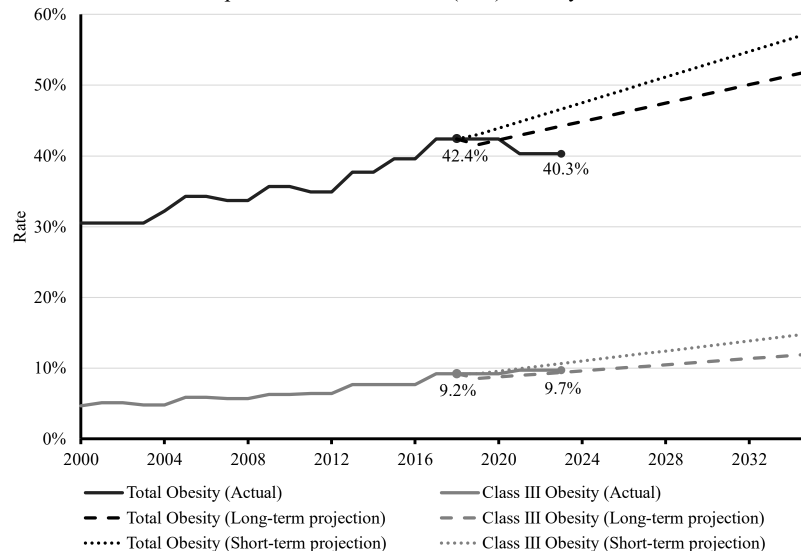


Source: National Center for Health Statistics[251]

This information represents a deviation from prior years' NHANES reports which showed a gradual increase in both the headline and severe obesity rate. Figure 4-1 displays the NHANES data on the overall and severe obesity rate from 2000 to 2023.

[251] Cheryl D. Fryar, Margaret D. Carroll, and Joseph Afful, "Prevalence of Overweight, Obesity, and Severe Obesity Among Adults Aged 20 and Over: United States, 1960–1962 Through 2017–2018," NCHS Health E-Stats (National Center for Health Statistics, 2020), Table 1, https://www.cdc.gov/nchs/data/hestat/obesity-adult-17-18/obesity-adult.htm; Bryan Stierman, Joseph Afful, Margaret D. Carroll, et al., "National Health and Nutrition Examination Survey 2017–March 2020 Prepandemic Data Files—Development of Files and Prevalence Estimates for Selected Health Outcomes," *National Health Statistics Reports*, no. 158 (June 2024), Tables 5 and 6, https://doi.org/10.15620/cdc:106273; Emmerich, Fryar, Stierman, and Ogden, "Obesity and Severe Obesity Prevalence in Adults."

Figure 4-2: 2024 Joint Economic Report Projection Compared to Updated NHANES Adult (20+) Obesity Rates



Source: National Center for Health Statistics[252]

The *2024 Response* used a linear regression of the past ten and 31 years of NHANES data to project obesity prevalence through 2034. Given that obesity prevalence had accelerated significantly faster in the prior ten years compared to the prior 31 years, two estimates were made, with the long-term projection representing the lower bound and the short-term projection representing the upper bound. As Figure 4-2 shows, especially in the case of the general obesity rate, there is a pronounced deviation from the earlier trend of obesity rates gradually increasing over the past 30+ years.[253] The change in this trend has led to a considerable amount

[252] Fryar, Carroll, and Afful, "Prevalence of Overweight, Obesity, and Severe Obesity," Table 1; Stierman, Afful, Carroll, et al., "National Health and Nutrition Examination Survey 2017–March 2020," Tables 5 and 6; Emmerich, Fryar, Stierman, and Ogden, "Obesity and Severe Obesity Prevalence in Adults."

[253] Joint Economic Committee Republicans, *The 2024 Joint Economic Report, Republican Response* (U.S. Congress Joint Economic Committee, 2024), p. 110, https://sen.gov/LVQNL.

of attention, with some claiming that the U.S. has passed its "peak obesity" and that this change may be due to the increased prevalence of anti-obesity medications (AOMs) such as GLP-1s.[254] While this change in the headline obesity rate is certainly a positive development, a more granular look into the data indicates that the plateauing observed may not indicate an improvement in the aggregate health of Americans and that the federal budget is still a long way away from reaping the benefits of this alleged reduction in the obesity rate.

Severe obesity rate

The *2024 Response* calculated the outsized impact that severe obesity (or Class 3 obesity), defined as a BMI greater than 40, has on health expenditures. The excess annual medical costs associated with Class 1 (BMI between 30.0 and 34.9) and Class 2 (BMI between 35.0 and 39.9) obesity were estimated to be $4,043 in 2024, while expenditures for those with Class 3 were more than double at $9,895.[255] Despite comprising less than a quarter of the overall obese population, Class 3 obesity accounted for over 44 percent of the total excess medical expenditures on obesity.[256] A significant portion of medical cost savings to both the federal government and private sector could be attributed to a large decline in the severe obesity rate. However, despite a drop in the overall obesity rate, the NHANES survey reports that severe obesity actually increased in 2021–23, rising from 9.2 percent in 2017–March 2020 to 9.7 percent in 2021–23.[257] Over the past ten

[254] John Burn-Murdoch, "We may have passed peak obesity," *Financial Times*, October 4, 2024, https://www.ft.com/content/21bd0b9c-a3c4-4c7c-bc6e-7bb6c3556a56.

[255] Joint Economic Committee Republicans, *2024 Republican Response*, 114.

[256] Joint Economic Committee Republicans calculations; Joint Economic Committee Republicans, *2024 Republican Response*.

[257] Data for 2017-2020 only goes through March 2020 due to the onset of the COVID-19 pandemic.

years, the severe obesity rate has risen by 2 percentage points, which represents a significant share of the increase in the growth of excess medical expenditures. Given these factors, it is not clear that even if the trend of the overall obesity rate decreasing was permanent that it would translate to savings for the federal government if at the same time the severe obesity rate continues to rise.

Overall obesity rate

In addition to the rising severe obesity rate, it is unclear whether the recent NHANES data represents a permanent or temporary trend, or whether it is attributable to factors other than improved health. Prior to the pre-COVID impartial data from 2019–March 2020 being combined with 2017–2018 data, the 2017–2018 period had a 42.4 percent obesity rate and a 9.2 percent severe obesity rate.[258] After the merging of this data, the obesity rate fell slightly to 41.9 percent, while the severe obesity rate remained at 9.2 percent. The decline of the obesity rate in 2021–2023 to 40.3 percent is notable, but it is not clear this represents a permanent trend. Although the obesity rate has progressively increased over the past 25 years, similar short-term declines have occurred in the past.

Since 1999, there have been two other two-year periods where the obesity rate had fallen: 2007–2008 and 2011–2012.[259] Despite

[258] Craig M. Hales, Margaret D. Carroll, Cheryl D. Fryar, and Cynthia L. Ogden, "Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017–2018," NCHS Data Brief no. 360 (National Center for Health Statistics, 2020), https://www.cdc.gov/nchs/products/databriefs/db360.htm.

[259] Cheryl D. Fryar, Margaret D. Carroll, and Joseph Afful, "Prevalence of Overweight, Obesity, and Severe Obesity Among Adults Aged 20 and Over: United States, 1960–1962 Through 2017–2018," NCHS Health E-Stats (National Center for Health Statistics, 2020), https://www.cdc.gov/nchs/data/hestat/obesity-adult-17-18/obesity-adult.htm.

declines in these periods, the obesity rate has risen by nearly 10 percentage points from 1999 to 2023.[260] It cannot be conclusively stated that the decline in 2021–2023 is a permanent trend that represents a change in the aggregate health of the U.S. population. It may instead be attributable to other factors such as increased mortality due to the COVID-19 pandemic or random fluctuations in the data.[261] Individuals with obesity were disproportionately impacted by the COVID-19 pandemic, and this, along with potential random variations in the sample population, may account for the observed decline in the obesity rate, rather than reflecting actual improvements in individuals' health.[262]

GLP-1s and the obesity rate

The theory that GLP-1 usage may have contributed to the most recent decline in obesity prevalence is difficult to state conclusively given the scarcity of data on usage and adherence, as well as granular trends in obesity data. Data on GLP-1 usage is scarce, but estimates from 2024 suggest that 12 percent of adults and 22 percent of individuals who are overweight or obese have used GLP-1s, which represents a significant growth from prior years.[263] Additionally, from 2019 to 2023, the number of prescriptions for GLP-1s is estimated to have more than

[260] From 30.5 percent to 40.3 percent.

[261] Bernard Arulanandam, Hamid Beladi, and Avik Chakrabarti, "Obesity and COVID-19 Mortality Are Correlated," *Scientific Reports* 13, no. 5895 (2023), https://doi.org/10.1038/s41598-023-33093-3.

[262] Romil Singh, Sawai Singh Rathore, Hira Khan, Smruti Karale, et al., "Association of Obesity with COVID-19 Severity and Mortality: An Updated Systematic Review, Meta-Analysis, and Meta-Regression," *Frontiers in Endocrinology* 13, no. 780872 (2022), https://doi.org/10.3389/fendo.2022.780872.

[263] KFF, "Poll: 1 in 8 Adults Say They've Taken a GLP-1 Drug, Including 4 in 10 of Those with Diabetes and 1 in 4 of Those with Heart Disease," May 10, 2024, https://www.kff.org/health-costs/press-release/poll-1-in-8-adults-say-theyve-taken-a-glp-1-drug-including-4-in-10-of-those-with-diabetes-and-1-in-4-of-those-with-heart-disease/.

quadrupled, which implies significant and growing demand for these medications.[264] Despite this explosion in demand and usage of these and other AOMs, evidence suggests that certain headwinds impact the potential of these medications.

In a study of Blue Cross Blue Shield patients, only 42 percent of individuals on GLP-1s adhered to the recommended treatment guideline of 12 weeks, while 30 percent of patients stopped usage within a month.[265] This falls in line with other research that suggests the overall one-year adherence to AOMs is only around 40 percent.[266] While effective for those who adhere to the medication plan, GLP-1s have a much smaller impact on BMI if patients stop taking them too early because a significant amount of weight lost can be regained if patients cease usage before the end of their treatment plan.[267] Reasons behind the low adherence are varied and not entirely clear, however, individuals who

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[264] Elizabeth Williams, Robin Rudowitz, and Clea Bell, "Medicaid Coverage of and Spending on GLP-1s," KFF, November 4, 2024, https://www.kff.org/medicaid/issue-brief/medicaid-coverage-of-and-spending-on-glp-1s/.

[265] Joshua P. Cohen, "58% Of Patients Discontinue Use Of Obesity Meds Before Reaching Meaningful Weight Loss, Study Shows," *Forbes*, June 20, 2024, https://www.forbes.com/sites/joshuacohen/2024/06/20/study-shows-58-of-patients-discontinue-use-of-obesity-meds-before-reaching-meaningful-weight-loss/.

[266] Hamlet Gasoyan, Elizabeth R. Pfoh, Rebecca Schulte, Phuc Le, and Michael B. Rothberg, "Early- and later-stage persistence with antiobesity medications: A retrospective cohort study," *Obesity* 32, no. 3 (2024): 486–93, https://doi.org/10.1002/oby.23952.

[267] Mojca Jensterle, Manfredi Rizzo, Martin Haluzík, and Andrej Janež, "Efficacy of GLP-1 RA Approved for Weight Management in Patients with or Without Diabetes: A Narrative Review," *Advances in Therapy* 39, no. 6 (2022): 2452–67, https://doi.org/10.1007/s12325-022-02153-x; John P. H. Wilding, Rachel L. Batterham, Melanie Davies, Luc F. Van Gaal, et al., "Weight regain and cardiometabolic effects after withdrawal of semaglutide: The STEP 1 trial extension," *Diabetes, Obesity & Metabolism* 24, no. 8 (2022): 1553–64, https://doi.org/10.1111/dom.14725.

experience shorter-term weight loss tend to stay on the medications longer.[268] Taken together, these factors suggest the effect of AOMs on the overall obesity rate may be smaller than anticipated due to suboptimal usage of these medications.

The difference in usage rates between men and women also suggests that GLP-1 usage may not have led to a decline in obesity rates. According to a Kaiser Family Foundation survey, an estimated 5 percent of women are currently using an AOM compared to only 2 percent of men.[269] An additional 13 percent of women say they have used an AOM in the past but are not currently compared to only 6 percent of men. This aligns with data from Blue Cross Blue Shield that states that 79 percent of its patients on GLP-1s are women.[270] These figures imply that any reductions in the overall obesity rate due to GLP-1s would likely be more pronounced in women. However, the NHANES data suggests that declines in the obesity rate were more strongly driven by men.

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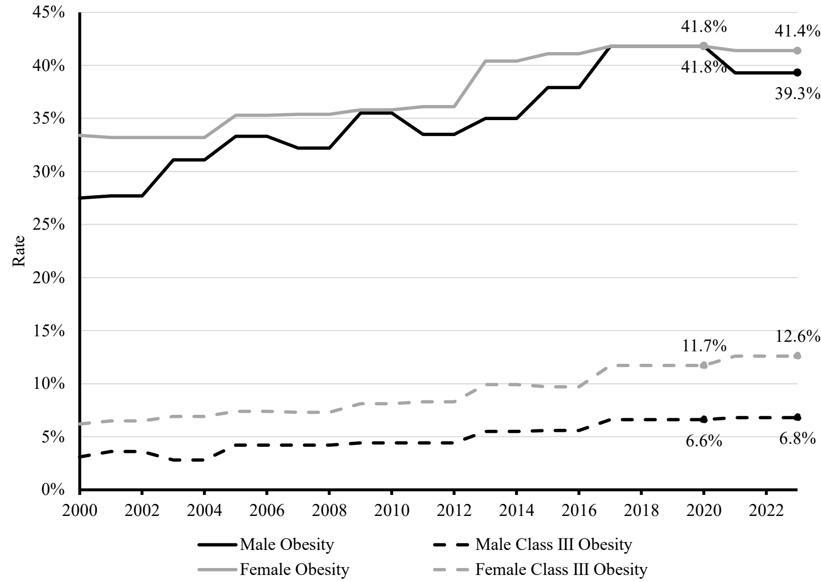
[268] Blue Cross Blue Shield, "Real-World Trends in GLP-1 Treatment Persistence and Prescribing for Weight Management," Blue Health Intelligence Issue Brief (May 2024), https://www.bcbs.com/media/pdf/BHI_Issue_Brief_GLP1_Trends.pdf; Gasoyan, Pfoh, Schulte, Le, and Rothberg, "Early- and later-stage persistence with antiobesity medications."

[269] Alex Montero, Grace Sparks, Ashley Kirzinger, Isabelle Valdes, and Liz Hamel, "KFF Health Tracking Poll July 2023: The Public's Views Of New Prescription Weight Loss Drugs And Prescription Drug Costs," KFF, August 4, 2023, https://www.kff.org/health-costs/poll-finding/kff-health-tracking-poll-july-2023-the-publics-views-of-new-prescription-weight-loss-drugs-and-prescription-drug-costs/.

[270] Blue Cross Blue Shield, "Real-World Trends in GLP-1 Treatment Persistence."

Figure 4-3: Adult (20+) Obesity Rates by Gender



Source: National Center for Health Statistics[271]

From the 2017–2020 period to the 2021–2023 period, the overall obesity rate fell by 2.5 percentage points for men but only 0.4 percentage points for women. At the same time, the severe obesity rate increased by 0.2 percentage points for men and 0.9 percentage points for women. Given that there is no measurable difference between the rate at which men and women adhere to their GLP-1 usage, this may imply that AOMs have had less of an impact on the overall obesity rate and that any declines may instead be attributable to other factors. More data is necessary to make conclusive statements, but this may indicate that the full impact of GLP-1s is not yet reflected in obesity data.

[271] Fryar, Carroll, and Afful, "Prevalence of Overweight, Obesity, and Severe Obesity," Table 1; Stierman, Afful, Carroll, et al., "National Health and Nutrition Examination Survey 2017–March 2020," Tables 5 and 6; Emmerich, Fryar, Stierman, and Ogden, "Obesity and Severe Obesity Prevalence in Adults."

Changes in GLP-1 usage

The potential for GLP-1 usage to impact obesity rates remains high over the near-to-long term. As previously mentioned, GLP-1s have a significant impact on BMI for those who adhere to their treatment plan, with those without diabetes experiencing an average weight loss ranging from 6.1 percent to 17.4 percent of their body weight while on semaglutides.[272] More adults report having heard about these drugs, and demand for them has been so strong that it has outpaced the available supply during the past two years.[273] Despite this, the cost of the drugs is still prohibitively high for most people, with the monthly price ranging from around $700 to over $1,000.[274] Even for those with insurance, the majority of adults on GLP-1s report that it is somewhat or very difficult to afford them.[275] The current high cost of the drugs is likely prohibiting individuals from using them who would otherwise be interested.

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[272] Jensterle, Rizzo, Haluzík, and Janež, "Efficacy of GLP-1 RA Approved for Weight Management."

[273] Alex Montero, Grace Sparks, Marley Presiado, and Liz Hamel, "KFF Health Tracking Poll May 2024: The Public's Use and Views of GLP-1 Drugs," KFF, May 10, 2024, https://www.kff.org/health-costs/poll-finding/kff-health-tracking-poll-may-2024-the-publics-use-and-views-of-glp-1-drugs/; Virta Health, "Demand for GLP-1s growing faster than expected," Fierce Healthcare, April 1, 2024, https://www.fiercehealthcare.com/sponsored/demand-glp-1s-growing-faster-expected.

[274] Inmaculada Hernandez and Sean D. Sullivan, "Net prices of new antiobesity medications," *Obesity* 32, no. 3 (2024): 472–5, https://doi.org/10.1002/oby.23973; Benedic N. Ippolito and Joseph F. Levy, "Estimating the Cost of New Treatments for Diabetes and Obesity," American Enterprise Institute Economic Perspectives (September 2023), https://www.aei.org/wp-content/uploads/2023/09/Estimating-the-Cost-of-New-Treatments-for-Diabetes-and-Obesity.pdf.

[275] Montero, Sparks, Presiado, and Hamel, "KFF Health Tracking Poll May 2024."

Fortunately, progress has been made over the course of the past year, and there are signs that the price of GLP-1s and other derivatives may soon decrease. The shortage of tirzepatide, a type of GLP-1, which had persisted since 2022 was recently declared by the FDA to be "resolved."[276] Additionally, semaglutides, which have been on the FDA drug shortage list since March 2022, recently changed from being "currently in shortage" to "available" as of November 2024.[277] Competition among pharmaceutical groups to create GLP-1s and other derivatives has also expanded in the past year.[278] The first generic GLP-1 recently hit the market and there has been a rapid increase in the development of AOMs to help match growing demand.[279] Lower cost versions of GLP-1s, such as those that come in vials rather than injector pens were also introduced in the latter half of 2024.[280] These versions have a significantly lower cost of approximately $400 to $530 for a month's supply. Increased competition and lower prices should

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[276] U.S. Food and Drug Administration, "FDA clarifies policies for compounders as national GLP-1 supply begins to stabilize," December 19, 2024, https://www.fda.gov/drugs/drug-safety-and-availability/fda-clarifies-policies-compounders-national-glp-1-supply-begins-stabilize.

[277] U.S. Food and Drug Administration, "Current and Resolved Drug Shortages and Discontinuations Reported to FDA," accessed January 2025, https://www.accessdata.fda.gov/scripts/drugshortages/dsp_ActiveIngredientDetails.cfm?AI=Semaglutide%20Injection&st=c&tab=tabs-1.

[278] Clara Rodriguez Fernandez, "Competitors race to launch GLP-1 drugs amid soaring weight loss demand," OutsourcingPharma, October 31, 2024, https://www.outsourcing-pharma.com/Article/2024/10/31/glp-1-market-heats-up-as-companies-vie-for-next-gen-obesity-drugs/.

[279] Nancy Schimelpfening, "Victoza: Generic GLP-1 Drug Similar to Ozempic Now Available," *Healthline*, June 24, 2024, https://www.healthline.com/health-news/victoza-generic-glp1-drug-available; Jakob Emerson, "Inside the GLP-1 'price war,'" Becker's Hospital Review, September 23, 2024, https://www.beckershospitalreview.com/pharmacy/inside-the-glp-1-price-war.html.

[280] Deidre McPhillips, "Lilly launches lower-price weight loss drug without injector pen," *CNN*, August 27, 2024, https://www.cnn.com/2024/08/27/health/zepbound-tirzepatide-new-vials/index.html.

lead to GLP-1s being more accessible for a larger population, resulting in greater uptake and potentially lower obesity rates in the long run.

Obesity legislation and recommendations

In the past year, there has also been a major push for the federal government to expand access to GLP-1s. The *Treat and Reduce Obesity Act*, reintroduced in the 118th Congress, would expand Medicare coverage of behavioral therapy to treat obesity as well as allow for Medicare Part D to cover AOMs for individuals with at least one comorbidity.[281] Additionally, the Biden Administration proposed a rule change in November 2024 that would expand coverage of AOMs to both Medicare and Medicaid, but this proposed rule has since been suspended.[282] Concerns about the growing rates of obesity—which were projected in the *2024 Response* to eclipse 50 percent by 2032 in the best-case scenario—have driven lawmakers to more aggressively pursue solutions, but many proposals currently entail a high fiscal cost.

The Congressional Budget Office estimates that the fiscal cost of expanding Medicare Part D to cover AOMs would be about $35

[281] Congress.gov, "H.R.4818—118th Congress (2023–2024): Treat and Reduce Obesity Act of 2023," December 27, 2024, https://www.congress.gov/bill/118th-congress/house-bill/4818.

[282] The White House, "FACT SHEET: Biden-Harris Administration Takes Latest Step to Lower Prescription Drug Costs by Proposing Expanded Coverage of Anti-Obesity Medications for Americans with Medicare and Medicaid," November 26, 2024, https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/11/26/fact-sheet-biden-harris-administration-takes-latest-step-to-lower-prescription-drug-costs-by-proposing-expanded-coverage-of-anti-obesity-medications-for-americans-with-medicare-and-medicaid/; The White House, "Regulatory Freeze Pending Review," January 20, 2025, https://www.whitehouse.gov/presidential-actions/2025/01/regulatory-freeze-pending-review/.

billion over the nine-year window from 2026 to 2034.[283] This is largely driven by high direct costs from the prescriptions, with the average cost to the federal government per user estimated to be $5,600 in 2026.[284] Savings per user associated with improved health are limited over the nine-year window following the implementation of the policy, with direct savings starting at $50 in 2026 and rising to $650 in 2034.[285] Despite these high initial costs to the federal government and limited savings to individuals, CBO does note that there are conditions that could change and reduce the fiscal impact of this policy.

First, competition, the development of generics, or other developments may lead GLP-1s to fall in price. CBO states that prices for AOMs are projected to fall, especially in the second decade following the policy change.[286] The introduction of new formulas and versions with different methods of administration may somewhat offset any cost reductions as newer versions tend to be more expensive. However, improved effectiveness of these new technologies, for example through increased adherence, may also result in greater fiscal savings through improved health. This would reduce federal government health outlays and increase labor force participation, which would lead to higher tax receipts.

Even assuming the best-case scenario for price reductions, current policy proposals would still have a net negative fiscal impact on the budget in the ten-year budget window. Cost savings from reductions in obesity through improved health grow gradually as

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[283] Congressional Budget Office, *How Would Authorizing Medicare to Cover Anti-Obesity Medications Affect the Federal Budget?* CBO report (October 8, 2024), https://www.cbo.gov/publication/60441.

[284] This estimate excludes increase in Part D premiums. Congressional Budget Office, "How Would Authorizing Medicare," 8.

[285] Congressional Budget Office, "How Would Authorizing Medicare," 9.

[286] Congressional Budget Office, "How Would Authorizing Medicare," 9.

both more individuals take up these drugs and as their health improves over time. CBO estimates that per-capita Medicare savings as a share of total Medicare spending for individuals on AOMs gradually grows from 0.2 percent in 2026 to 2.8 percent in 2034, which represents $50 and $650 per Medicare patient using AOMs, respectively.[287] CBO notes that these savings would be higher if individuals use the medications for longer, or if they start using them before receiving them through Medicare.[288] A reduction in prices would have a two-fold impact; it both reduces the direct cost to the federal government and grows demand for these medications from individuals who are not yet of Medicare age.

Under CBO's assumptions, even in the most optimal case where there is a high take-up rate, effectiveness of AOMs increases, and prices fall due to increased competition, it is not likely that current proposals for Medicare to cover these drugs would have a positive fiscal impact, at least within a ten-year window. Nevertheless, these medications would undoubtedly improve individuals' health, mortality outcomes, and well-being.

Targeting GLP-1 coverage to specific populations fares better under a cost-benefit analysis than broad coverage. As previously discussed, excess healthcare expenditures for those who are severely obese are more than double the costs of those who are classified as having Class 1 or Class 2 obesity. CBO notes that Medicare spending is substantially higher for those with severe obesity, even when compared to other obese individuals, and that these costs progressively increase as individuals' BMI increases above 40.[289] Given that the greatest potential cost savings come

[287] Congressional Budget Office, "How Would Authorizing Medicare," 9.
[288] Congressional Budget Office, "How Would Authorizing Medicare," 12.
[289] Congressional Budget Office, "How Would Authorizing Medicare," 2-3.

from this group, policymakers should consider targeting coverage for those with certain comorbidities and a BMI over 40, at least initially. This would substantially reduce the present cost of the prescription coverage as the severely obese population generally is at most only 25 percent of the overall obese population.[290]

As outlined in the *2024 Response*, reductions in the obesity rate that improve the aggregate health of the U.S. population would have benefits that extend well beyond CBO's ten-year window, including greater employment and lower dependency on health services earlier in life. As CBO mentions in their analysis as well, benefits extend over time as more individuals take up these medications, especially among those not yet on Medicare.[291] Specifically, they state that "savings also could be larger if greater-than-expected AOM use among the current non-Medicare population resulted in lower obesity rates and less spending to treat health complications for those people as they aged, became eligible for Medicare, and enrolled in the program."[292] For these reasons, policymakers should consider targeting coverage towards a younger population that could have decades' worth of savings if certain comorbidities were avoided. The Medicaid population—which is significantly younger than the Medicare population, with almost 75 percent of enrollees being under the age of 65—could be reformed to allow coverage to individuals who would have the highest lifetime health expenditures.[293] A combination of targeting

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[290] JEC Republicans calculations; Joint Economic Committee Republicans, *2024 Republican Response*.

[291] Congressional Budget Office, "How Would Authorizing Medicare," 12.

[292] Congressional Budget Office, "How Would Authorizing Medicare," 12.

[293] Medicaid programs in 13 states currently cover GLP-1s as of August 2024. KFF, "Medicaid Enrollees by Age," KFF State Health Facts, https://www.kff.org/medicaid/state-indicator/medicaid-enrollees-by-age/; Williams, Rudowitz, and Bell, "Medicaid Coverage of and Spending on GLP-1s."

those who are younger and have a high BMI could lead to large health savings at a fraction of the cost it would take to cover the entire Medicare and Medicaid population. More analysis should be conducted to determine the exact fiscal impact of such policies but targeting anti-obesity policy towards a younger and less healthy population could be a more fiscally responsible way to address the obesity crisis.

CHAPTER 5: THE ECONOMICS OF SKILLED AND UNSKILLED MIGRATION

In Chapter 2 of the Republican Response in the *2024 Joint Economic Report* (*Response*), Joint Economic Committee Republicans outlined the various demographic trends that are adversely impacting the U.S.' fiscal situation, such as the aging population and declining fertility rate.[294] In that Chapter, JEC Republicans also outlined policies to address these demographic trends and increase growth, including those that encourage high-skilled immigration.[295] We concluded that high-skilled immigrants—especially those in science, technology, engineering, and mathematics (STEM) fields—have an outsized economic impact that benefits all Americans, but that this economic potential is held back by various restrictions, such as caps on the number of work visas appropriated in a year. These caps on high-skilled immigration, which limit the U.S.' economic potential, are especially egregious considering the recent influx of low-skilled immigration, which offers less economic benefit and involves substantial tradeoffs.

The dramatic influx of undocumented immigrants since the start of 2021 has spurred considerable debate over the economics of high- and low-skilled immigration. Relatively few low-skilled visas are available, with the number of permanent low-skilled

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[294] Joint Economic Committee Republicans, "Chapter 2: Demographics and the Deficit," in *The 2024 Joint Economic Report, Republican Response* (U.S. Congress Joint Economic Committee, 2024), https://www.jec.senate.gov/public/vendor/_accounts/JEC-R/jer-chapters/2024JERChapter2.pdf.

[295] High skilled migration is typically defined as individuals with a university degree or higher or significant technical work experience. Migration Research Hub, "High-skilled migration," https://migrationresearch.com/taxonomies/topics-migration-processes-migration-forms-high-skilled-migration.

visas being capped at 5,000 per year.[296] Despite this, there has been a recent, significant influx of undocumented, low-skilled workers who now comprise a significant portion of the workforce, especially in certain industries.[297] This Chapter will overview the aggregate economic impact of high- and low-skilled immigration and recommend policies that maximize the U.S.' economic potential, weighing the tradeoffs that arise from such immigration. While social and cultural considerations are important in any debate on immigration, the intention of this Chapter is to view this debate with a purely economic perspective.

High-skilled migration

The *2024 Response* highlighted how it is imperative to pursue policies that can help stabilize the country's skyrocketing debt-to-GDP ratio.[298] Two ways to do this are by expanding the tax base and increasing economic growth through technological innovation. One avenue to accomplish both is by taking advantage of one of the U.S.' most valuable privileges—its ability to attract high-skilled foreign individuals who wish to work, study and

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[296] This figure does not fully capture the growth in the low-skilled labor force as there are a number of temporary and seasonal visa programs that constitute a large number of foreign low-skilled workers, including the H-2A and H-2B visa programs. U.S. Citizenship and Immigration Services, "Temporary (Nonimmigrant) Workers," https://www.uscis.gov/working-in-the-united-states/temporary-nonimmigrant-workers; Madeleine Sumption and Demetrios G. Papademetriou, "Legal Immigration Policies for Low-Skilled Foreign Workers," Migration Policy Institute policy brief (April 2013), https://www.migrationpolicy.org/research/legal-immigration-policies-low-skilled-foreign-workers.

[297] Steven A. Camarota, "Illegal Immigration and the U.S. Labor Market," prepared testimony for the U.S. House Committee on Education and Workforce, September 13, 2023, p. 6, https://edworkforce.house.gov/uploadedfiles/9.13.23_camarota_testimony_help_subcommittee_hearing_on_open_borders_and_workforce.pdf.

[298] Joint Economic Committee Republicans, *The 2024 Joint Economic Report, Republican Response* (U.S. Congress Joint Economic Committee, 2024), p. 6, https://sen.gov/LVQNL.

invest here. Skilled immigrants, especially those in STEM fields, lead to outsized economic growth and their contributions result in positive wage and employment outcomes for native-born Americans.[299] For example, for every 100 foreign-born workers who receive a STEM degree in the U.S., 262 jobs are created for native-born Americans in part due to the disproportionate rate at which foreign-born workers innovate and create businesses.[300] In the case of H-1B visa workers, for every 100 additional H-1B workers, 183 jobs are created for native-born individuals.[301] Skilled immigrants also have a positive impact on the country's fiscal situation as the net fiscal impact of all high-skilled immigrants with at least a college degree is estimated to be $13 trillion over the course of their lives largely due to their higher than average incomes leading to greater tax receipts.[302] In the near term, it is estimated that granting permanent residency to immigrants with advanced STEM degrees would reduce the deficit by $129 billion over the next ten years and $634 billion over the subsequent ten.[303]

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[299] Madeline Zavodny, "Immigration and American Jobs," American Enterprise Institute Working Paper, December 15, 2011, https://www.aei.org/research-products/working-paper/immigration-and-american-jobs/.

[300] Zavodny, "Immigration and American Jobs," 6; Shai Bernstein, Rebecca Diamond, Abhisit Jiranaphawiboon, Timothy McQuade, and Beatriz Pousada, "The Contribution of High Skilled Immigrants to Innovation in the United States," NBER Working Paper no. 30797 (December 2022), https://doi.org/10.3386/w30797; Pierre Azoulay, Benjamin F. Jones, J. Daniel Kim, and Javier Miranda, "Immigration and Entrepreneurship in the United States," NBER Working Paper no. 27778 (September 2020), https://doi.org/10.3386/w27778.

[301] Zavodny, "Immigration and American Jobs."

[302] Robert Rector, "The Net Fiscal Costs of Low-skilled and Illegal Immigration for the U.S. Taxpayer," prepared testimony for the U.S. Senate Committee on the Budget, September 13, 2023, https://www.budget.senate.gov/imo/media/doc/rector_testimony_913.pdf.

[303] Alex Arnon, Vidisha Chowdhury, Duncan Haystead, Brendan Novak, and Youran Wu, "Budgetary Effects of Granting Green Cards to Immigrants with

Current high-skilled immigration system

Despite the outsized impact that skilled immigrants have on the U.S. economy and fiscal situation, total skilled immigration has remained stagnant due to caps on the number of individuals who can receive work visas and permanent residency.[304] The current system presents issues not only by preventing willing and talented individuals from working in the U.S., but also through abuse in existing programs which deteriorates trust in the programs and steals spots from legitimate candidates. The most well-known visa program for skilled immigration, the H-1B, is intended to allow employers to temporarily hire foreign workers for jobs which require specialized knowledge that cannot be otherwise filled by American workers.[305] While the program is effective in the aggregate at producing economic benefits,[306] it is in need of reform to prevent abuse and ensure that the brightest, most talented individuals are able to work in the U.S.

A September 2008 report from the Department of Homeland Security (DHS) that sampled 246 H-1B petitions found at least one disqualifying violation in 20.7 percent of cases, consisting of fraud in 13.4 percent of cases and technical violations in 7.3 percent.[307] Examples of fraud included the use of forged or falsified documents, the use of illegitimate shell companies that did not

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Advanced STEM Degrees," Penn Wharton Budget Model, January 18, 2024, https://budgetmodel.wharton.upenn.edu/issues/2024/1/18/budgetary-effects-of-stem-green-cards.

[304] U.S. Citizenship and Immigration Services, "H-1B Cap Season," https://www.uscis.gov/working-in-the-united-states/temporary-workers/h-1b-specialty-occupations/h-1b-cap-season.

[305] Wage and Hour Division, "H-1B Program," U.S. Department of Labor, https://www.dol.gov/agencies/whd/immigration/h1b.

[306] Joint Economic Committee Republicans, *2024 Republican Response*, 51–56.

[307] U.S. Citizenship and Immigration Services, "H-1B Benefit Fraud & Compliance Assessment" (September 2008), https://lawandborder.com/wp-content/uploads/2008/10/h-1b-benefit-fraud-assessment.pdf.

extend legitimate job offers to candidates, misrepresentation of job roles or a petitioner's H-1B status, and cases where petitioners or beneficiaries were currently under investigation by ICE, among others.[308] Accounting, human resources, sales, and advertising had the highest fraud rate of 42 percent, and managerial, art, and computer professional jobs had the next highest fraud rates between 27 and 33 percent.[309] Additionally, fraud was more prevalent among beneficiaries who only had bachelor's degrees compared to those with graduate degrees.[310]

There are several reform proposals to address the fraud and inequity within the H-1B program and ensure that the program is not used as a tool to undercut Americans' wages by importing cheaper labor. The first major reform proposal is eliminating the randomness of the H-1B lottery and replacing it with a points-based system that prioritizes giving visas to individuals who have the greatest long-run expected fiscal contributions to the economy. The points-based system would favor individuals who are younger, have higher-level degrees, rank highly in English proficiency, provide an investment for American business creation, are self-employed, or have a high salary offer relative to both other applicants and the prevailing wage in the industry. The program would also be reformed so that employees are self-sponsored rather than employee-sponsored, which would avoid the current issue of beneficiaries having multiple companies

[308] U.S. Citizenship and Immigration Services, "H-1B Benefit Fraud & Compliance Assessment," 9–11.

[309] U.S. Citizenship and Immigration Services, "H-1B Benefit Fraud & Compliance Assessment," 13.

[310] U.S. Citizenship and Immigration Services, "H-1B Benefit Fraud & Compliance Assessment," 12.

submit applications on their behalf to boost their chances of receiving a visa.[311]

In addition to the proposals intended to strengthen the applicant pool and selection process, a number of proposals have been made to explicitly address fraud. In October 2020, the DHS implemented a number of policies to reduce H-1B fraud, but these rules were rescinded shortly after by the subsequent Administration.[312] The two interim final rules made a number of changes to the H-1B program. These changes include: tightening the definition of specialty occupations to require applicants to have specialized, rather than generalized, degrees in their field; increasing the DHS's authority to perform workplace inspections to ensure that fraud is not occurring and that H-1B workers are doing the specific job they were hired to do; requiring employers who contract or place their employees at third-party worksites to prove that the employees' work is relevant to their specialization; and increasing the minimum wage required for an H-1B application to be approved.[313] The current Administration should

[311] Yekrangi & Associates, "Can Multiple Companies File an H1B for the Same Applicant?" March 17, 2023, https://www.yeklaw.com/blog/2023/march/can-multiple-companies-file-an-h1b-for-the-same-/.

[312] U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services, "8 CFR Part 214, Strengthening the H-1B Nonimmigrant Visa Classification Program, CIS No. 2658-20 DHS Docket No. USCIS-2020-0018," *Federal Register* 85, no. 196 (October 8, 2020): 63918–65, https://www.govinfo.gov/content/pkg/FR-2020-10-08/pdf/2020-22347.pdf; U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services, "8 CFR Part 214, Strengthening the H-1B Nonimmigrant Visa Classification Program, Implementation of Vacatur, CIS No. 2658-20 DHS Docket No. USCIS-2020-0018," *Federal Register* 86, no. 95 (May 19, 2021): 27027–8, https://www.govinfo.gov/content/pkg/FR-2021-05-19/pdf/2021-10489.pdf.

[313] Lars-Erik A. Hjelm, Maka Y. Hutson, Jillie B. Richards, and Casey Christine Higgins, "Trump Administration Introduces Major Changes to H-1B Visas and Employment-Based Green Cards," Akin Gump Strauss Hauer & Feld

consider reimplementing these rules and pursuing further action to clear the program of fraud and ensure that the program's intended goal is achieved.

Reforming current immigration system to retain talent

Policies should ensure that high-skilled workers—who, as outlined in the *2024 Response*, make overwhelmingly positive economic contributions that benefit all Americans—are able to do so without onerous burdens or restrictions.[314] The U.S. stands to benefit from admitting more qualified and legitimate high-skilled individuals, and, at a minimum, lawmakers must ensure that individuals already working or studying in the U.S. are not forced to leave due to poor policy.

The U.S. has a large comparative advantage because the country's research and higher education institutions are highly attractive to talented individuals. The ability for American institutions to attract talent is a valuable resource, but equally important is the country's ability to maintain it. Because of current immigration policies, a significant number of highly educated individuals who would otherwise prefer to work here are leaving the country. For example, from 2012 to 2020, of all international students who graduated in the U.S. with a bachelor's degree, master's degree, or PhD, only 41 percent stayed in the U.S. after graduation. That amounts to around 1.1 million U.S.-educated individuals leaving the U.S.[315] Retention rates for those with PhDs and master's degrees was stronger at 76 and 51 percent, respectively, but for

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LLP, October 22, 2020, https://www.akingump.com/en/insights/alerts/trump-administration-introduces-major-changes-to-h-1b-visas-and-employment-based-green-cards.

[314] Joint Economic Committee Republicans, *2024 Republican Response*, 51–56.

[315] Connor O'Brien, "Most international graduates of American universities ultimately leave the U.S.," Economic Innovation Group Analysis, June 27, 2024, https://eig.org/immigrant-retention-estimates/.

those with bachelor's degrees the rate was only 17 percent. While a number of those who choose to return abroad likely do so for personal reasons, many others do so because of restrictions on work visas and permanent resident green cards.[316] Excessive restrictions on skilled immigration constrict economic growth potential and push the one million skilled workers on waitlists towards countries like China.[317] Implementing sensible reforms to the high-skilled immigration system that not only attract the brightest talent but also address fraud will maximize American economic potential and ensure the U.S. does not squander its advantage as the top destination for work and innovation.

Immigration trends

Onerous restrictions on high-skilled immigration are especially egregious given the recent, rapid influx of low-skilled workers who offer much less clear net economic benefits for the U.S. and native workers. Estimating changes in the number of low-skilled workers in the U.S. driven by undocumented immigration is difficult due to the scarcity of accurate and up-to-date data, but existing data suggests that there has been a significant influx of undocumented migrants over the past four years. From FY2021 to FY2024, there were 10.8 million inadmissible encounters at U.S. borders compared to only around 3 million in the prior four fiscal years.[318]

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[316] O'Brien, "Most international graduates of American universities ultimately leave the U.S."

[317] David J. Bier, "Backlog for Skilled Immigrants Tops 1 Million: Over 200,000 Indians Could Die of Old Age While Awaiting Green Cards," Cato Institute Immigration Research and Policy Brief no. 18 (March 30, 2020), https://www.cato.org/publications/immigration-research-policy-brief/backlog-skilled-immigrants-tops-1-million-over.

[318] U.S. House Committee on Homeland Security, "STARTLING STATS FACTSHEET: Fiscal Year 2024 Ends With Nearly 3 Million Inadmissible Encounters, 10.8 Million Total Encounters Since FY2021," October 24,

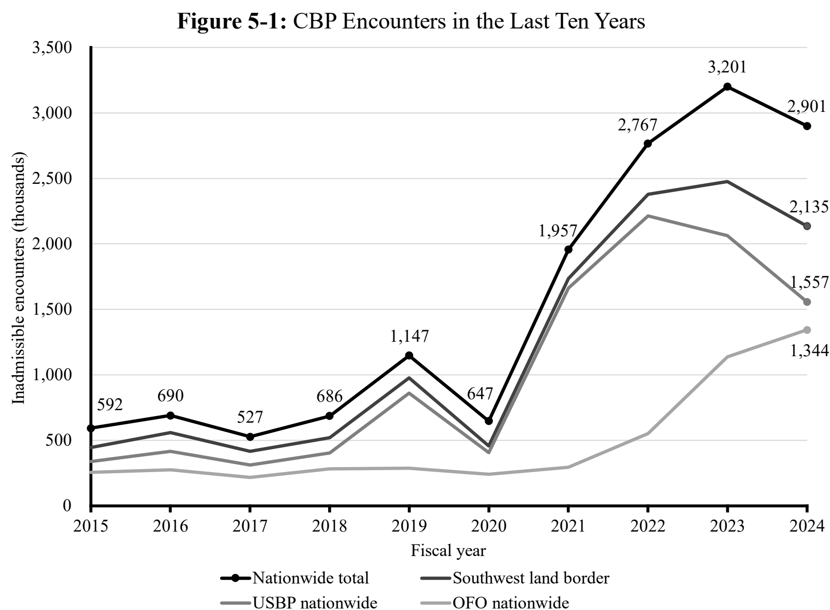

Figure 5-1: CBP Encounters in the Last Ten Years

Source: Office of Homeland Security Statistics[319]

Inadmissible aliens are individuals met at ports of entry who are ineligible to enter the U.S. or receive visas due to a number of factors including but not limited to security reasons, lack of proper documentation, criminality, and failure to provide labor certification.[320] Although this figure is not a perfect proxy for the number of migrants who have entered illegally since it only counts individuals who have been apprehended, the increase in the past

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2024, https://homeland.house.gov/2024/10/24/startling-stats-factsheet-fiscal-year-2024-ends-with-nearly-3-million-inadmissible-encounters-10-8-million-total-encounters-since-fy2021/; U.S. Customs and Border Protection, "Southwest Land Border Encounters," https://www.cbp.gov/newsroom/stats/southwest-land-border-encounters.

[319] Office of Homeland Security Statistics, "CBP Encounters," U.S. Department of Homeland Security, https://ohss.dhs.gov/khsm/cbp-encounters.

[320] *Inadmissible aliens, U.S. Code 8* (2023), § 1182, https://www.govinfo.gov/app/details/USCODE-2023-title8/USCODE-2023-title8-chap12-subchapII-partII-sec1182.

four years relative to the preceding four years indicates that there has at least been significant growth in the number of individuals attempting to enter without authorization. Many of these individuals likely evaded border enforcement and are currently in the U.S. This is further evidenced by estimates from the U.S. Customs and Border Protection that suggest there are nearly 2 million individuals who have evaded border enforcement since the start of FY2021 and are in the U.S. without any vetting or documentation.[321]

Determining the exact number of unauthorized immigrants in the country at any given time is difficult, but the most recent estimates from 2022 based on the 2020 census estimate it to be almost 11 million.[322] Of these nearly 11 million individuals, around 40 percent are individuals who overstayed their visas.[323] More recent estimates that incorporate data from the Census Bureau estimate it may be as high as 12.8 million as of October 2023.[324] Much of the growth in undocumented immigration has been driven by a

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[321] U.S. House Committee on Homeland Security, "STARTLING STATS FACTSHEET: Biden and Harris' Border Crisis Still Wreaking Havoc—at the Borders and in the Interior," September 23, 2024, https://homeland.house.gov/2024/09/23/startling-stats-factsheet-biden-and-harris-border-crisis-still-wreaking-havoc-at-the-borders-and-in-the-interior/.

[322] Bryan Baker and Robert Warren, "Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2018–January 2022," (Office of Homeland Security Statistics, U.S. Department of Homeland Security, April 2024), https://ohss.dhs.gov/sites/default/files/2024-06/2024_0418_ohss_estimates-of-the-unauthorized-immigrant-population-residing-in-the-united-states-january-2018%25E2%2580%2593january-2022.pdf.

[323] Center for Migration Studies, "Correcting the Record: False or Misleading Statements on Immigration," July 24, 2024, https://cmsny.org/correcting-record-false-misleading-statements-on-immigration/.

[324] Steven A. Camarota, "The Cost of Illegal Immigration to Taxpayers," prepared testimony for the U.S. House Committee on the Judiciary, January 11, 2024, https://budget.house.gov/imo/media/doc/the_cost_of_illegal_immigration_to_taxpayers.pdf.

number of policy changes that began in the prior Administration. A multitude of programs, including mass-parole programs and those intended to streamline refugee settlement in the U.S. like the Safe Mobility Initiative, played a part in allowing nearly eight million undocumented migrants at least temporary entry into the U.S. since 2021.[325] Because more granular data on the population of these migrants is unavailable, it is difficult to estimate how many individuals are of working age or currently working in the U.S. However, as of 2022, Pew Research estimates the number of undocumented immigrants in the labor force to be around 8.3 million, or 4.8 percent of the overall labor force.[326]

Wage effects

The rapid influx of migrants on top of the existing undocumented population has large implications for the overall economy, especially regarding the labor market and budget. The previous Administration argued that providing citizenship pathways for existing undocumented migrants increases potential economic

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[325] U.S. House Committee on the Judiciary, "Inside the Biden-Harris Administration's Open-Borders Alliance with United Nations Bureaucrats," Interim Staff Report (November 1, 2024), https://judiciary.house.gov/sites/evo-subsites/republicans-judiciary.house.gov/files/evo-media-document/2024-11-01%20Inside%20the%20Biden-Harris%20Administration%27s%20Open-Borders%20Alliance%20with%20United%20Nations%20Bureaucrats.pdf; U.S. House Committee on Homeland Security, "STARTLING STATS FACTSHEET: Fiscal Year 2024 Ends With Nearly 3 Million Inadmissible Encounters."

[326] Historically, this figure has ranged from 4.4 to 5.4 percent. More recent numbers may be higher given changes in immigration policy. Jeffrey S. Passel and Jens Manuel Krogstad, "What we know about unauthorized immigrants living in the U.S.," Pew Research Center, July 22, 2024, https://www.pewresearch.org/short-reads/2024/07/22/what-we-know-about-unauthorized-immigrants-living-in-the-us/.

output by increasing the size of the labor force.[327] It is true that increases to the labor force support higher output and lower costs for producers; however, there are a number of tradeoffs that make the net benefits to native-born Americans and the country's fiscal situation much less clear. While undocumented workers are estimated to have made the economy $321 billion larger and contributed $25.9 billion in taxes in 2019, it is not clear that this has led to tangible benefits for other working Americans or had a net-positive contribution to the budget.[328] One study estimates that, in 2021, illegal immigrants received $42 billion in benefits through various welfare programs like SNAP and Medicaid and that public schools spend $68.1 billion annually on the children of illegal immigrants.[329]

Economic studies shows that there is a negative wage effect associated with an increase in the labor supply due to immigration for those who are low-skilled or less educated.[330] Low-skilled individuals, such as those without a high school degree, were most adversely affected by low-skilled immigration, and this effect was especially pronounced for minorities.[331] As general economic theory would suggest, this effect was more pronounced for the low-skilled migrants who were close labor substitutes to native

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[327] Cecilia Rouse, Lisa Barrow, Kevin Rinz, and Evan Soltas, "The Economic Benefits of Extending Permanent Legal Status to Unauthorized Immigrants," Council of Economic Advisers blog (The White House, September 17, 2021), https://bidenwhitehouse.archives.gov/cea/written-materials/2021/09/17/the-economic-benefits-of-extending-permanent-legal-status-to-unauthorized-immigrants/.

[328] Steven A. Camarota, "The Cost of Illegal Immigration to Taxpayers."

[329] Steven A. Camarota, "The Cost of Illegal Immigration to Taxpayers."

[330] National Academies of Sciences, Engineering, and Medicine, *The Economic and Fiscal Consequences of Immigration* (The National Academies Press, 2017), p. 224, http://www.nap.edu/23550.

[331] National Academies of Sciences, Engineering, and Medicine, *The Economic and Fiscal Consequences of Immigration*, 224.

workers. The willingness to take a wage lower than the prevailing wage depresses wages for native workers, especially in the short term.[332] As previously stated, the number of undocumented immigrants in the labor force is around 8.3 million or 4.8 percent of the overall labor force. Since the majority of those undocumented individuals are low-skilled, they represent a much higher percentage of the low-skilled labor market, and any effects of low-skilled immigration on wages or job growth are much more pronounced in the low-skilled labor market compared to the overall U.S. labor market.

Figure 5-2: Supply and Demand of Labor, Effect of Short - Term Increase of Labor on Wages

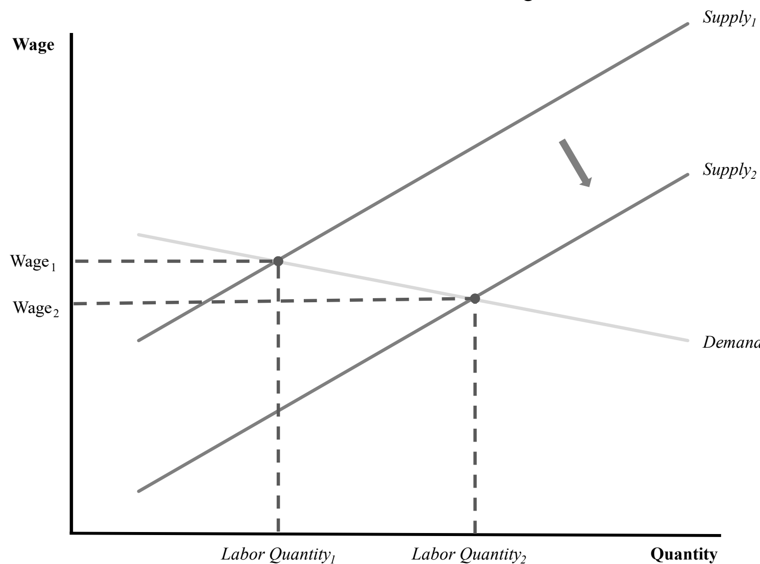

Figure 5-2 illustrates a basic overview of how increases in the supply of labor affect individuals' wages. Barring changes in demand, a positive shift in the supply of labor will result in a reduction in the price paid for labor. This basic theory is backed

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[332] National Academies of Sciences, Engineering, and Medicine, *The Economic and Fiscal Consequences of Immigration*, 224–8.

by the academic literature, although in practice the effects of immigration are more complex. The adverse wage effects outlined previously may be more pronounced for certain groups due to the composition of immigration inflows. While the overall effect of low-skilled immigration on the average wage may be dampened due to their labor being a close substitute only in certain industries, the wage impact within those specific sectors is likely to be disproportionately large relative to the change in the average wage. This dynamic applies across all types of immigration; however, unlike high-skilled immigration, low-skilled immigration typically lacks the positive externalities—such as innovation and job creation—that benefit native-born Americans and help offset wage reductions.

Budgetary impact

Debate over the aggregate fiscal impact of immigration has largely centered on whether immigrants' labor and tax contributions outweigh the benefits they receive through various social programs. Educational attainment, which influences an individual's income, and age of arrival, which determines how long an individual will be working and thus contributing taxes, are the most important factors in determining an individual's aggregate fiscal impact. A recent paper from the Manhattan Institute estimated the lifetime impact of immigrants on the federal budget by estimating the net impact of immigrant cohorts based on their age and educational attainment.[333] The author found that, as a whole, the average new immigrant will reduce the federal budget deficit by around $10,000 over the course of their lifetime, but that this budget reduction is largely driven by young, educated

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[333] Daniel Di Martino, "The Lifetime Fiscal Impact of Immigrants," Manhattan Institute Report (September 19, 2024), https://manhattan.institute/article/the-lifetime-fiscal-impact-of-immigrants.

immigrants.[334] Meanwhile, older and less-skilled migrants have a negative lifetime fiscal impact. In the case of the most successful cohort, individuals arriving the U.S. between the ages of 18 and 24 with a graduate degree, their lifetime fiscal impact is over $1.1 million.[335] The average immigrant who arrives between the ages of 0 and 54 and attains a graduate degree will have a positive lifetime fiscal impact ranging between $147,000 and $1.1 million. This wide range is largely driven by age of arrival, as older immigrants will be in the labor force for a relatively short period and will start receiving various retirement benefits sooner. The average immigrant who arrives between ages 0 and 34 and attains a bachelor's degree also has a positive lifetime fiscal impact. Conversely, for immigrants arriving after the age of 55, there is no level of educational attainment that generates a positive lifetime fiscal impact.[336] Although immigrants receive less in benefits than the average native-born American, the amount of taxes paid is not enough to generate a positive fiscal impact for most cohorts.[337]

These results suggest that the U.S. stands to benefit by implementing selective immigration policies that incentivize younger and more educated workers to come to the U.S. while restricting lower-skilled and older immigration. The U.S. has significant economic potential to gain from high-skilled, younger workers, while low-skilled and older immigrants represent a relative fiscal drain. Unfortunately, due to the previous Administration's border policies the opposite has happened, and there has been a large increase in low-skilled immigrants, especially relative to the number of high-skilled immigrants who immigrated at the same time. It is estimated that the cost of the

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[334] These figures do not estimate the fiscal impact on state budgets.
[335] Di Martino, "The Lifetime Fiscal Impact of Immigrants," 26.
[336] Di Martino, "The Lifetime Fiscal Impact of Immigrants," 26.
[337] Di Martino, "The Lifetime Fiscal Impact of Immigrants," 25.

current border crisis, which CBO estimates will result in 8.7 million new unlawful immigrants from 2021 to 2026, will cost around $1.15 trillion over the lifetime of these immigrants.[338] To fully capture the economic advantages of selective immigration, it is crucial that future policies prioritize the integration of high-skilled, younger workers while recognizing the fiscal consequences posed by low-skilled and older immigration.

Housing

Beyond its effects on wages and the budget, immigration impacts other aspects of the economy, including housing costs. A rapid increase in immigration, as has been observed over the past four years, increases the aggregate demand for housing, especially in areas where the immigration is concentrated. Given that the U.S. is facing a housing shortage of over 20 million homes and that, due to a variety of regulatory hurdles, builders are unable to respond quickly to the demand, an increase in the aggregate demand for housing will cause shelter costs to rise, especially in the short term.[339]

A paper studying the effects of international immigration on German shelter costs found that a 1 percent increase in international migration within a district was associated with a 3 percent increase in the cost of buying an apartment unit and a 1

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[338] Di Martino, "The Lifetime Fiscal Impact of Immigrants," 1.

[339] Joint Economic Committee Republicans, "The HOUSES Act: Addressing the National Housing Shortage by Building on Federal Land" (U.S. Congress Joint Economic Committee, August 2022), https://www.jec.senate.gov/public/_cache/files/efdd0c37-af95-40cd-9125-e80f8a11504b/the-houses-act---addressing-the-national-housing-shortage-by-building-on-federal-land.pdf; Salim Furth, "Housing Affordability: Trends, Shocks, and State Legislation," prepared testimony for the U.S. Congress Joint Economic Committee, January 17, 2024, https://www.jec.senate.gov/public/_cache/files/f21b79f5-6b16-45c4-bb6f-7c257ef94c94/furth-testimony.pdf.

percent increase in the cost of renting an apartment.[340] As with wages, low-skilled migrants disproportionately impact housing prices, especially on the lower end of the housing market. The increase in apartment prices was nearly double for low-cost housing for which low-skilled immigrants typically have higher demand. Another study from Spain found similar effects, finding that "a one percentage point increase in the immigration rate raises average house sale prices by 3.3%."[341]

Studies in the U.S. on the effect of immigration on housing costs have found similar results. In a study of home and rent data from 282 metropolitan statistical areas (MSAs), a 1 percent rise in the immigrant population relative to an MSA's total population was associated with a 0.8 percent increase in both rent and home prices.[342] The authors also found a corresponding 1.6 percent increase in rents and a 9.6 percent increase in home prices in surrounding MSAs as the native-born population moves in response to rising immigration. Reasons for this increased flight of the native-born population in response to a rising immigrant population are theorized to be a response to increased competition in the labor market.[343]

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[340] Umut Unal, Bernd Hayo, and Isil Erol, "The Effect of Immigration on Housing Prices: Evidence from 382 German Districts" (April 8, 2024), https://doi.org/10.2139/ssrn.4325192.

[341] Rosa Sanchis-Guarner, "Decomposing the Impact of Immigration on House Prices," *Regional Science and Urban Economics* 100 (2023), https://doi.org/10.1016/j.regsciurbeco.2023.103893.

[342] Abeba Mussa, Uwaoma G. Nwaogu, and Susan Pozo, "Immigration and Housing: A Spatial Econometric Analysis," *Journal of Housing Economics* 35 (2017): 13–25, https://doi.org/10.1016/j.jhe.2017.01.002.

[343] Randall Filer, "The Effect of Immigrant Arrivals on Migratory Patterns of Native Workers," in *Immigration and the Work Force: Economic Consequences for the United States and Source Areas*, ed. George J. Borjas and Richard B. Freeman (1992): 245–70, https://ideas.repec.org/h/nbr/nberch/6911.html.

Other studies have also found longer-run effects on home prices in response to immigration.[344] A 1 percent increase in legal immigration relative to a city's population was found to have increased rent and home prices by around 1 percent.[345] The adverse effects of increased immigration on the housing market were even higher than the effects on the labor market, meaning that increased immigration raised shelter costs by magnitudes larger than it suppressed wages for the local population.[346] Alleviating restrictions on housing construction would address some negative effects of immigration on shelter costs, but in situations like the U.S.', in which the supply of housing is inflexible, increases in demand for housing will ultimately raise costs.

Conclusion

The U.S. has a significant competitive advantage in part because many individuals desire to work here. The U.S.' immigration system should be reformed and streamlined so that the best and brightest are able to work and expand the economy. Policy changes to the high-skilled immigration system will reduce fraud and admit those who provide the greatest net economic benefit. While such heavy restrictions on skilled immigration have persisted, misguided policies enacted by the prior Administration have led to a substantial influx of low-skilled immigration that has failed to provide sufficient economic benefits to Americans. Policymakers should pursue targeted immigration policies that incentivize high-skilled immigration while limiting the amount of low-skilled immigration. Such policies would positively impact

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[344] Albert Saiz, "Immigration and Housing Rents in American Cities," *Journal of Urban Economics* 61, no. 2 (2007), https://realestate.wharton.upenn.edu/wp-content/uploads/2017/03/433.pdf.

[345] Saiz, "Immigration and Housing Rents in American Cities," 2.

[346] Saiz, "Immigration and Housing Rents in American Cities," 27.

the deficit and assist in setting the U.S. on a more sustainable fiscal path.