



Osher Lifelong Learning Institute, Fall 2023

Contemporary Economic Policy

University of New Hampshire
Fall, 2023

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National Economic Education Delegation



Course Outline

- **Contemporary Economic Policy**

- Week 1 (10/24): Economic Inequality (Jon Haveman, NEED)
- Week 2 (10/31): Economic Update (Geoffrey Woglom, Amherst College)
- Week 3 (11/7): Monetary Policy (Geoffrey Woglom)
- Week 4 (11/14): Crypto Currencies (Joan Nix, CUNY)
- Week 5 (11/21): International Institutions (Alan Deardorff, U of Michigan)
- **Week 6 (11/28): Federal Debt (Geoffrey Woglom)**

Available NEED Topics Include:

- Healthcare Economics
- US Economy
- Climate Change
- Economic Inequality
- Economic Mobility
- Trade and Globalization
- Minimum Wages
- Immigration Economics
- Housing Policy
- Federal Budgets
- Federal Debt
- Black-White Wealth Gap
- Autonomous Vehicles
- US Social Policy



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The US Federal Debt

Geoffrey Woglom,
Professor of Economics
Amherst College, emeritus
November 28, 2023



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Credits and Disclaimer

- **This slide deck was created by:**
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 - Geoffrey Woglom, Amherst College, Emeritus
- **This slide deck was reviewed by:**
 - Olivier Blanchard, Peterson Institute for International Economics
 - John H. Cochrane, Stanford University
- **Disclaimer**
 - NEED presentations are designed to be nonpartisan.
 - It is, however, inevitable that presenters will be asked for and offer their own views.
 - Such views are those of the presenters and not necessarily those of the National Economic Education Delegation (NEED).

Outline

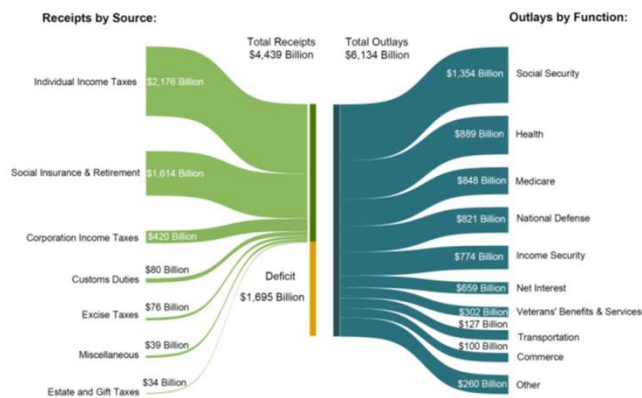
- **Definitions and Basic Data and Historical Data.**
- **What needs to be done to “stabilize” the debt?**
- **Traditional Economic Analysis of the Costs of the Debt**
- **New Ideas about the Costs of the Debt and the importance of foreign holders of the debt.**
- **Recent Congressional Budget Office (CBO) analysis of the Cost of the Debt.**
- **Citizens Guide to Debt Issues**

Basic Definitions

- Fiscal year Deficit = Total Outlays Less Revenues between Oct to September.
- The deficit paid for by government borrowing: (net) issue of new government bonds.
- The accumulated value of past borrowing is the total government debt.

The Federal Budget in FY2023 (ended 9/30)

Inc Tax, 49%
 SS Tax, 36%
 Corp Tax, 9.5%

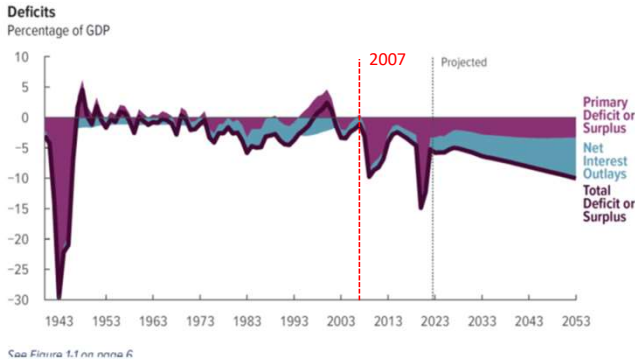


Mandatory: \$3.9tr, 62%
 Discretion.: \$1.7tr, 27%
 Net Interest, \$0.7tr, 10%

Deficit: 1.6tr, 25%
 6% of GDP

Programmatic Outlays = Mandatory + Discretionary

Past and Future of Deficits



Useful Deficit Decompositions:

$$\text{Total Deficit} = (\text{Programmatic Outlays} + \text{Interest Expense}) - \text{Revenue}$$

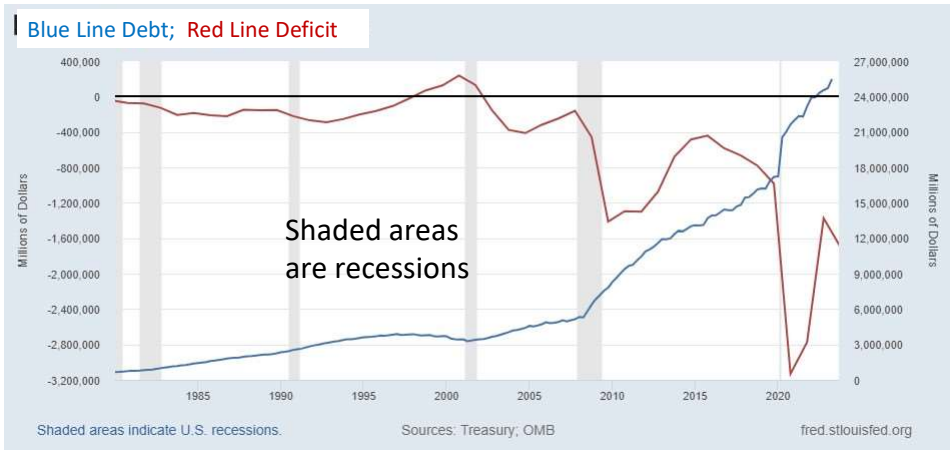
$$= (\text{Programmatic Outlays} - \text{Revenue}) + \text{Interest Expense}$$

$$= \text{Primary Deficit} + \text{Net Interest}$$

E.g, 2007: $1.1 = (17.4+1.7) - 18.0 = 19.1-18.0 = 1.1$
 $1.1 = (17.4-18.0) + 1.7 = -0.6 + 1.7 = 1.1$

Debt vs. Deficit

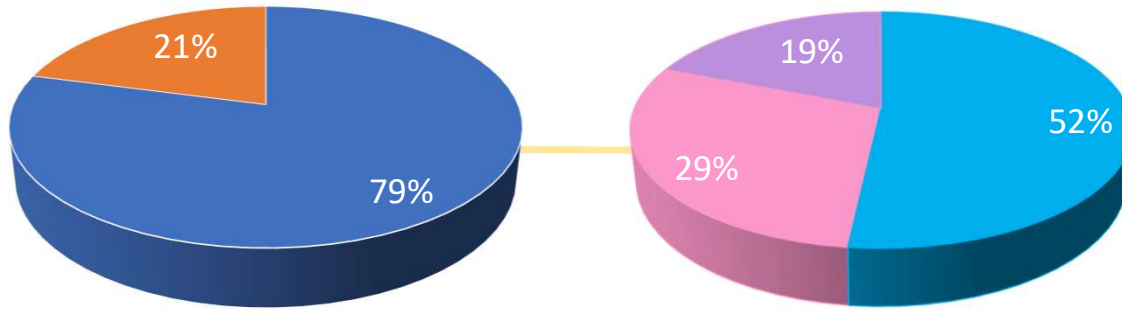
The Sum of All Past Deficits Less Surpluses Equals the Debt



A Breakdown of the Total Federal Debt

Total Public Debt: \$3295 tr, 10/1

Publicly Held Debt: \$24.6 tr, 3/1

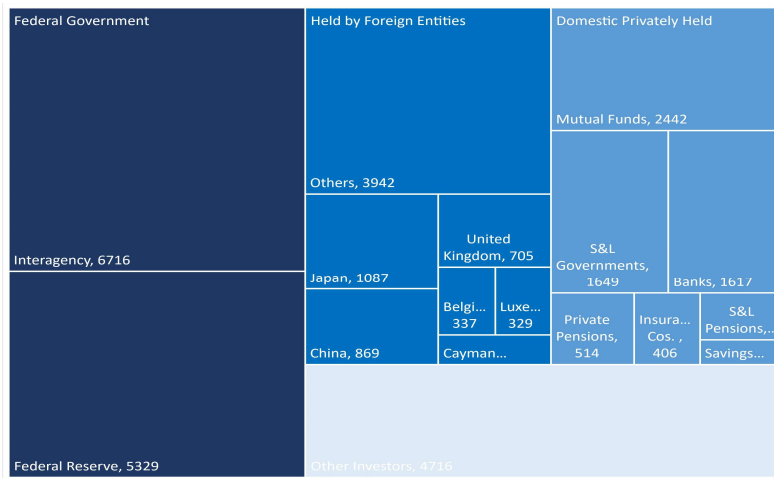


■ Publicly Held
 ■ Intra-gov't
 ■ Domestically Held
 ■ Foreign
 ■ Federal Reserve



Sources: US Treasury, Federal Reserve Board

Ownership of \$31.5 trillion Federal Debt (3/23)



Not All Debt Is Created Equal

Intra-governmental debt is important bookkeeping.

- This debt **DOES NOT** require funding on credit markets

- **Debt held by the public**

- This debt is funded by borrowing on credit markets and competes with private funding.

- **Most analyses focus on the publicly held debt *relative* to GDP because:**

- To the extent that debt and deficits have burdens these burdens depend on the size of the debt *relative* to the size of the economy.

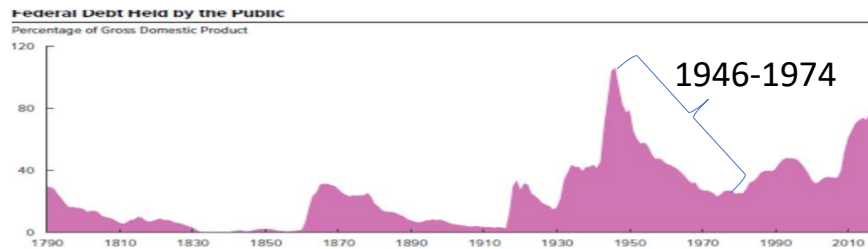
CBO: Budget Analysts in Chief

- **The Congressional Budget Office was founded in 1974 to provide Congress with information about the budgetary implications of legislation.**

- **Two kinds of Reports**

- Cost Estimates or “Scoring”
 - o H.R. 5409, Safeguarding American Farms from Foreign Influence Act
 - o Build Back Better Scoring.
- Projections of Debt and Deficits – The 2023 Long-Term Budget Outlook

Key Points About the U.S. Relative Debt



1. Relative debt peaked during WWII (106%) - followed by a steady decline until the 1980s.
2. Prior to 1983, relative debt rose purposefully (wars, recessions, public investment) and then fell.
3. What can we learn from the 46-74 period, where the relative debt fell continuously?



Debt Dynamics

- The relative debt fell *in spite of* deficits in 21 of the 29 years, with the debt increasing by 42%. How?
- 1946-1974, deficits caused the debt to grow, but not as fast as the economy was growing.
- While the debt grew by 42%, GDP (nominal) grew by 550%

You don't need a surplus to reduce the *relative* debt:
You just need GDP to grow faster than the debt



Relative Debt Dynamics

- **Key Relationship for falling relative debt:**

- When GDP growth is *less* than the interest rate on the debt, the relative debt only falls when there is a primary *surplus*.
- When GDP growth is *greater* than the interest rate on the debt, the relative debt can fall with a (small) primary deficit.



Good and Bad Borrowing

- **Good**

1. *Reasonable* expectation of higher income in the future.
2. Temporary Need.
3. Profitable Investment Opportunity.

- **Criteria are the same for households, firms, and governments.**

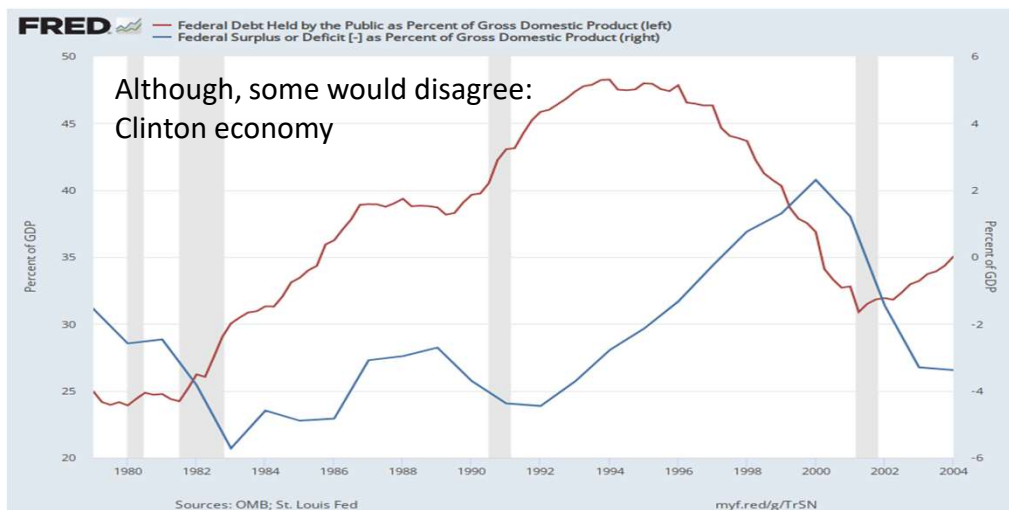
- **If you are not borrowing for one of these reasons it is bad, no matter what it does to the debt.**



Traditional Views of the Cost of the Debt

- **First a non-issue: There is no analogy between household and government debt.**
 - The government does not have to pay back the debt.
 - Maturing government bonds are paid by issuing new bonds.
- **Economist View of the Debt circa 1980, very little cost because relative debt was falling. That changes in 1983.**

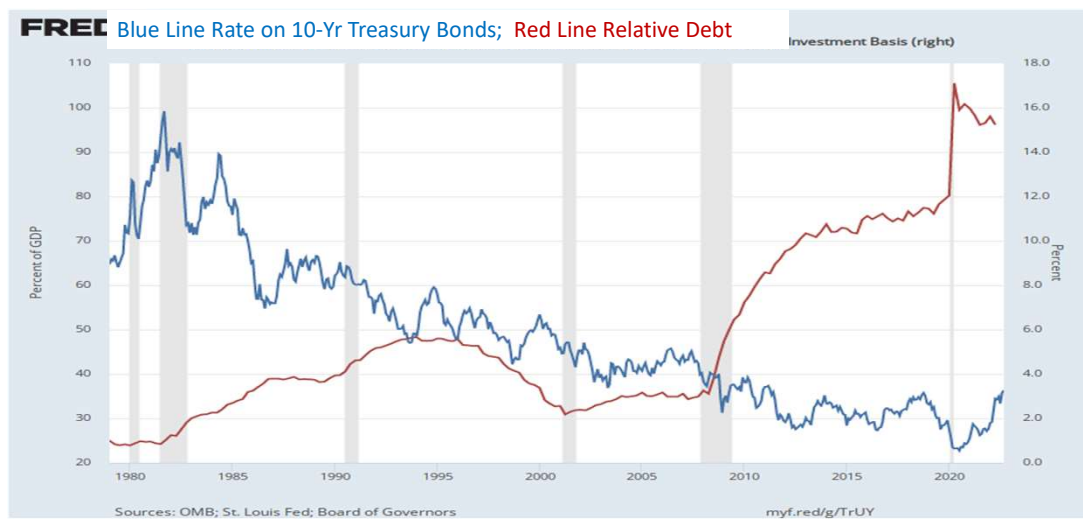
Tax Cuts Don't "Pay for Themselves"



Traditional View: Debt and Deficits Raise Interest Rates

1. **Crowding Out via higher interest rates:**
 1. **Private:** less investment and over time to a smaller capital stock and reduced future output.
 2. **Government:** primary surplus needed to stabilize the debt is larger; i.e., less programmatic outlays or higher taxes
2. **Foreign Borrowing:** Higher interest rates lead to foreign capital inflows or foreign borrowing. With foreign borrowing, some of our GDP is paid to foreigners as interest.

The Dog that Didn't Bark; Rising Interest Rates?



Olivier Blanchard's Presidential Address to the AEA 1/2019

“If the future is like the past [with low interest rates],...the issuance of debt without a later increase in taxes may well be feasible. Put bluntly, public debt may have no fiscal cost.”

But,

“My purpose...is not to argue for more public debt, especially in the current political environment. It is to have a richer discussion of the costs of debt...than is currently the case.”

What the Traditional View Got Wrong

- **Assumed that the interest rate was *greater* than the growth in GDP**
 - In order to stabilize the debt, government must run a primary surplus.
 - The bigger the debt, the larger the required primary surplus.
- **More debt today means a higher primary surplus is needed in the future, i.e., higher taxes and/or less programmatic outlays.**

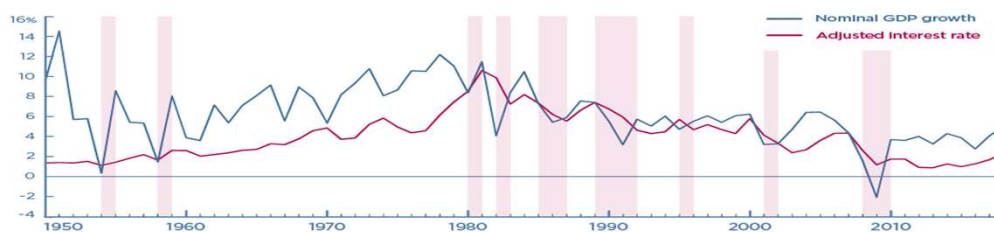
New View: Almost a Free Lunch

- If the interest rate is **less** than the growth rate of GDP, then Debt to GDP can be stabilized with a (small) **primary deficit**: programmatic outlays can be less than revenues!
- **Blanchard does believe that the relative debt must be stabilized**
 1. At some point current deficits must be reduced.
 2. But it may not be crucial at what level of debt we stabilize.
 3. Recent rise in interest rates has caused Blanchard to reemphasize deficit reduction.

Blanchard's Evidence

Historically, US GDP Growth has been Higher than the Interest Rate

Nominal US GDP growth and adjusted interest rate



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Notes: Pink vertical bands denote years in which nominal GDP growth was lower than the adjusted interest rate. The adjusted interest rate is calculated using the maturity of debt held by private investors, the tax rate paid by marginal holders, and the proportion of investors who pay taxes.

Sources: Economic Report of the President (ERP) (2013), table B-88, for 1974–2012 (www.gpo.gov/fdsys/pkg/ERP-2013); Treasury Bulletin (June 2017), table FD5, for 2012 to present (<https://www.fiscal.treasury.gov/files/reports-statements/treasury-bulletin/b2017-2.pdf>); ERP (1976), table B-72 (https://fraser.stlouisfed.org/files/docs/publications/ERP/1976/ERP_1976.pdf); Federal Reserve Statistical Release Z1: Financial Accounts of the United States (2016), table L.210 (<https://www.federalreserve.gov/releases/z1/2016Q09/data.htm>); Measuringworth.com (<https://www.measuringworth.com/datasets/usgdp/sourcegdp.php>).

But Why Must the Relative Debt Be Stabilized?

- **Stephanie Kelton provided a prominent and recent exposition of Modern Monetary Theory in her June 6th 2020, *NYTimes* op-ed, “Learn to Love Trillion-Dollar Deficits.”**
 - US Treasury borrows in dollars and therefore cannot default (as opposed to Greece).
 - Example: How did we “find the money” in FY 2020 to increase in the deficit by about \$1.9 trillion?
 - Answer: Fed open market purchases of \$1.7 trillion provided 89% of the financing.
 - More generally, she argues that we can always find the money to increase federal spending

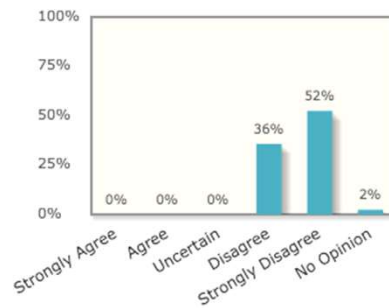
MMT's Free Lunch

- **The only limit on deficit spending is if it leads to too much spending thereby increasing current inflation.**
- **Recognizing this fact, “...could free policymakers not only to act boldly amid crises but also to invest boldly in times of more stability.”**
- **Too bad the second part isn't true.**
- **We rely on foreigners to hold a substantial portion of our debt and they can lose if the exchange value of the dollar falls**

Don't Just Take My Word for It

Question A: Countries that borrow in their own currency should not worry about government deficits because they can always create money to finance their debt.

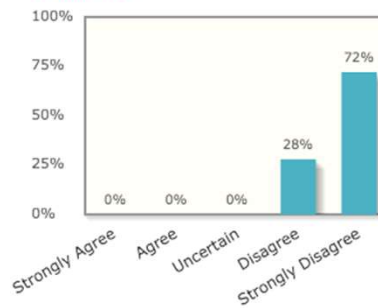
Responses



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Source: IGM Economic Experts Panel
www.igmcchicago.org/igm-economic-experts-panel

Responses weighted by each expert's confidence



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Source: IGM Economic Experts Panel
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Why do Foreigners Buy US Treasuries?

- **Market for Treasuries is the deepest, most liquid and safest capital market in the world.**
- **US economy has a history of political and economic stability.**
- **We enjoy “An exorbitant privilege” (Valery Giscard d’Estaing): The dollar is the largest international reserve currency.**
 - Most trade transactions are quoted in dollars, e.g., oil.
 - With some exceptions, foreigners borrow in dollars. E.g., Yankee bonds

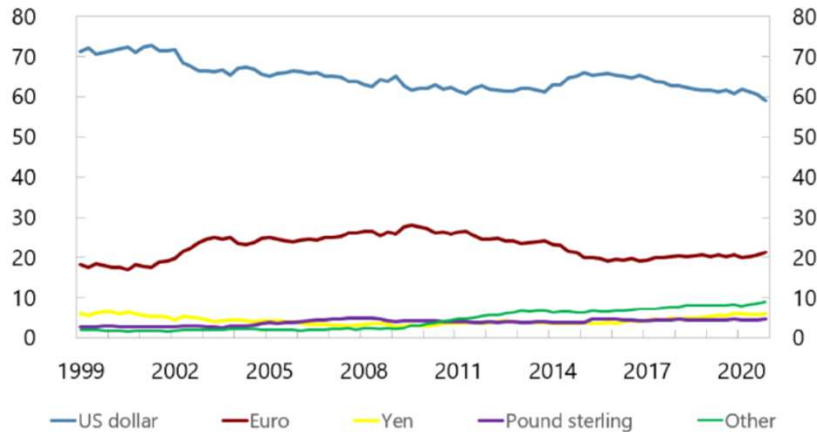


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Demand for Dollars by Central Banks

(currency composition of global foreign exchange reserves, percent)



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Source IMF Currency Composition of Official Exchange Reserves

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CBO on the Costs of “High and Rising Debt”

1. The interest expense portion of the deficit will rise, including payments to foreigners.
2. Crowding out of private investment.
3. “The likelihood of a fiscal crisis in the United States would increase.”
4. Slow erosion of confidence in the U.S. dollar as an international reserve currency leading to higher interest rates.
5. Policymaker constraint in using deficit-financed fiscal policy to respond to unforeseen events.

CBO, “Budget and Economic Outlook: 2022-2032,” May 2022, pp15-16.



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What would a Fiscal Crisis Look Like?

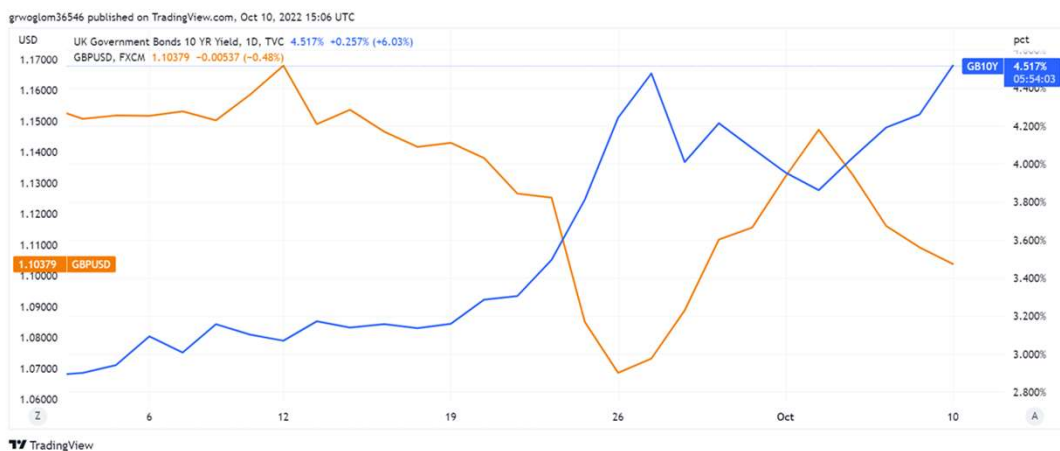
Foreigners lose confidence in the dollar and sell Treasuries in exchange for assets denominated in their own currency,

1. Sale of Treasuries raises interest rates, worsening our fiscal outlook.
2. Trading of Foreign for US assets lowers US exchange rate.
 - a. Raising the price of imports thereby increasing inflation.
 - b. Lowering the foreign currency returns on all US assets, exacerbating 1.

Could the Fed Bail us Out?

1. It could buy Treasuries and prevent the rise in interest rates.
2. Insufficient foreign assets to prevent the fall in the exchange rate,

Fiscal Crisis Preview: UK & Liz Truss

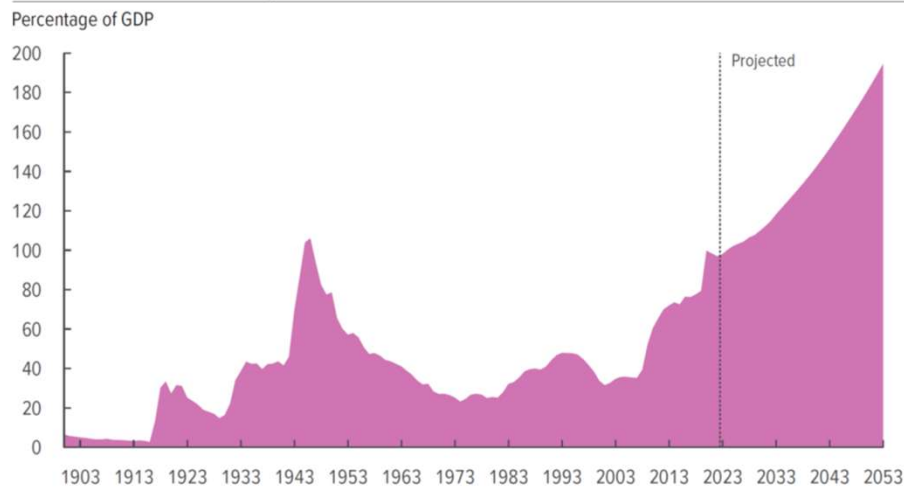


Bottom Line: We Need to Worry about the Debt

1. Economist don't really know why they fell to such low levels over the past 20 years. What will they be in the next 20?
2. A fiscal crisis should be avoided at all costs.
3. The good news is we may be able to stabilize the relative debt without a running a surplus.

But is this Problem Impossible?

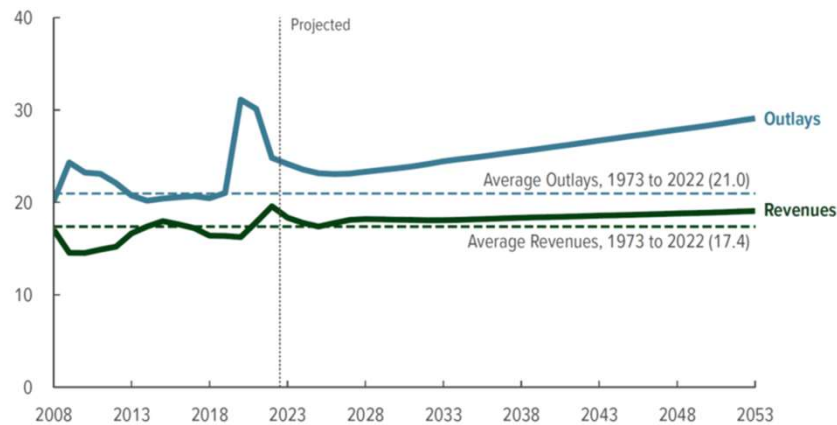
Federal Debt Held by the Public, 1900 to 2053



The Blueprint for a Crisis?

Total Outlays and Revenues

Percentage of Gross Domestic Product



But, these are
“projections,” not
forecasts!

Data source: Congressional Budget Office. See www.cbo.gov/publication/59014#data.



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Source: CBO, “The 2023 Long-Term Budget Outlook,” 6/2023

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Citizen’s Guide to “Budget Reconciliation.”

- Procedure successfully used 22 times since 1974 to avoid a Senate filibuster.
- Reconciliation can be used for changing taxes and spending (not Social Security) subject to the Byrd Rule.
- Byrd rule:
 1. No extraneous provisions.
 2. No increase in the deficit after 10 year window.
- Reconciliation games played by both parties:
 1. BBB.
 2. Trump Tax Cut



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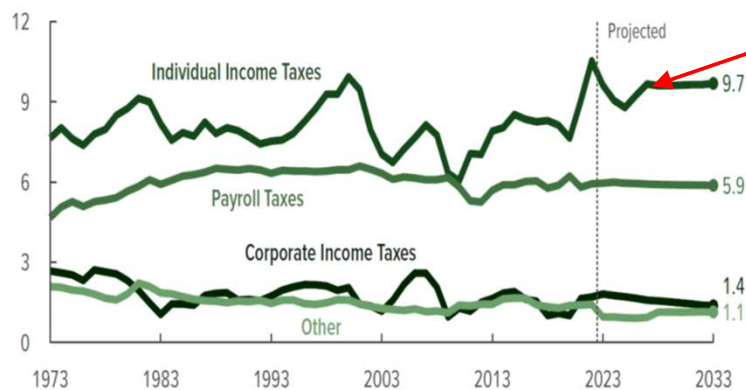
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Reconciliation and CBO Projections

- For the CBO to be effective it must be perceived to be (and must be) nonpartisan.
- Therefore, CBO “baseline” projections and legislative scoring must not try to predict changes in legislation.
- Instead, CBO must analyze the data based on the current law as written.
- CBO is allowed to provide analyses of policy options.

Example: Trump Tax Cut

Revenues, by Category
Percentage of Gross Domestic Product

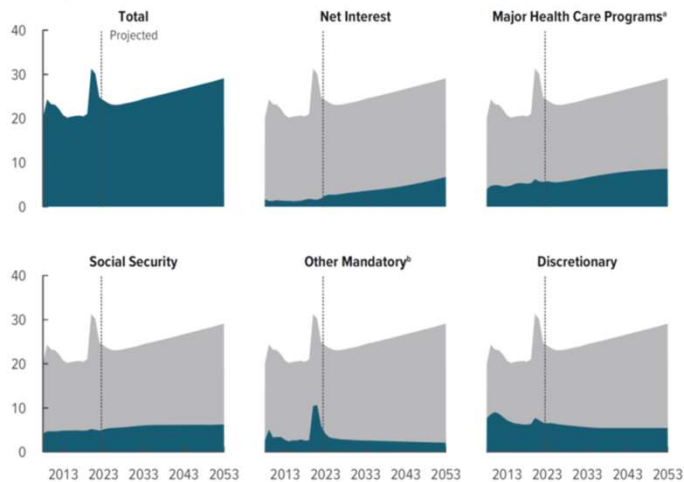


Why do Income Taxes go up in 2025?

So, What Do We Do?

Outlays, by Category

Percentage of GDP



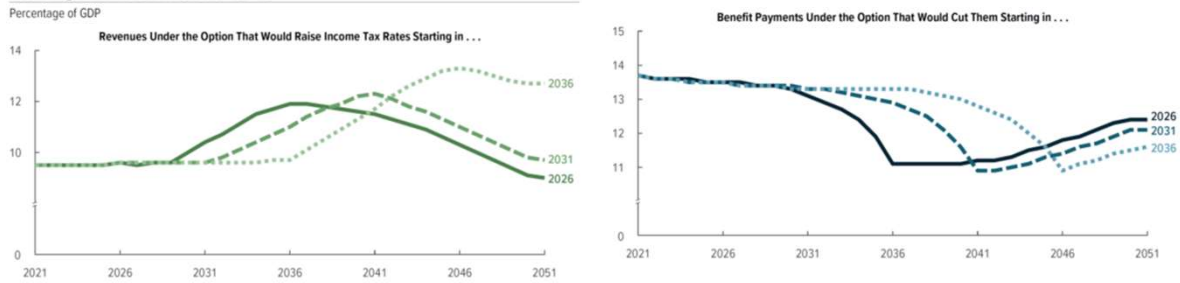
Unfortunately, The Required Changes are Big!

Deficit and Debt Arithmetic (back of the envelope):

1. CBO estimates over the next ten years on average.
 1. GDP growth: 4%
 2. Interest on the Debt 3%
 3. Debt to GDP 100%
2. Debt to GDP can be stabilized with a primary *deficit* of 1%.
3. Projected primary deficit is 3% (but don't forget Trump tax cuts)

But, We Need to Get Started

Tax Revenues and Benefit Payments Under Two Options for Stabilizing Starting in Three Different Years



CBO, "The Economic Effects of Waiting to Stabilize the Federal Debt," Apr 2022

The Wit and Wisdom of Herb Stein



If something cannot go on for ever,

— Herbert Stein —

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