The US Federal Debt

Lifeguard Wealth
April 6, 2023

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NEED

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National Economic Education Delegation

- **Vision**
  - Someday, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.
- **Mission**
  - NEED unites the skills and knowledge of a vast network of professional economists to promote understanding of the economics of policy issues in the United States.
- **NEED Presentations**
  - Are **nonpartisan** and intended to reflect the consensus of the economics profession.

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Who Are We?

- **Honorary Board: 48 members**
  - 2 Fed chairs: Janet Yellen, Ben Bernanke
  - 6 chairs of the Council of Economic Advisers
    - Furman (D), Rosen (R), Bernanke (R), Yellen (D), Tyson (D), Goolsbee (D)
  - 3 Nobel Prize-winners
    - Akerlof, Smith, Maskin
- **Delegates: 652+ members**
  - At all levels of academia and government service
  - All have a PhD in economics
  - Crowdsource slide decks
  - Give presentations
- **Global Partners: 45 PhD Economists**
  - Aid in slide deck development

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Credits and Disclaimer

- **This slide deck was created by:**
  - Jon Haveman, Executive Director, NEED
  - Geoffrey Woglom, Amherst College, Emeritus
- **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).

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First: A Budget Primer

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What Does the US Govt. Budget Look Like?

2022 Budget Summary (in billions)

Revenue			Outlays	
Income Taxes	$2,632		Mandatory	$4,134
Payroll Taxes	$1,484		Discretionary	$1,661
Corporate Taxes	$425		Interest	$475
Other	$356			
Total	$4,897		Total	$6,270

Budget Deficit: $1,373 Billion

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https://www.cbo.gov/publication/58888

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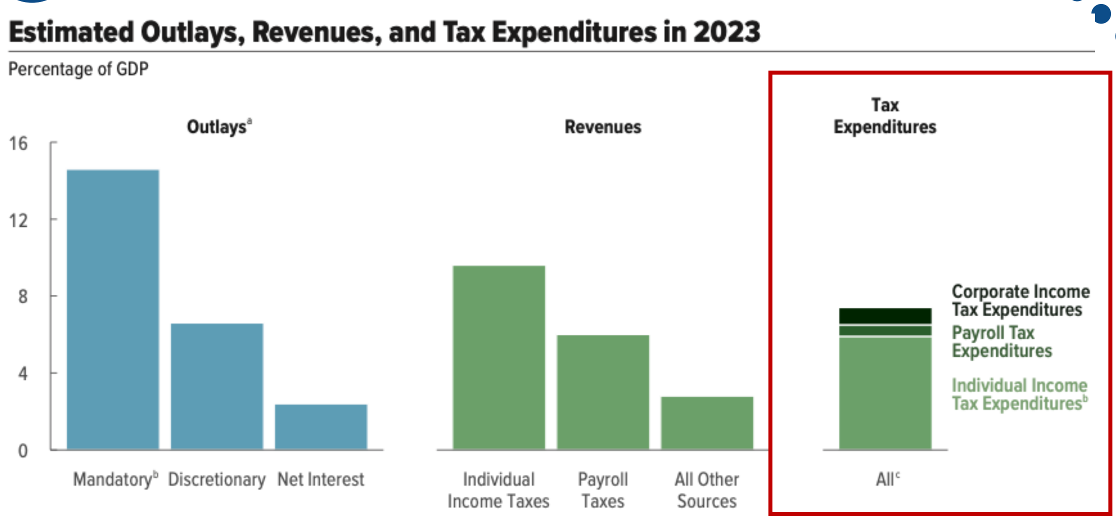
But There is More to The Budget!



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Source: https://www.cbo.gov/system/files/2023-02/58848-Outlook.pdf

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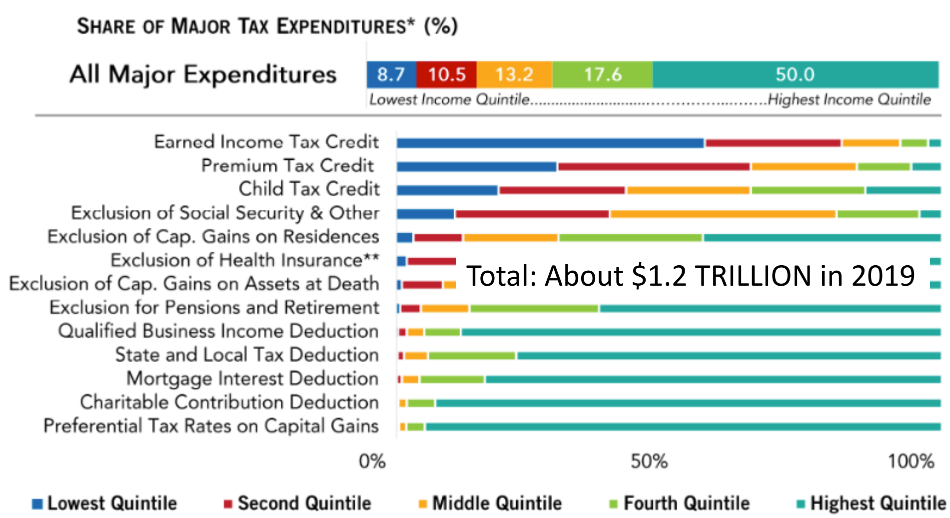
What Are Tax Expenditures?



SOURCE: Congressional Budget Office, *The Distribution of Major Tax Expenditures in 2019*, October 2021.

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Source: https://www.pgpf.org/Chart-Archive/0199_distribution_tax_expenditures

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And Now: The Debt

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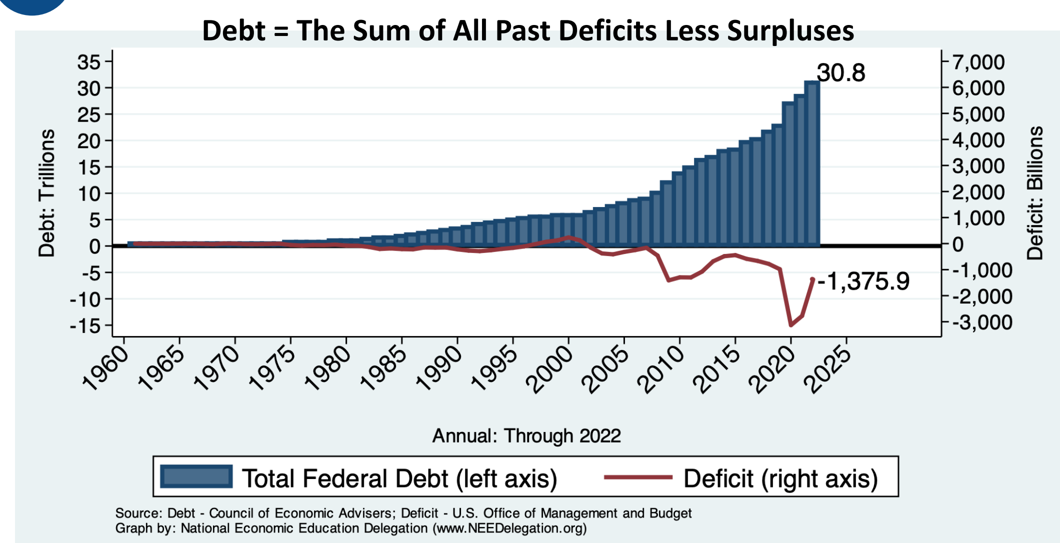
Debt vs. Deficit



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Of Debt, Deficits, and Surpluses

- **FLOW**
  - ***Deficit***: The excess of outlays over revenues in a year.
  - ***Surplus***: The excess of revenues over outlays in a year.
- **STOCK**
  - ***Debt***: The accumulation of debt over time.
    - The sum of all past deficits and surpluses.

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How Does the US Government Borrow?

- **It issues debt.**
  - Treasury marketable securities:
    - Treasury bills, notes, and bonds
    - TIPS: Treasury inflation-protected securities
    - Savings bonds
- **Who buys the debt?**
  - Other federal agencies
  - Individuals and businesses
  - State and local governments
  - Foreign government and individuals
  - Federal Reserve

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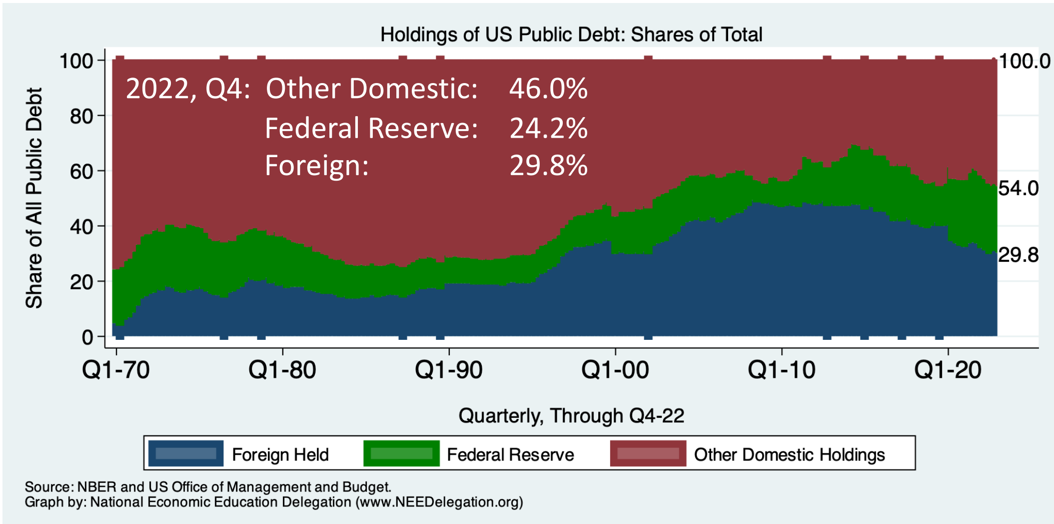
Trends in US Debt Over Time



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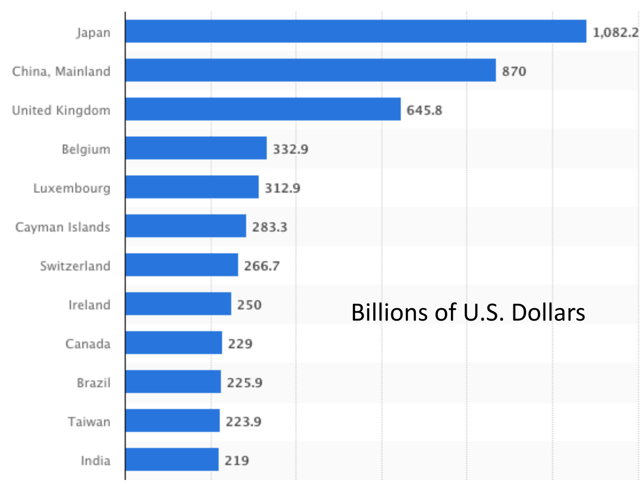
Who Holds Debt to Foreigners, 11/22



Foreign ownership is relatively recent – in 1990 foreign ownership was less than 20%

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Source: https://www.statista.com/statistics/246420/major-foreign-holders-of-us-treasury-debt/

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Why Do Foreign Investors Buy US Treasuries?

- **Market for Treasuries is the deepest, most liquid capital market in the world.**
- **The US economy has a history of political and economic stability.**
- **The dollar is the largest international reserve currency.**
  - Most trade transactions (e.g., oil) are quoted in dollars.
  - With some exceptions, foreign citizens borrow in dollars.

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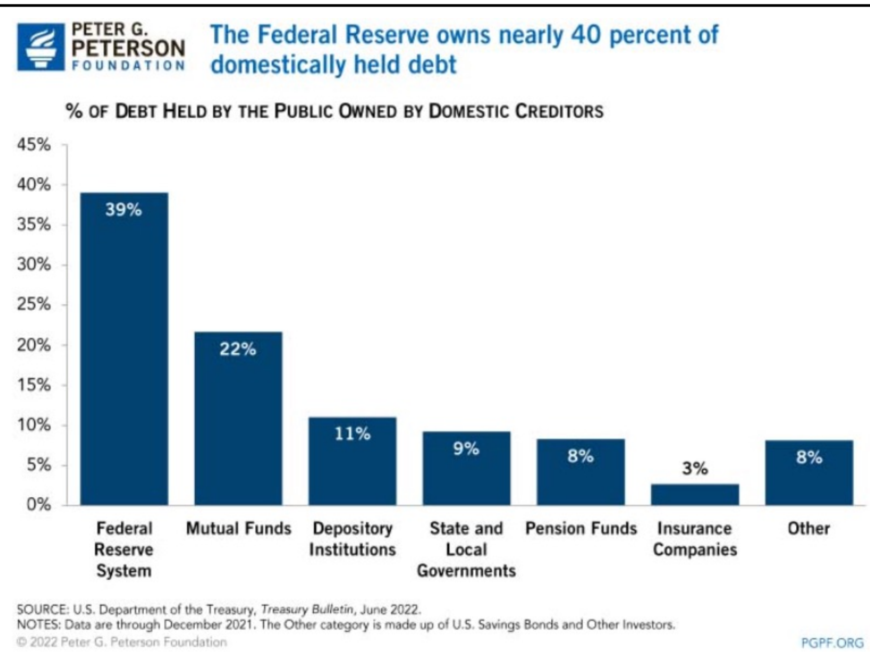

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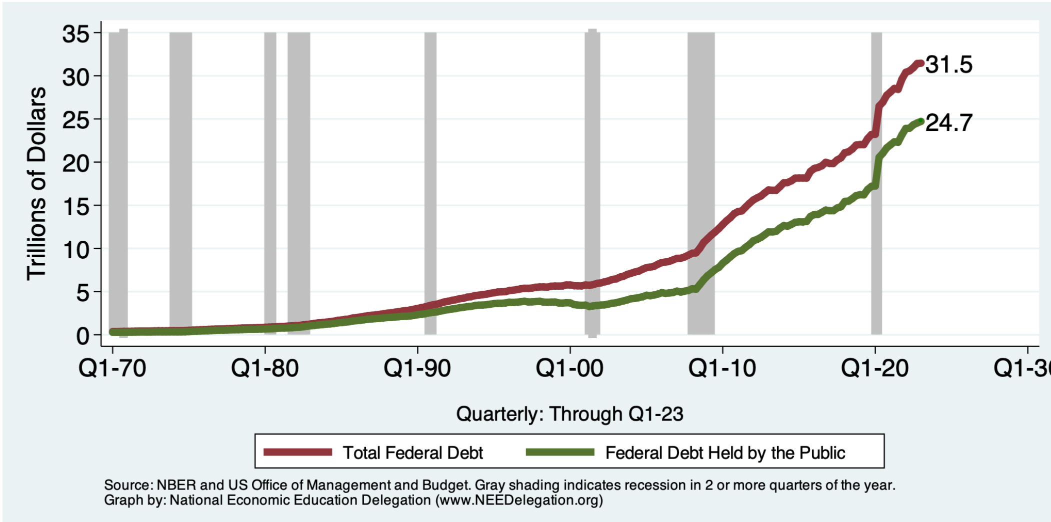
Not All Debt Is Created Equal

- **Some debt can reduce the availability of investment funds to other borrowers.**
  - Often referred to as "crowding out" private investment.
- **Intragovernmental debt is (important) bookkeeping.**
  - This debt **DOES NOT** crowd out private investment.
- **Debt held by the public.**
  - This debt **MIGHT** crowd out private investment.
- **Most analyses of debt focus on federal debt held by the public.**

Important Points:

- Not all debt is created equal.
- What is the right measure of the debt?
- Components of the debt.

Two Measures of the Debt



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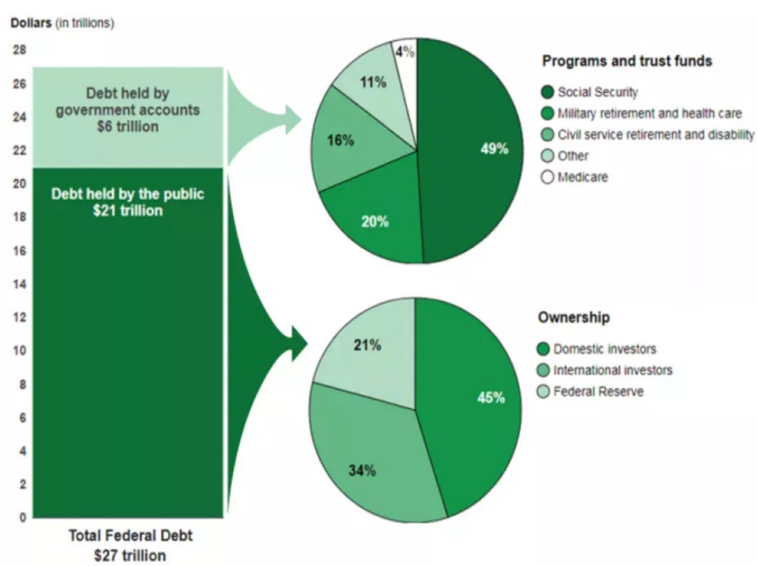
A Breakdown of Total Federal Debt, 2020



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https://www.gao.gov/americas_fiscal_future?t=federal_debt

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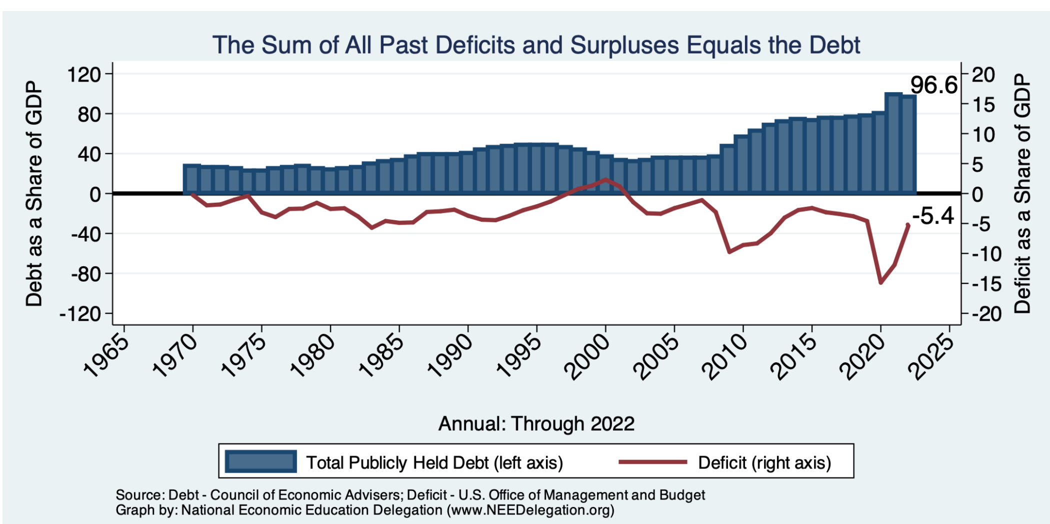
The All-Important *Relative* Debt

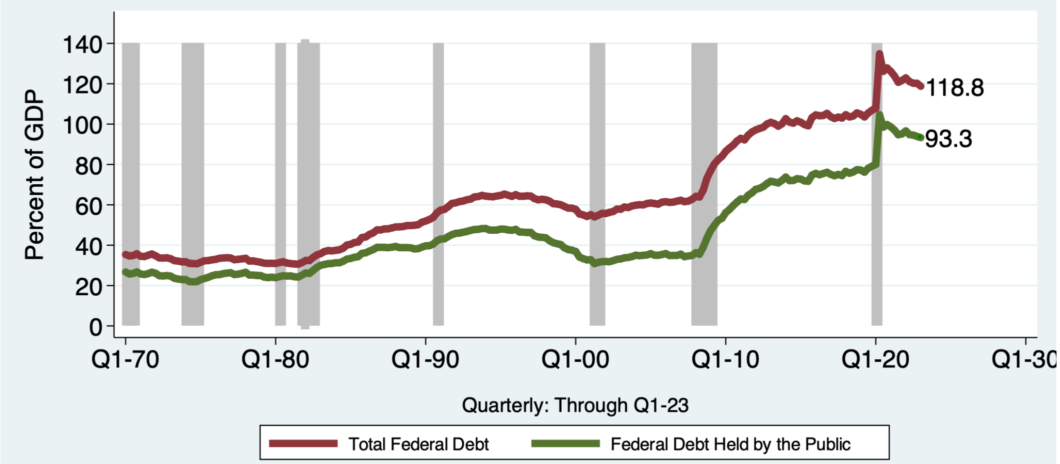
- **CBO analyzes the debt *relative* to GDP because:**
  - To the extent that debt and deficits have burdens, these burdens depend on the size of the debt ***relative*** to the size of the economy.

	Total Public Debt	Relative Debt Debt/GDP
United States	$24.5 Trillion	93.3%
Greece	$0.215 Trillion	170%

Relative Debt and Deficit



Two Measures of RELATIVE Debt



Source: NBER and US Office of Management and Budget. Gray shading indicates recession in 2 or more quarters of the year.
Graph by: National Economic Education Delegation (www.NEEDelegation.org)

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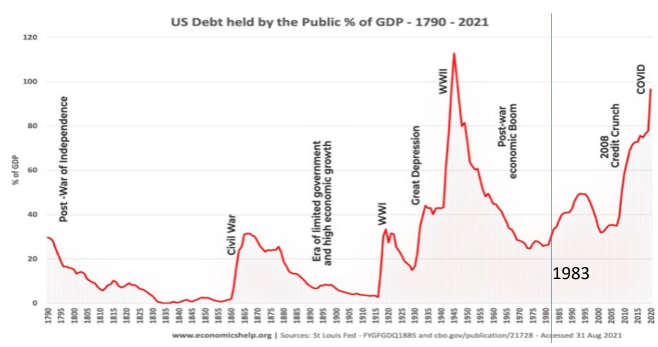
Key Points About US Relative Debt



1. **Prior to 1983, relative debt rose purposefully (wars and recessions) and then fell.**
2. **Relative debt peaked during World War II, followed by a long decline.**
3. **Relative debt has been and is expected to rise for the next 30 years w/o a strategic purpose.**

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Debt Dynamics

- **Surprising (?) Facts**
  - From 1945 to 1979, relative debt fell from 100% of GDP to 25% of GDP.
  - During this period, the federal budget was in surplus only 8/35 years!
- **Relative debt is a fraction: Debt/GDP; fractions fall if:**
  - The ***numerator*** falls (budget surplus)
  - The ***denominator*** rises (nominal GDP growth)
  - The ***denominator*** grows faster than the ***numerator***
    - ***GDP growth is greater than the interest rate on borrowing.***
    - ***CAN still run deficits and reduce the relative debt.***

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An Almost Free Lunch

- **If the interest rate is *less* than the growth rate of GDP, then the contribution from the primary budget can be positive, hence…**
- **Debt to GDP can be stabilized with a (small) primary *deficit*.**

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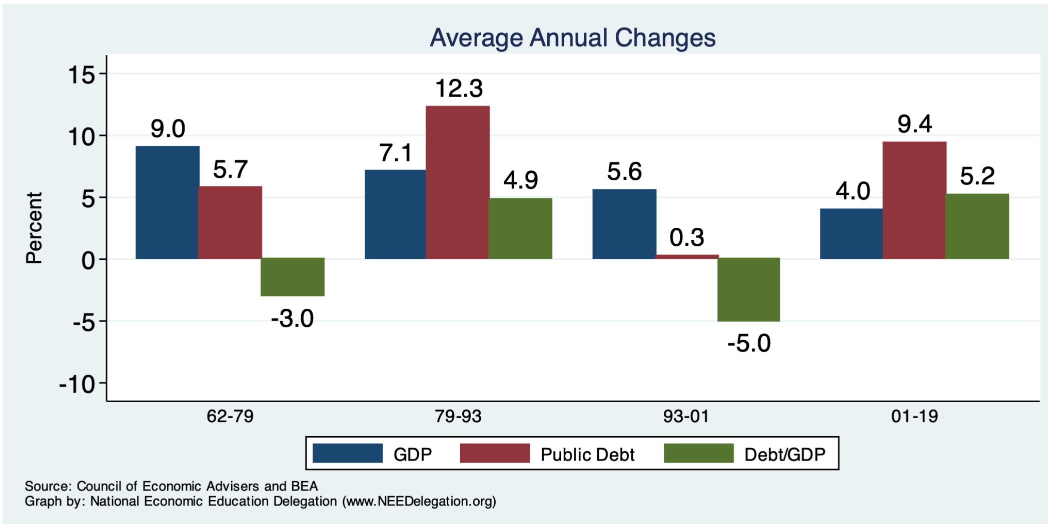
The Arithmetic of Changes in Relative Debt



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Is Stabilizing Relative Debt Good Enough?

- **This means that the absolute level of the debt would continue to increase.**
- **Yes, it is probably good enough.**
  - It is a reflection of the economy's ability to support the debt.
  - Stability will avoid bond market scares.
- **More on this later.**

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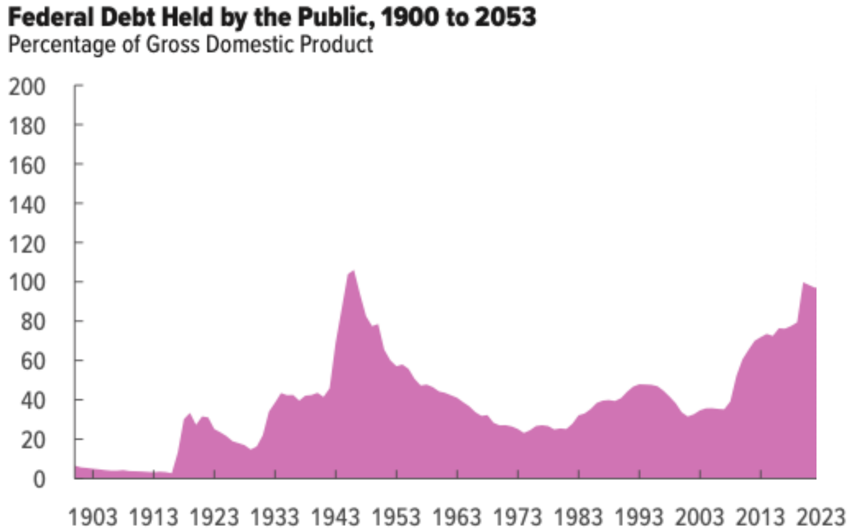
But Let's Think About Today



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Why Has the Federal Debt Risen So Much?

- **Expenditures UP:**
  - Social Security
  - Health-care costs
  - Economic stimulus
    - **In particular, during the Great Recession & COVID.**
  - Military engagements overseas
- **Revenues DOWN:**
  - Declining income tax revenues
    - Stagnant wages
    - **Tax cuts**
  - Social security
    - Declining revenues

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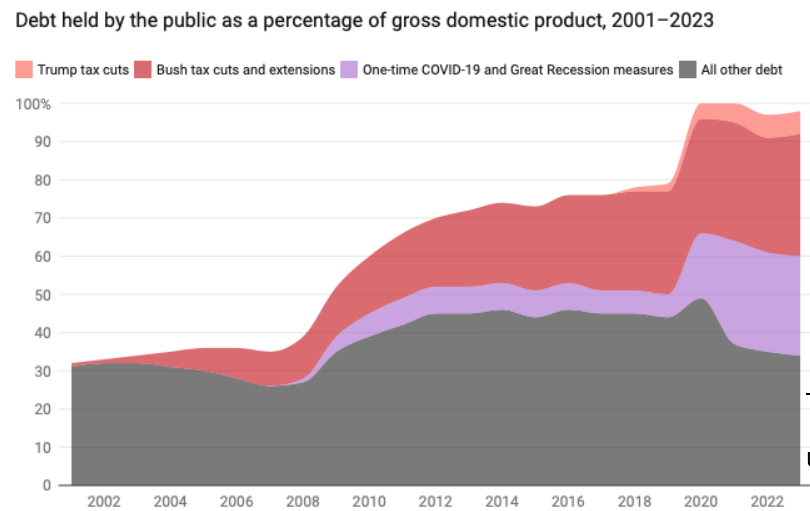
Tax Cuts Have Driven The Debt Increases



Trump Tax Cuts: 6% of GDP

Bush Tax Cuts: 32% of GDP

Great Recession & COVID: 26% of GDP

The rest: 34% of GDP

Up from 31% in 2001

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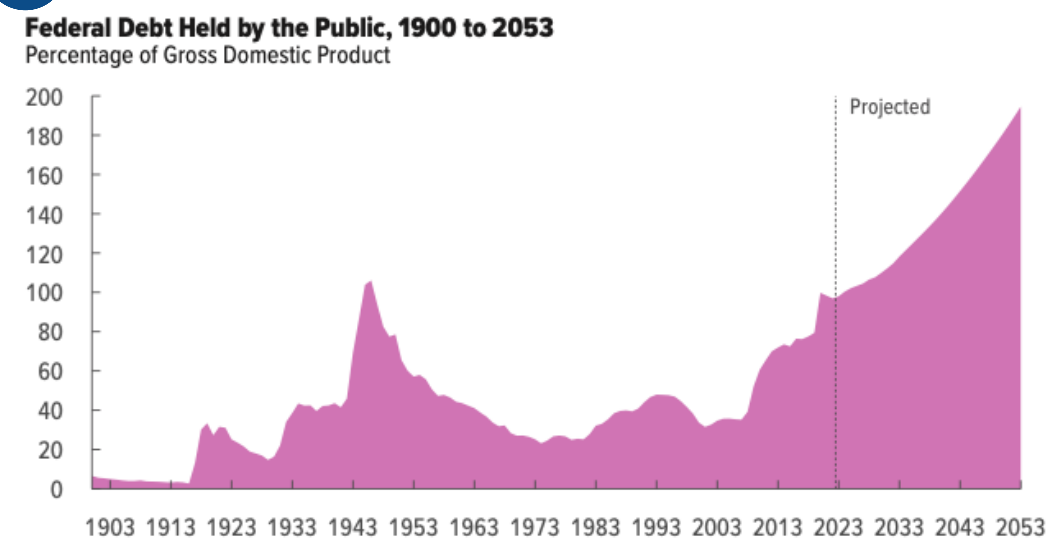
Now Let's Think About Today and the Future



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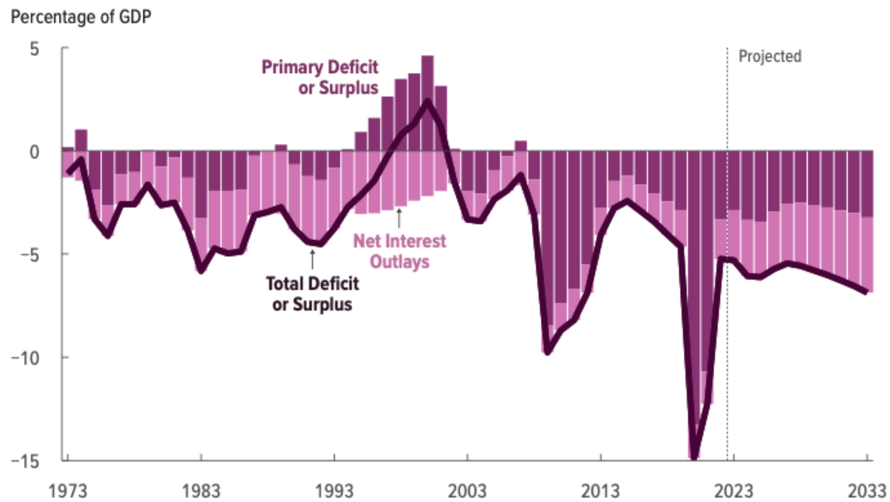
Rising Debt Levels Due to a Future of Deficits



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Source: Congressional Budget Office, The Budget and Economic Outlook: 2023 to 2033

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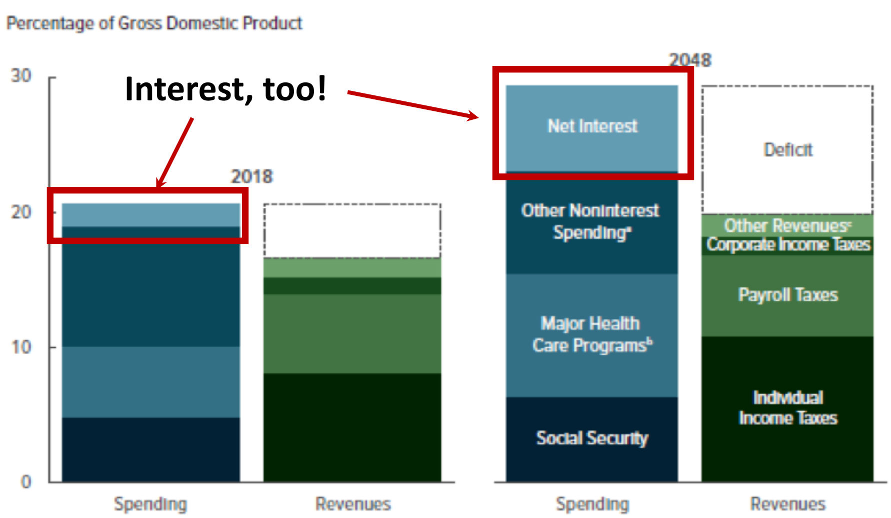
Spending to Grow Much Faster Than Revenue



Source: Congressional Budget Office.

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Two Measures of the Deficit

- **(1) Primary deficit = current programmatic outlays – revenues**
- **(2) Total deficit = primary deficit + interest**
- **Interest on the debt is**
  - The part of the total deficit that is due to past deficits.
- **This distinction becomes important for understanding:**
  - The future course of relative debt.
  - The costs borne by future generations because of the debt.

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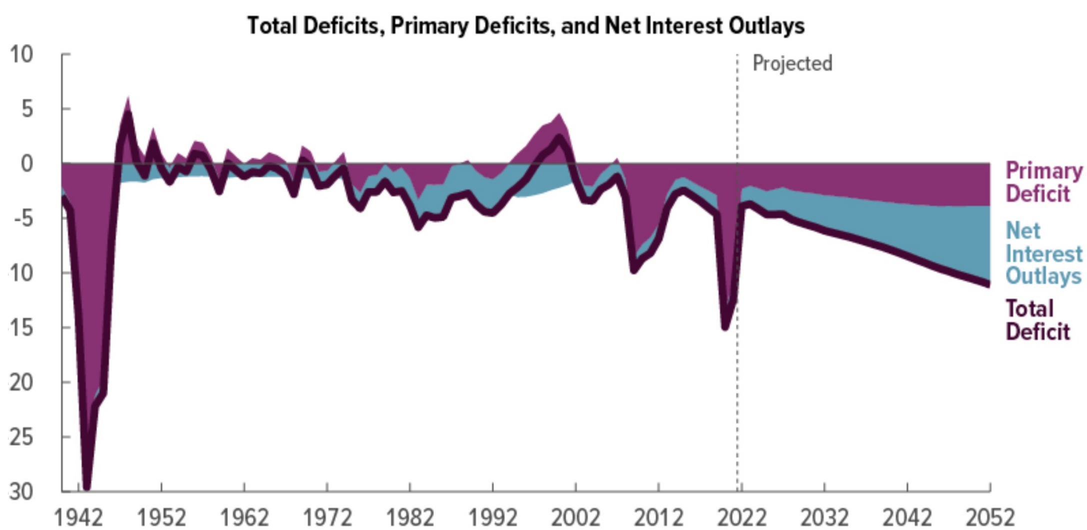
Interest Will Grow as a Share of the Deficit



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Source: CBO 2022 Long Term Budget Outlook

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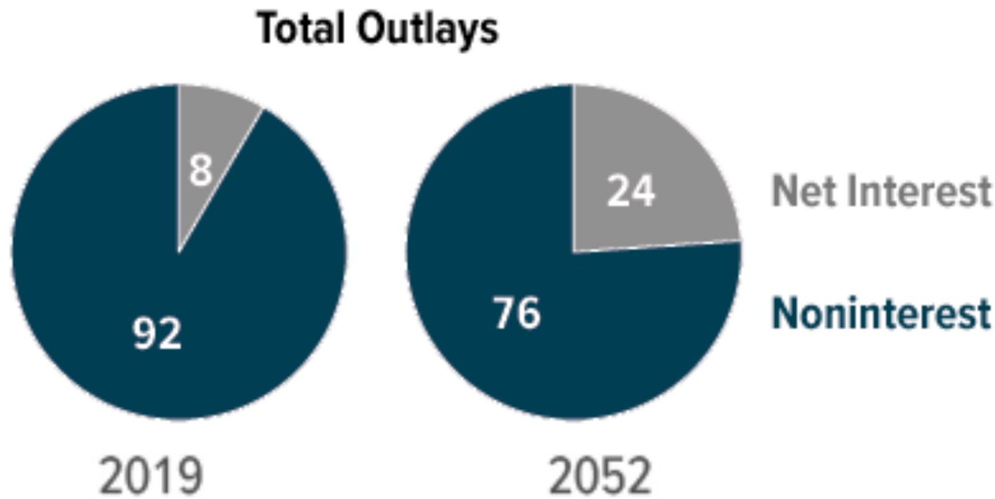
Interest Will Grow as a Share of the Deficit



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Source: CBO 2022 Long Term Budget Outlook

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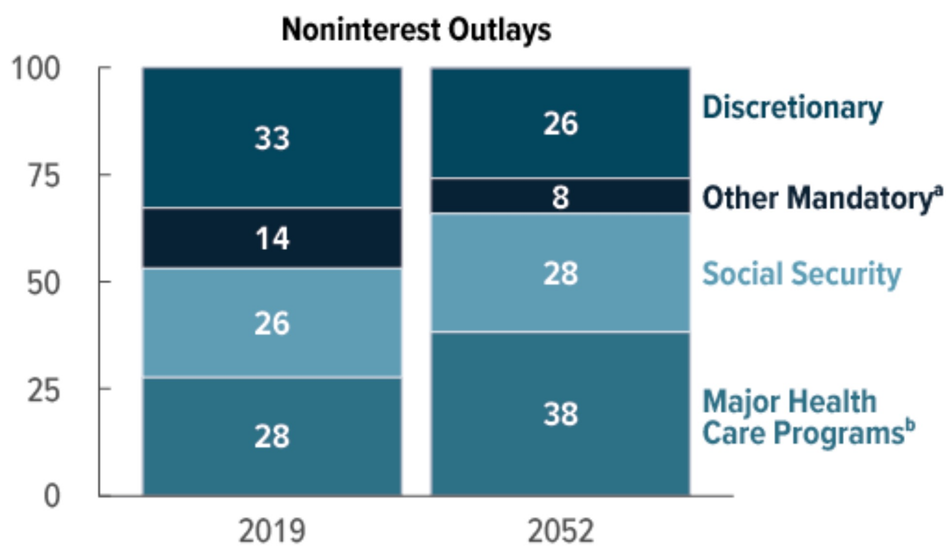
What Are the Primary Drivers Going Forward?



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Source: CBO 2022 Long Term Budget Outlook

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How to Think About the Debt

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Perspectives on Increased Debt

- **Does debt impose a burden on future generations?**
  - Does it inevitably have to be paid off?
- **Government borrowing crowds out private capital and investments.**
  - Weakened by the ability to borrow from other countries.
- **In time, debt service might crowd out other government spending.**
  - Diminishing policy priorities in the budget.
- **Is it reasonable to borrow at low interest rates for investment?**
  - For example, for infrastructure.

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Is The Debt a Problem Today?

- **Federal government borrows each month with little difficulty.**
- **Very little evidence of "crowding out."**
- **Interest rates are low, but rising – this is becoming a concern.**
- **So, no, other than the debt ceiling, it's not a problem today.**

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Not All Borrowing Is Bad!

- **Two good reasons to borrow:**
  1. During a temporary crisis
     1. Recession
     2. War
     3. Pandemic
  2. Productive public investment
     1. Infrastructure
     2. Education

- **These deficits did not and do not permanently increase relative debt.**
  - Great Depression, WWII, Great Recession, COVID
  - Public investment expands GDP and tax revenue

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So, Why Worry About it?

- **If debt becomes too high:**
  - Investors might start questioning the creditworthiness of the US government.
    - Problem: Nobody knows how high is too high.
  - It becomes more difficult to borrow in times of crisis.
    - War, severe recession
    - "Fiscal space"
      - Impossible to measure how much we have.
      - Clearly, we have less now than in 2007.
  - Could start to crowd out investment by consumers and businesses.
    - Not currently a problem. No idea if/when it might become one.
  - Could be inflationary.

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So, Why Worry About It?

- **If debt continues to grow:**
  - Interest payments will grow with it.
    - 8% of spending in 2019.
    - 22% of spending in 2052.
    - Less room for using the budget for policy priorities.
    - 30% of payments go to other countries.
  - The longer we wait to address it, the harder and more disruptive addressing it will be.
  - Interest rates are increasing.

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Growth in Relative Debt

- **Can be scary to….**
  - International investors
  - Bond markets

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Fiscal Crisis, or a Run on the Dollar

- **With an exploding relative debt, what happens if foreigners lose confidence in the stability of the dollar?**
- **CBO (*Federal Debt: A Primer*, March 2020):**

  because the United States currently benefits from the dollar's position as the world's reserve currency and because the federal government borrows in dollars, a financial crisis—similar to those that befell Argentina, Greece, or Ireland—is less likely in the United States.

  Although no one can predict whether or when a **fiscal crisis** might occur or how it would unfold, the risk is almost certainly increased by high and rising federal debt.

- **Crises of confidence, in addition to being unpredictable, happen very quickly.**

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What Is a Fiscal Crisis?

- **Increased perception of risk in government debt.**
- **Potential manifestations:**
  - Sudden significant increase in interest rates
  - Plunging exchange rates
- **Why?**
  - Increased expectation of default
- **Potential results:**
  - Dramatic budget reforms may be quickly necessary to stave off actual default.
  - Recession from declines in:
    - investment (interest rates)
    - consumption (interest rates)
    - Government spending
  - Higher interest bill on existing debt

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Summary

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The Key: Stabilization of Relative Debt

- Stabilization of relative debt might forestall the consequences of chronic deficits.
- Problem: The US federal debt is in no way stable.
- W/o stability, interest rates might rise, causing crowding out of:
  - policy priorities
  - domestic investment
- Budget surpluses are not necessary, but budget control is.

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Bottom Line: We Need to Worry about the Debt

1. Interest rates are rising.
2. A fiscal crisis should be avoided at all costs.
3. Stabilizing relative debt would substantially reduce the possibility of a crisis.
4. The good news is we might be able to stabilize relative debt without a primary surplus.

But we must substantially reduce primary deficits.

We MUST MUST MUST continue raising the debt ceiling.

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Bottom Bottom Line

- Question is not ***WHETHER*** the US will have to act…
  but ***WHEN***.

- Some combination of the following ***WILL*** be necessary:
  - **Raising taxes**
  - **Cutting spending**
  - **Reining in health-care costs**

- **The longer we wait, the harder it will be!**

Thank you!

Any Questions?

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