

Osher Lifelong Learning Institute, Spring 2023 **Contemporary Economic Policy Issues**

Duke University
May-June 2023

Host: Jon Haveman, Ph.D.
National Economic Education Delegation



Available **NEED** Topics Include:

- **US Economy**
- **Healthcare Economics**
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- **Immigration Economics**
- **Housing Policy**
- **Federal Budgets**
- **Federal Debt**
- **Black-White Wealth Gap**
- **Autonomous Vehicles**
- **Healthcare Economics**



Course Outline

- **Contemporary Economic Policy**

- Week 1 (5/2): US Economic Update (Geoffrey Woglom, Amherst College)
- Week 2 (5/9): Monetary Policy (Geoffrey Woglom)
- Week 3 (5/16): Healthcare Economics (Kelley Cullen, E. Washington University)
- Week 4 (5/23): Climate Change Economics (Sarah Jacobson, Williams College)
- Week 5 (5/30): The Black-White Wealth Gap (Mike Shor, Univ. of Connecticut)
- **Week 6 (6/6): Federal Debt (Jon Haveman, NEED)**



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Submitting Questions

- **Please submit questions of clarification in the chat.**
 - I will try to handle them as they come up.
- **We will do a verbal Q&A once the material has been presented.**
- **Slides will be available from the NEED website shortly after the talk (https://NEEDEcon.org/delivered_presentations.php)**



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The US Federal Debt

OLLI – Duke University
June 6, 2023

Jon Haveman, Ph.D.
National Economic Education Delegation





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- **This slide deck was created by:**
 - Jon Haveman, Executive Director, NEED
 - Geoffrey Woglom, Amherst College, Emeritus
- **This slide deck was reviewed by:**
 - Olivier Blanchard, Brookings Institution
- **Disclaimer**
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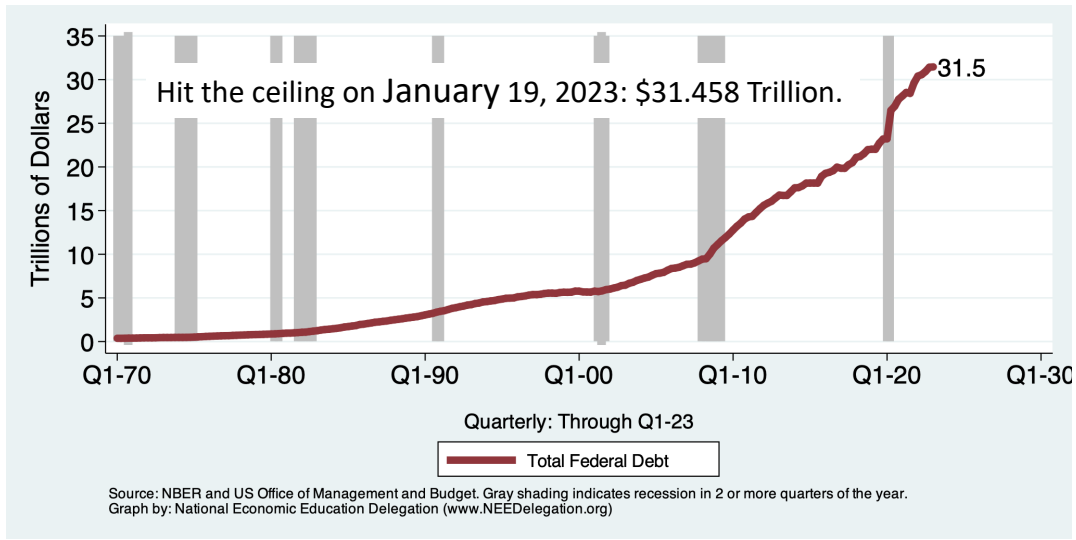
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US Government Debt

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A Brief History of The Debt



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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.



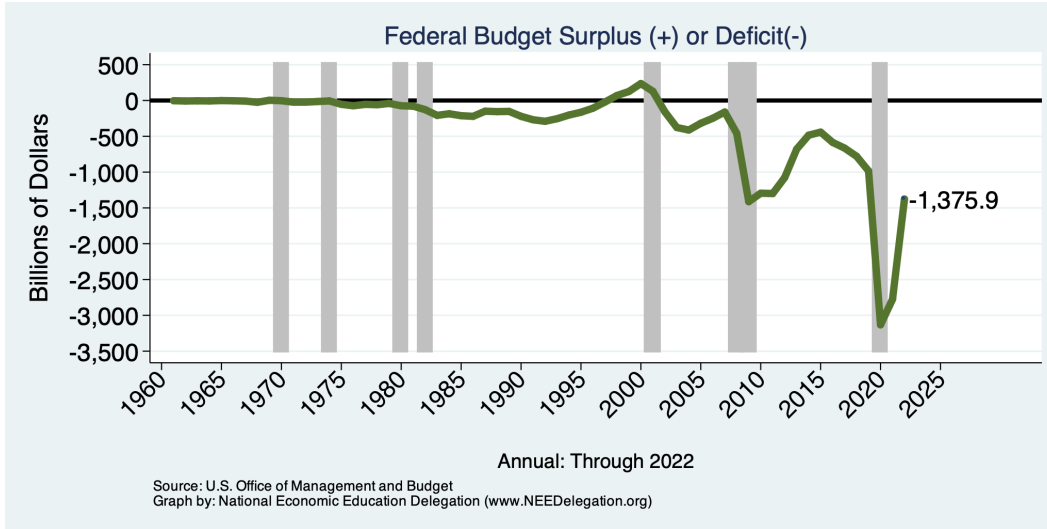
What Does the US Govt. Budget Look Like?

2022 Budget Summary (in billions)

Revenue		Outlays	
Income Taxes	\$2,632	Mandatory	\$4,135
Payroll Taxes	\$1,483	Discretionary	\$1,662
Corporate Taxes	\$425	Interest	\$475
Other	\$356		
Total	\$4,896	Total	\$6,271

Budget Deficit **\$1,376 Billion**

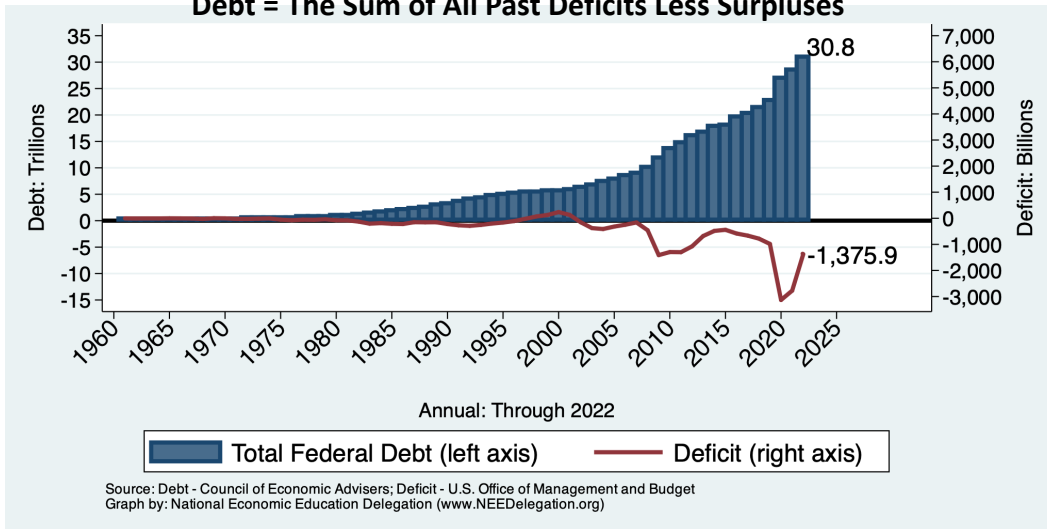
A History of Persistent Deficits



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Debt vs. Deficit

Debt = The Sum of All Past Deficits Less Surpluses



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Roughly Speaking...

- **The debt:**
 - Rises with a deficit.
 - Falls with a surplus.

- **Interest rates might get in the way of this relationship.**
 - High interest rates raise the level of interest payments.



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How Does the US Government Borrow?

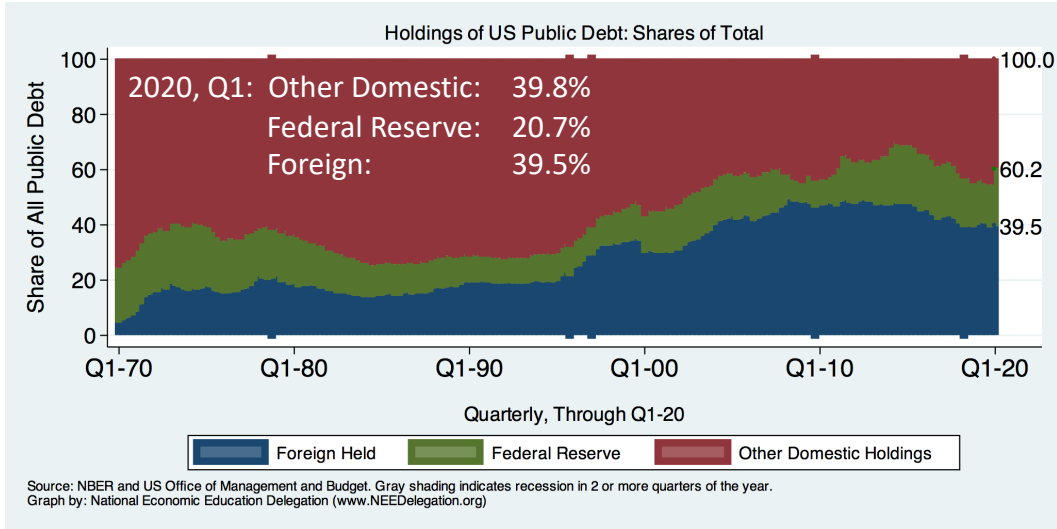
- **It issues debt.**
 - Treasury marketable securities:
 - Treasury bills, notes, and bonds
 - TIPS: Treasury inflation-protected securities
 - Savings bonds

- **Who buys the debt?**
 - Other federal agencies
 - Individuals and businesses
 - State and local governments
 - Foreign government and individuals
 - Federal Reserve



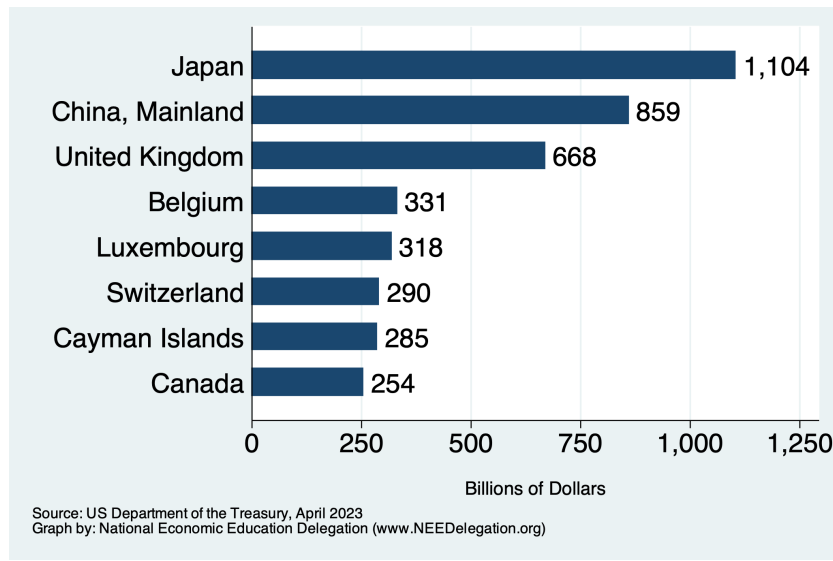
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Trends in US Debt Holdings Over Time

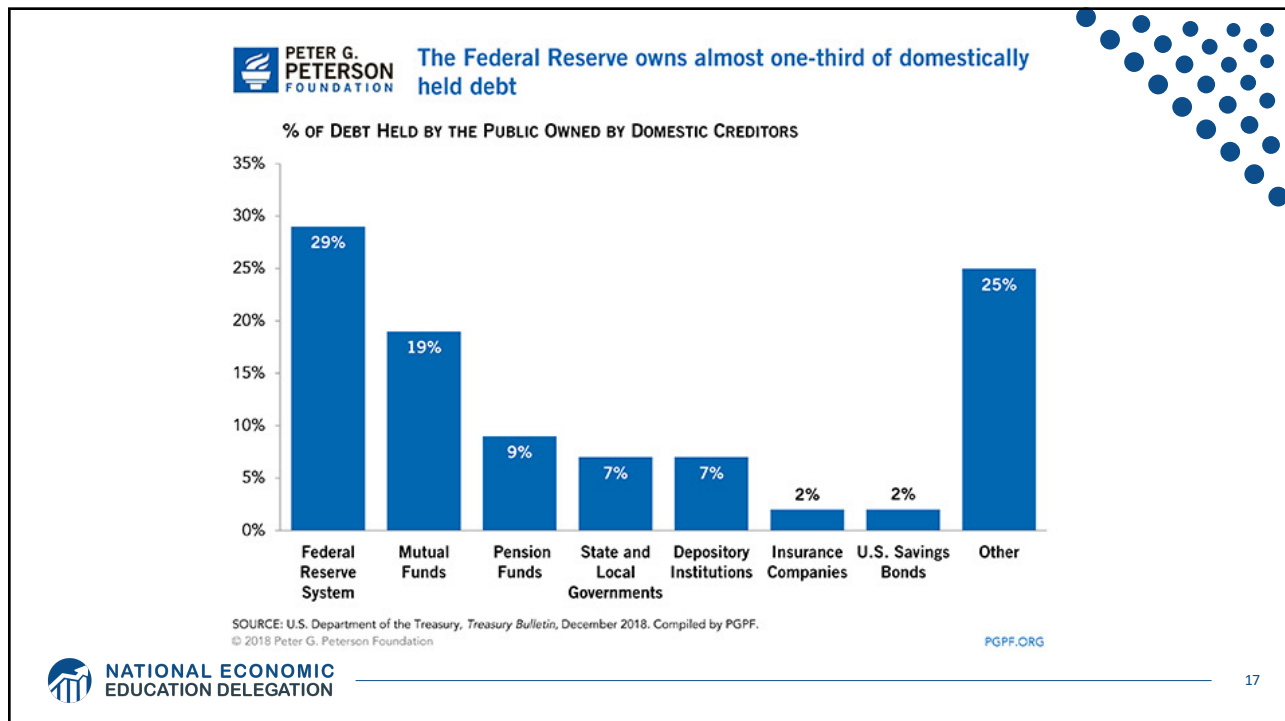


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Who Holds US Foreign Debt?



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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
- **Intragovernment 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.**

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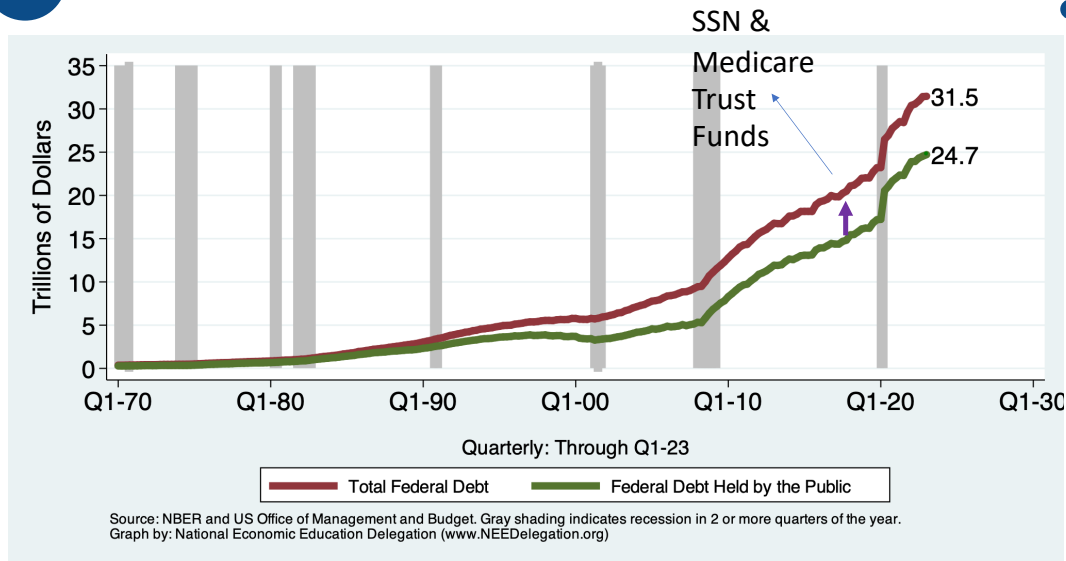
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Important Points:

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

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Two Measures of the Debt



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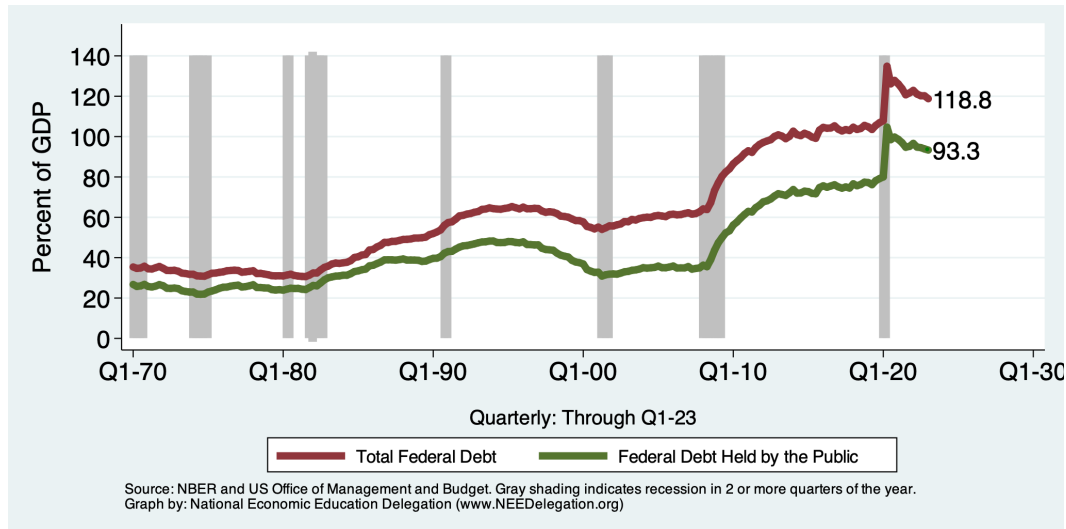
The All-Important *Relative Debt*

- 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	\$24.7 Trillion	93.3%
Greece	\$0.215 Trillion	170%

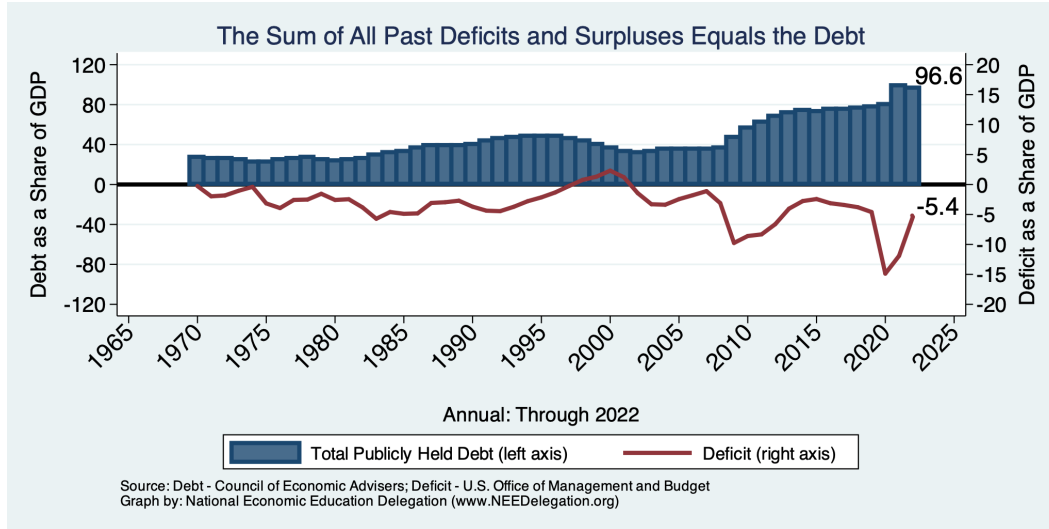
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Two Measures of RELATIVE Debt



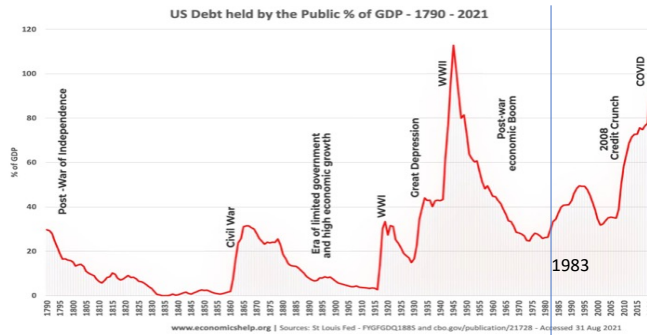
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Relative Debt and Deficit



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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 once, in 1969.

- **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*



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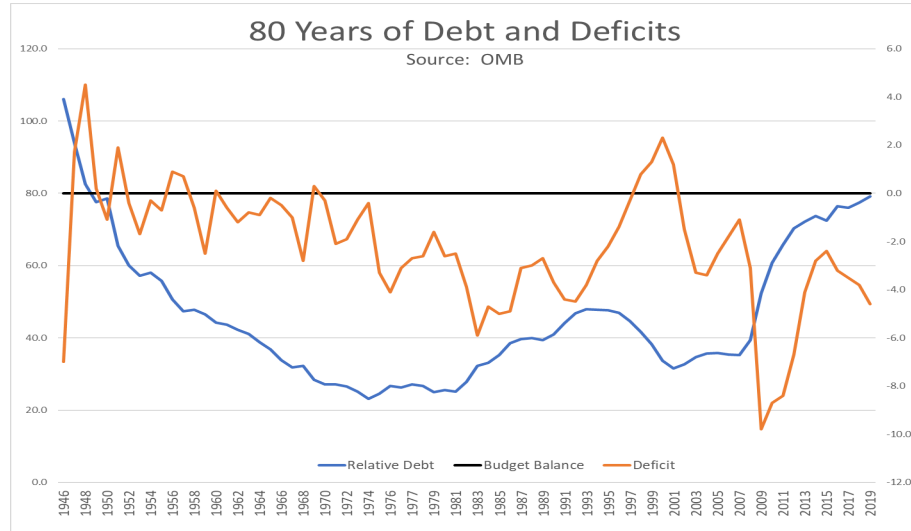
An Almost Free Lunch

- 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**.



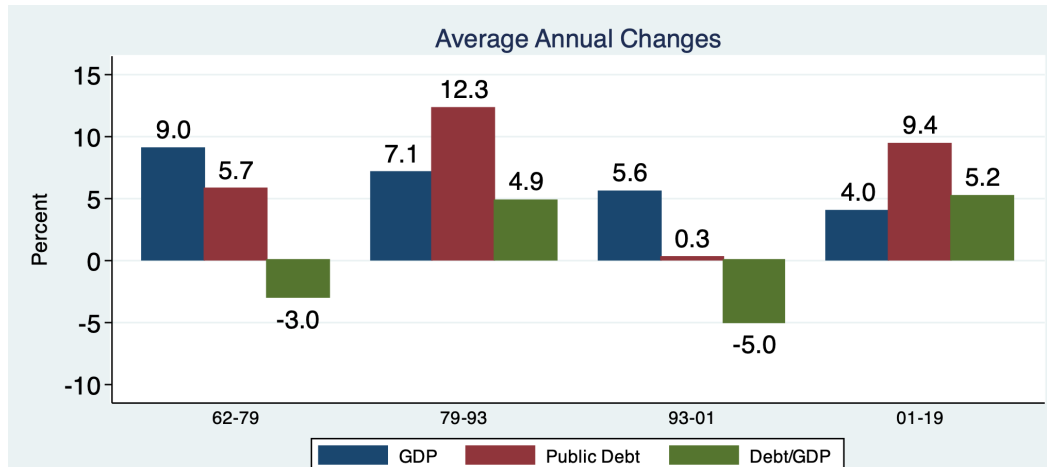
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The Post-WWII Fall in Relative Debt



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The Arithmetic of Changes in Relative Debt



Source: Council of Economic Advisers and BEA
Graph by: National Economic Education Delegation (www.NEEDelegation.org)

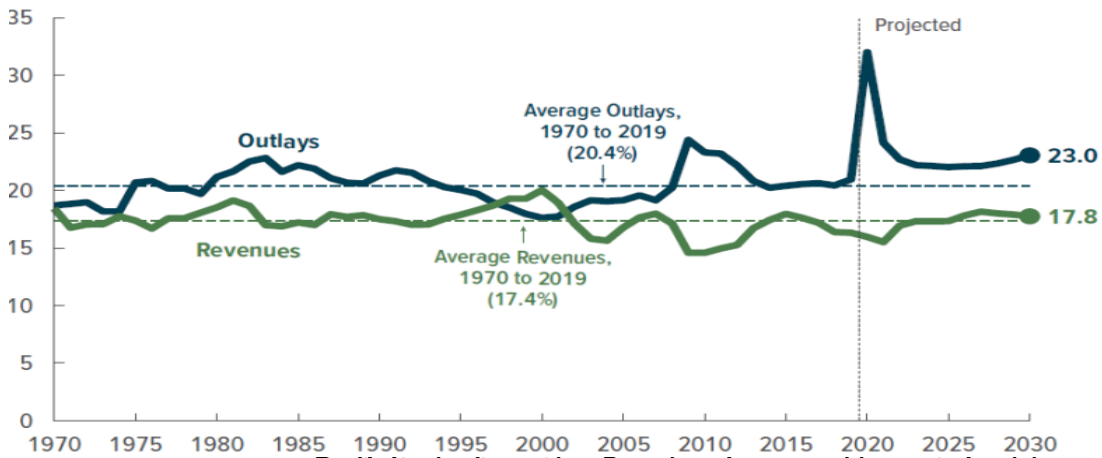
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How did we get here?

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How Did We Get Here?

Percentage of Gross Domestic Product



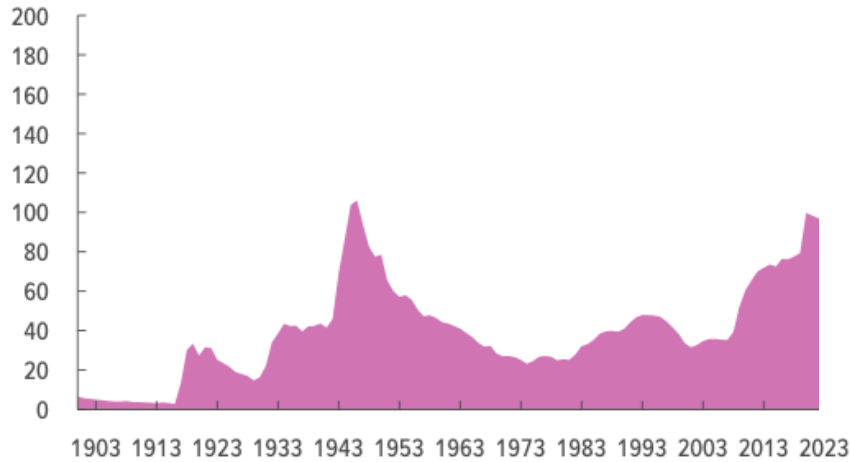
Deficits before the Pandemic were Unsustainable

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But Let's Think About Today

Federal Debt Held by the Public, 1900 to 2053

Percentage of Gross Domestic Product



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Why Has the Federal Debt Risen So Much?

• Expenditures UP:

- Aging population
 - o Social Security
 - o Health-care costs
- Economic stimulus
 - o **In particular, during the Great Recession & COVID.**
- Military engagements overseas
- Rising interest payments

• Revenues DOWN:

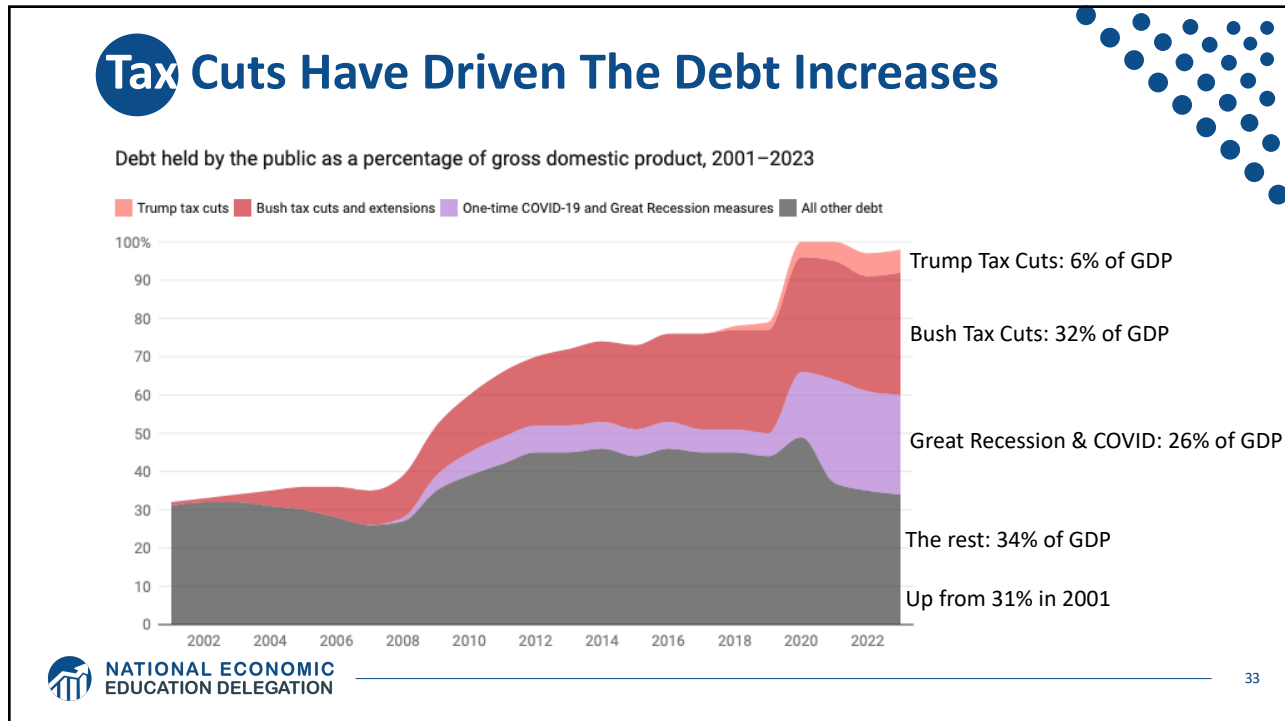
- Declining income tax revenues
 - o Stagnant wages
 - o **Tax cuts**
- Social security
 - o Declining revenues



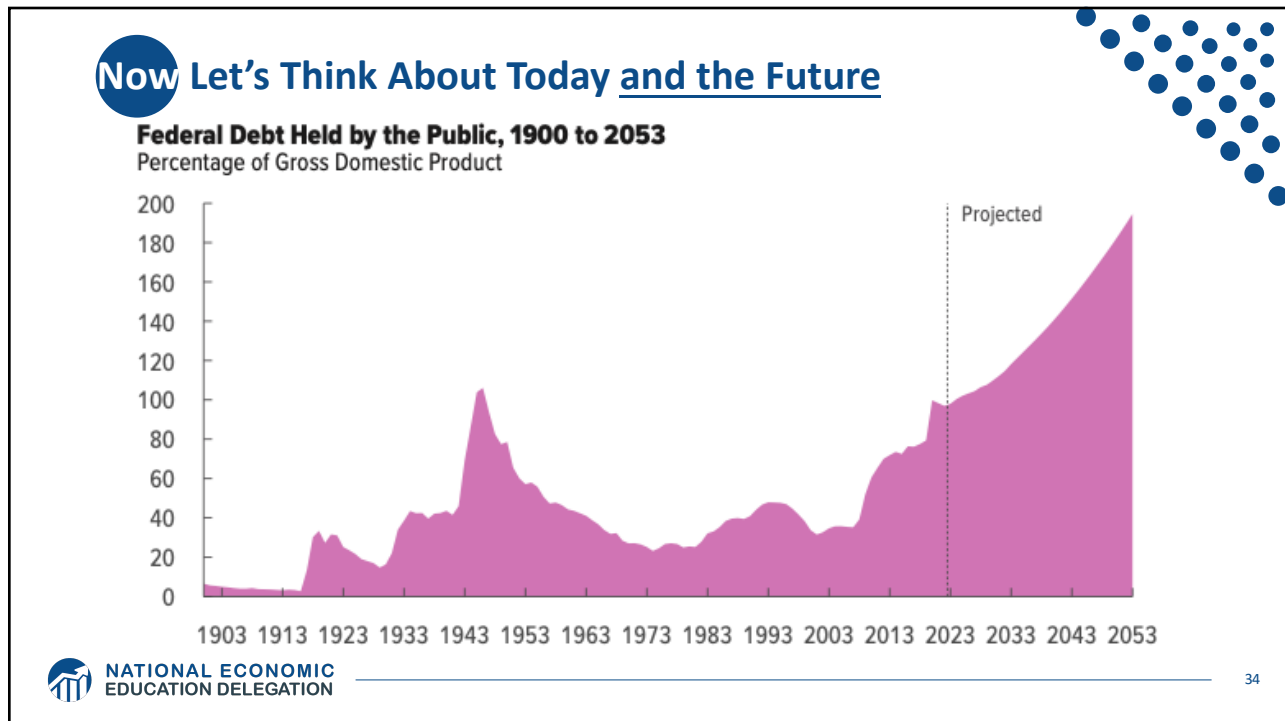
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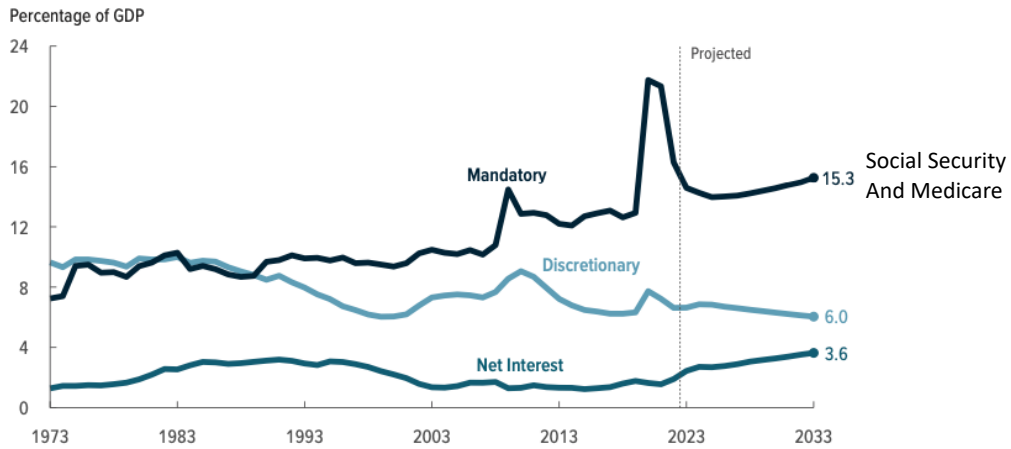
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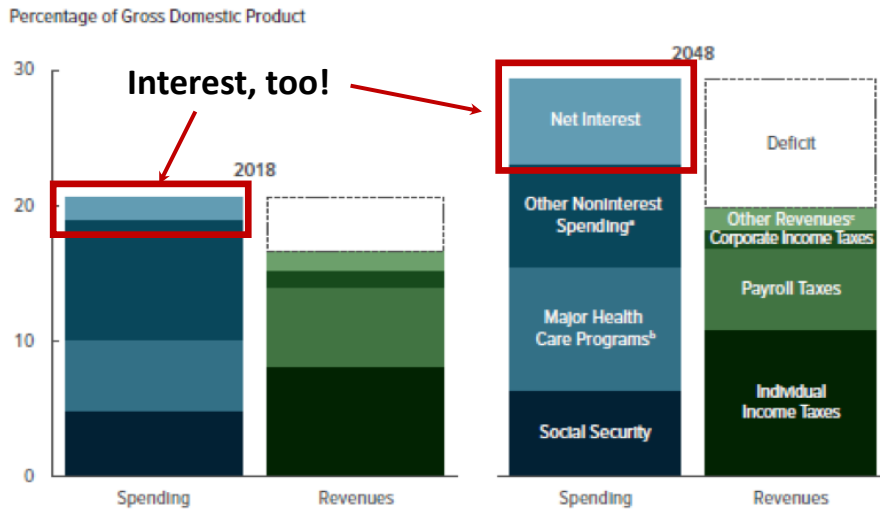
What Are the Primary Drivers Going Forward?

Outlays, by Category



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Spending to Grow Much Faster Than Revenue



Source: Congressional Budget Office.

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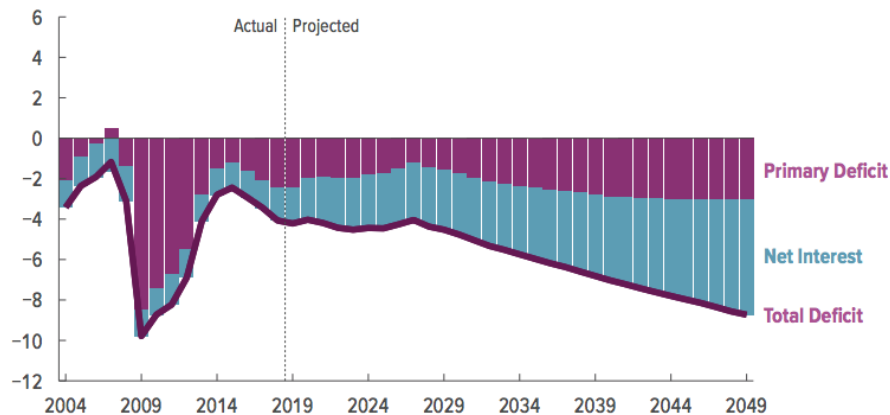
Two Measures of the Deficit

- (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

Percentage of Gross Domestic Product



Deficits grow from 4.2 percent of GDP in 2019 to 8.7 percent in 2049, driving up debt. Net spending for interest on debt accounts for most of the growth in total deficits.

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How to Think About the Debt



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Perspectives on Increased Debt

- **Government borrowing “crowds out” private capital and investments.**
 - Weakened by the ability to borrow from other countries.
- **Does debt impose a burden on future generations?**
 - Does it inevitably have to be paid off?
- **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.



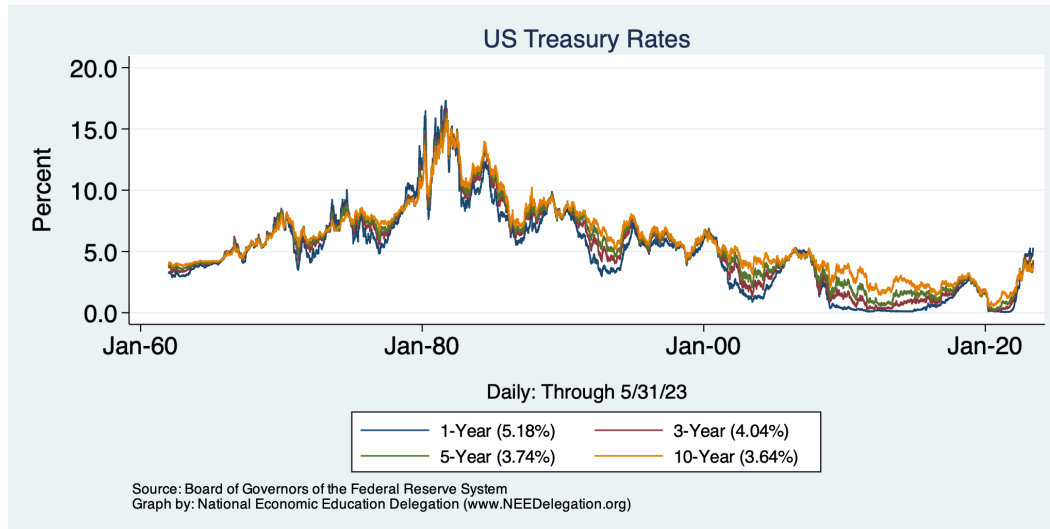
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Is The Debt a Problem Today?

- 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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Interest Rates Are Still Historically Low



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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 do not permanently increase relative debt.**

- Great Depression, WWII
- Public investment expands GDP and tax revenue



So, Why Worry About it?

- **If debt becomes too high:**

- Investors might start questioning the creditworthiness of the US government.
 - o Problem: Nobody knows how much debt is too much debt.
- It becomes more difficult to borrow in times of crisis.
 - o War, severe recession, pandemic
 - o “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.
 - o Not currently a problem. No idea if/when it might become one.
- Could be inflationary.



So, Why Worry About It?

- **If debt continues to grow:**

- Interest payments will grow with it.
 - o 8% of spending in 2018.
 - o 22% of spending in 2048.
 - o Less room for using the budget for policy priorities.
 - o 40% of payments go to other countries.
- The longer we wait to address it, the harder and more disruptive addressing it will be.
- Interest rates might increase.



Growth in Relative Debt

- **Can be scary to....**

- International investors
- Bond markets

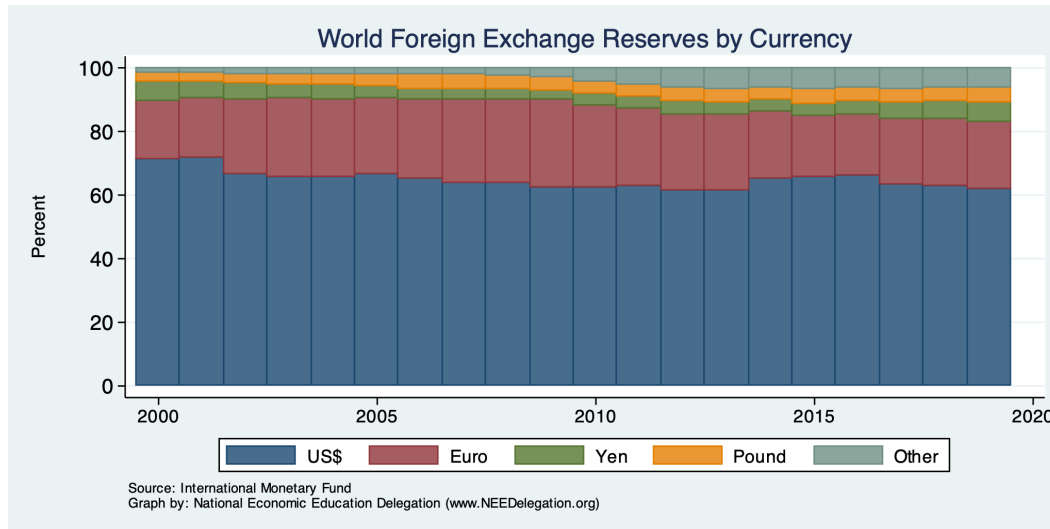


Fiscal Crisis, or a Run on the Dollar

- 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.

Will Our “Exorbitant Privilege” Last Forever?



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.



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.**



But Wait!



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Maybe Debt Isn't a Problem After All: MMT

- **Stephanie Kelton provided a prominent and recent exposition of modern monetary theory in a *NY Times* op-ed on June 6, 2020:**
 - “Learn to Love Trillion-Dollar Deficits.”
- **Modern monetary theory**
 - US Treasury borrows in its own currency and therefore cannot default.
 - As opposed to countries, such as Greece, which borrow in euros.
 - Example: How did we “find the money” for the recent increase in the deficit of about \$1.9 trillion?
 - Answer: The Fed purchased \$1.7 trillion = 89% of financing
 - More generally, MMT argues that we can always find the money to increase federal spending.



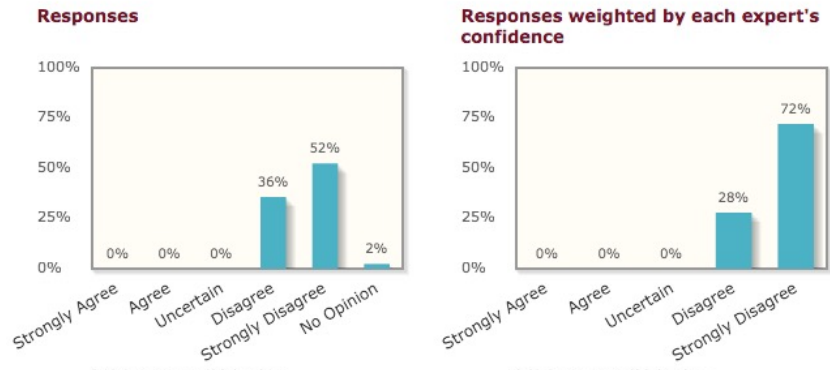
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MMT's Free Lunch

- The only limit on deficit spending is when 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.”
 - First part, acting boldly, is important and likely true.
 - Second part, invest boldly, is suspect.
 - Third part? Could encourage imprudent spending....

General Sense on Modern Monetary Theory

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.



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 Source: IGM Economic Experts Panel
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Shall we manufacture our own fiscal crisis?

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Existential Threat: Averted/Postponed!



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Countdown to Default – Halted!



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5 Things to Know about the Debt Ceiling

1. The debt limit has been raised continually for more than a century.
2. Raising the debt limit is not about new spending; it is about paying for previous choices policymakers legislated.
3. The uselessness of a debt limit is exhibited by the fact that only one other advanced country—Denmark—has a separate debt limit rule like ours.
4. After the debt hit the ceiling, the Treasury Department used several accounting gimmicks to postpone the day of reckoning, but these typically last only a few months.
5. The economic consequences of a large-scale, intentional default are unknown, but predictions range from bad to catastrophic.

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Lessons from 1979 & 2011

- **Accidental partial default in 1979:**
 - Increased borrowing costs by \$40 Billion.

- **2011 Government shutdown was very costly:**
 - Stock markets plunged (17%).
 - Employment growth stuttered.
 - Treasuries – downgraded credit ratings.
 - Borrowing costs rose – perhaps by as much as \$20 Billion.

- **There were likely costs to the recent mini-crisis.**
 - Economists will evaluate and get back to us.
 - Also, think about what politicians, treasury employees, and journalists could have been doing with their time.



More Generally...



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.



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Bottom-Line Takeaways

- Relative debt must be stabilized, so it is imperative to reduce primary deficits.
- Given the fiscal challenges of an aging population and climate change, it is better to do this sooner rather than later.
- But high debt levels should not deter:
 - Productive infrastructure investment.
 - Fiscal responses to crises:
 - When the house is on fire, you don't worry about being in a drought; you just put it out.
- Debt ceiling – what is it good for?



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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!**



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Thank you!

Any Questions?

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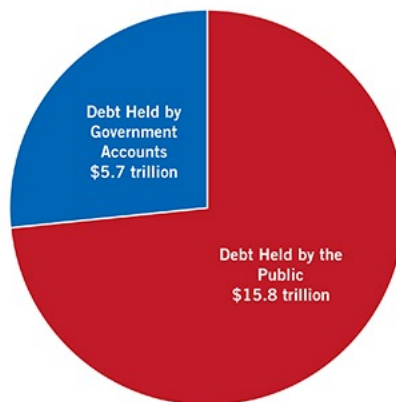


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What makes up gross federal debt?

Gross Federal Debt at the End of Fiscal Year 2018:
\$21.5 Trillion



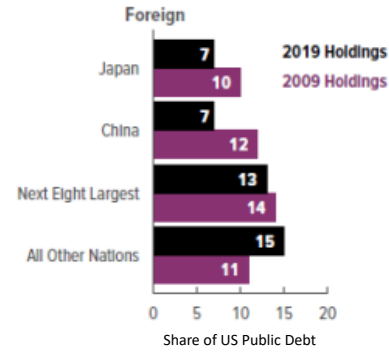
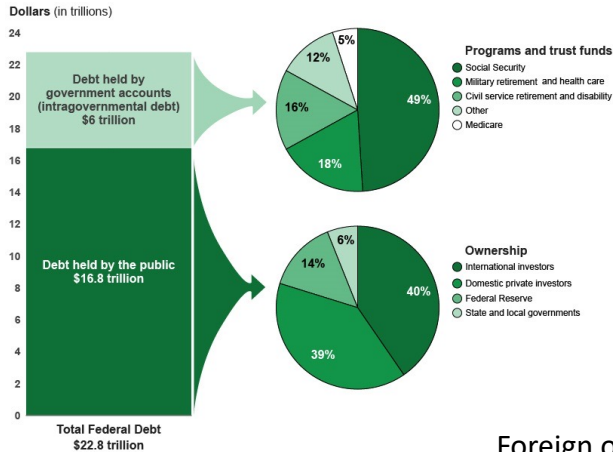
SOURCE: Department of Treasury, *Monthly Treasury Statement*, issue for September 2018. Compiled by PGPF.
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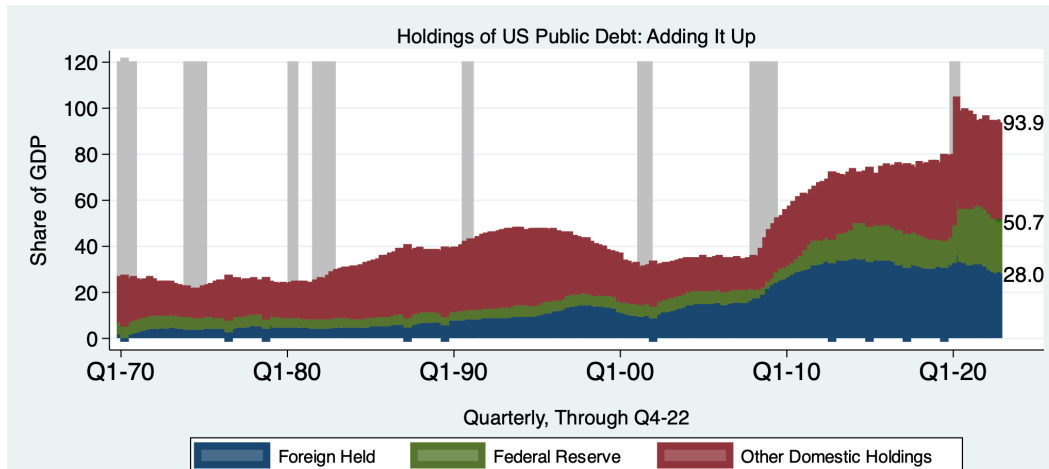
A Breakdown of Total Federal Debt



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

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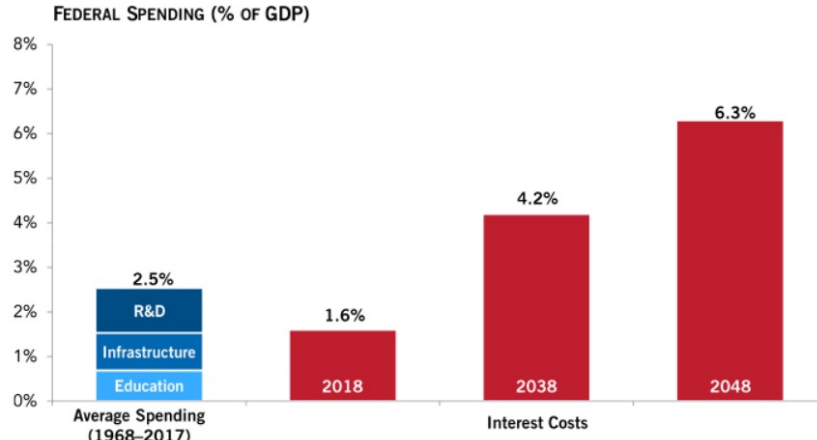
Summary: Who Holds US Public Debt?



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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Interest Payments to Grow Significantly



SOURCE: Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2019*, February 2018; Congressional Budget Office, *The 2018 Long-Term Budget Outlook*, June 2018. Compiled by PGPF.

NOTE: Infrastructure excludes defense.
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