



The US Federal Debt

Viamonte
May 8, 2024

Jon Haveman, Ph.D.
NEED




1

1

National Economic Education Delegation

- **Vision**
 - One day, 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.



2

2

Who Are We?

- **Honorary Board: 54 members**

- 2 Fed Chairs: Janet Yellen, Ben Bernanke
- 6 Chairs Council of Economic Advisers
 - o Furman (D), Rosen (R), Bernanke (R), Yellen (D), Tyson (D), Goolsbee (D)
- 4 Nobel Prize Winners
 - o Akerlof, Smith, Maskin, Bernanke

- **Delegates: 652+ members**

- At all levels of academia and some in government service
- All have a Ph.D. in economics
- Crowdsource slide decks
- Give presentations

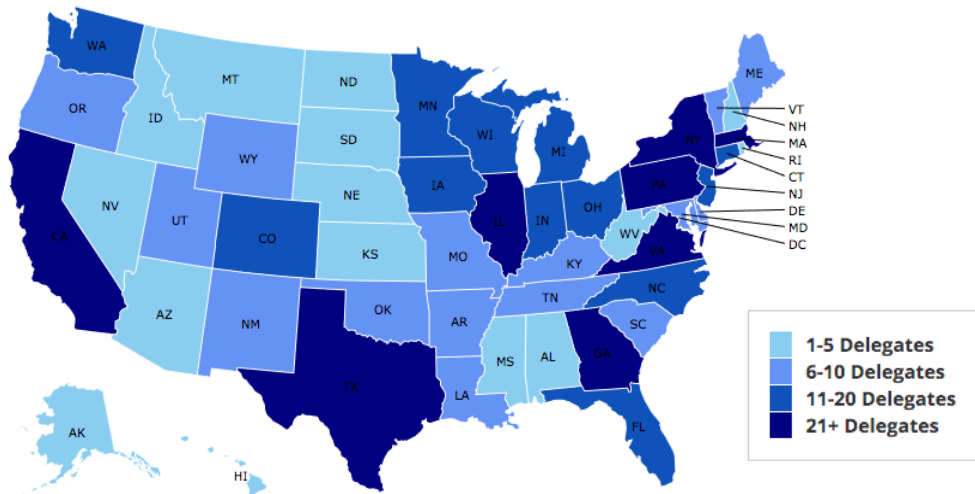
- **Global Partners: 49 Ph.D. Economists**

- Aid in slide deck development

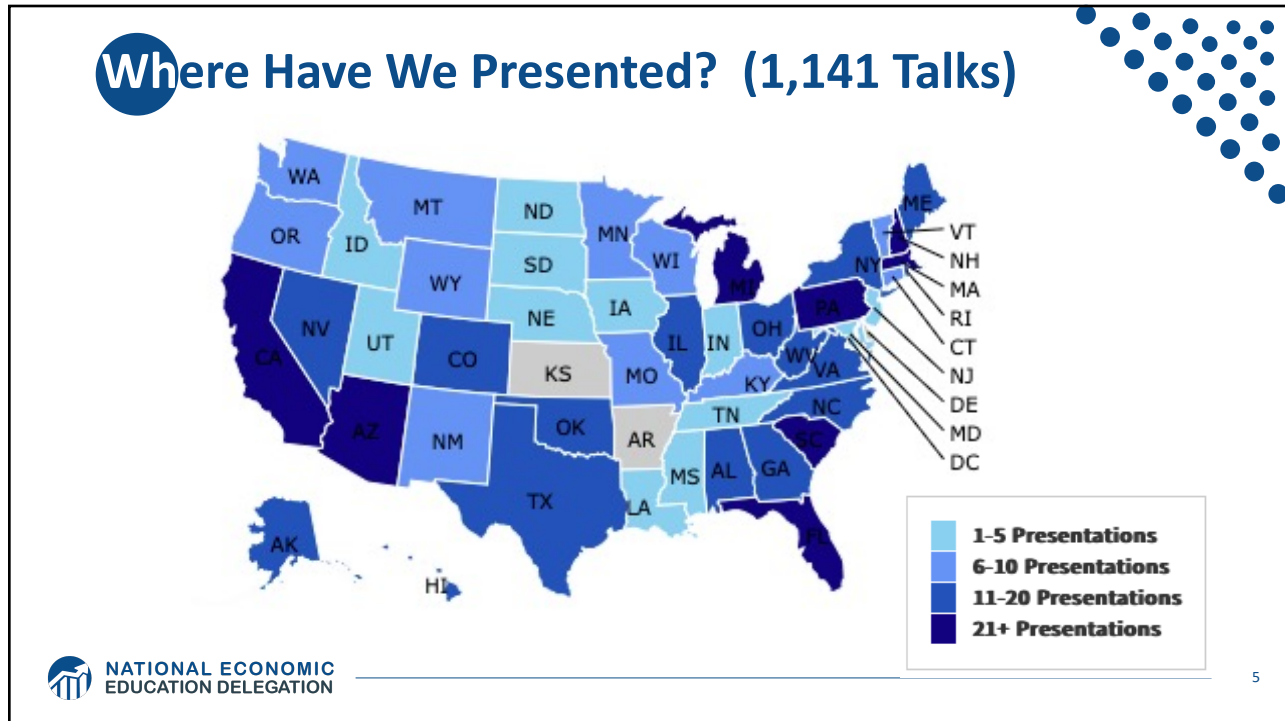


3

Where Are We?



4



5

- ## Available NEED Topics Include:
- US Economy
 - Healthcare Economics
 - 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
 - Healthcare Economics
- NATIONAL ECONOMIC EDUCATION DELEGATION**

6

Credits and Disclaimer

- **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**
 - 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).


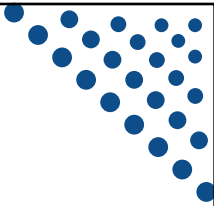
7

Outline

- **First: A Budget Review**
- **The Debt**
- **Important Points About the Debt**
- **How to Think About the Debt**
- **Summary**

8

First: A Budget Review



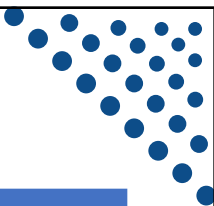
NATIONAL ECONOMIC EDUCATION DELEGATION

9

9



What Does the US Govt. Budget Look Like?

2023 Budget Summary (in trillions)



| Revenue | | Outlays | |
|-----------------|-------|---------------|-------|
| Income Taxes | \$2.2 | Mandatory | \$3.8 |
| Payroll Taxes | \$1.6 | Discretionary | \$1.7 |
| Corporate Taxes | \$0.4 | Interest | \$0.7 |
| Other | \$0.2 | | |
| Total | \$4.4 | Total | \$6.1 |

Budget Deficit \$1.7 Trillion



NATIONAL ECONOMIC EDUCATION DELEGATION

<https://www.cbo.gov/publication/59727>

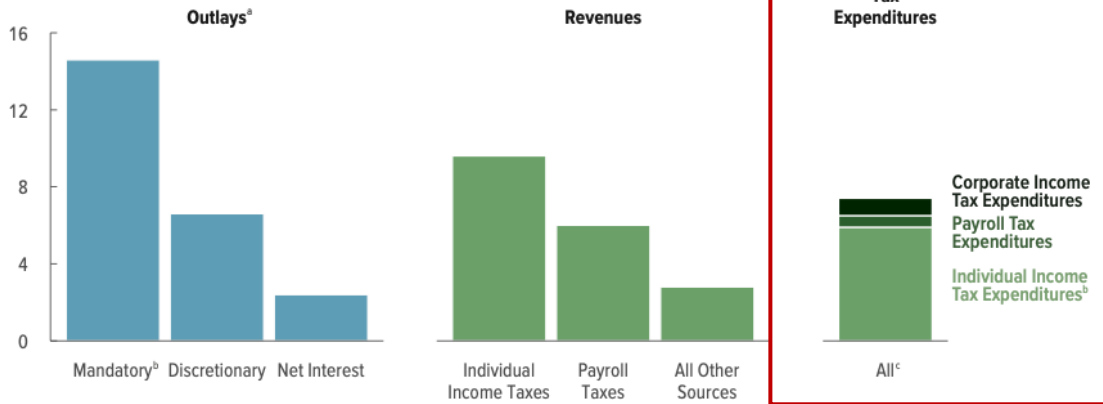
10

10

But There is More to The Budget!

Estimated Outlays, Revenues, and Tax Expenditures in 2023

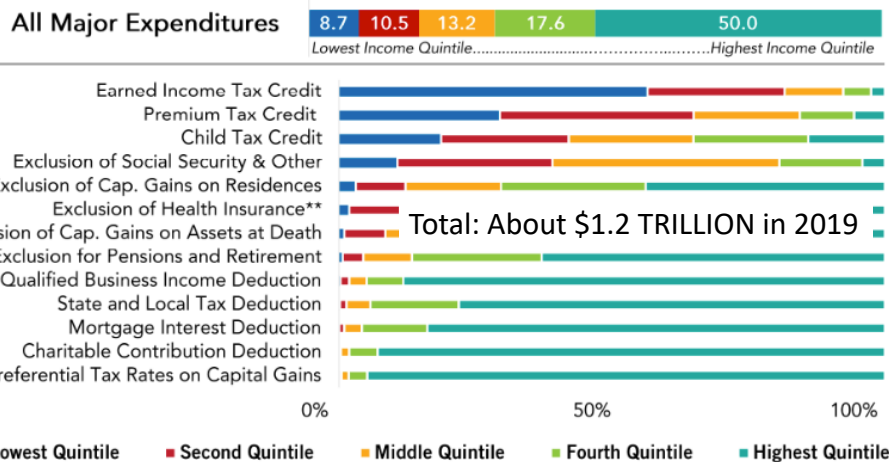
Percentage of GDP



11

What Are Tax Expenditures?

SHARE OF MAJOR TAX EXPENDITURES* (%)



Total: About \$1.2 TRILLION in 2019

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

12



And Now: The Debt

 NATIONAL ECONOMIC
EDUCATION DELEGATION

13

13



WHAT IS THE NATIONAL DEBT TODAY?

\$34,563,921,916,418

 NATIONAL ECONOMIC
EDUCATION DELEGATION

14

14

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

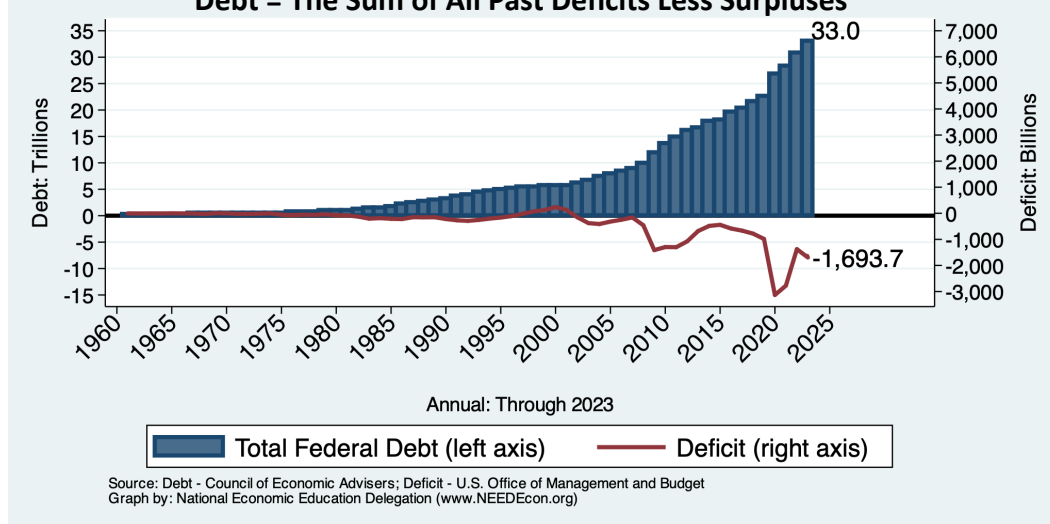
- **Debt:** The accumulation of debt over time.
 - The sum of all past deficits and surpluses.



15

Debt vs. Deficit

Debt = The Sum of All Past Deficits Less Surpluses



16

Major Takeaways: Talking Points

- **The debt is not currently a significant problem.**
- **The current trajectory of federal debt is unsustainable.**
- **We must enact plans to reduce the future (primary) deficits.**
 - These are driven by Medicare and Social Security spending.
- **The longer we postpone action, the greater the probability of a “fiscal crisis.”**

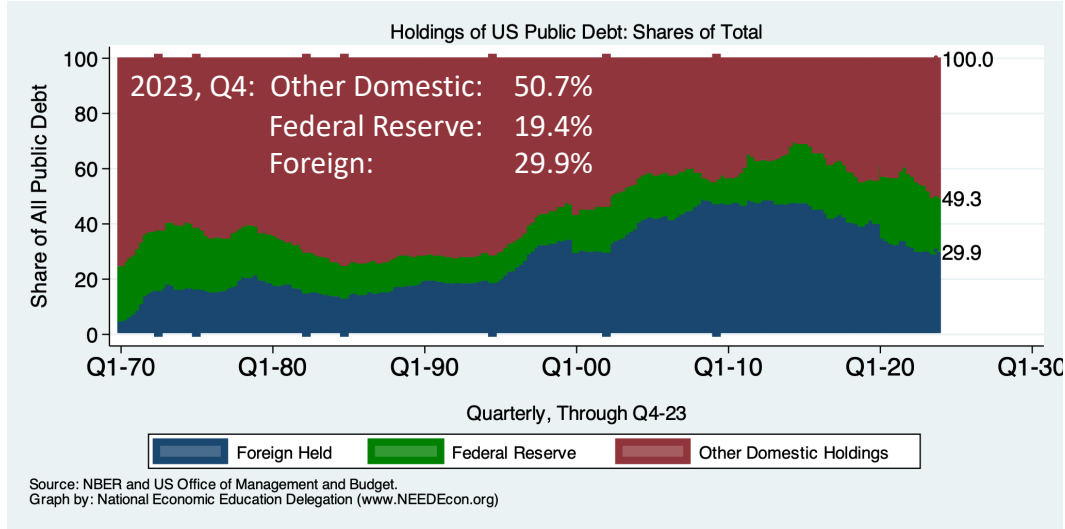
17

How Does the US Government Borrow?

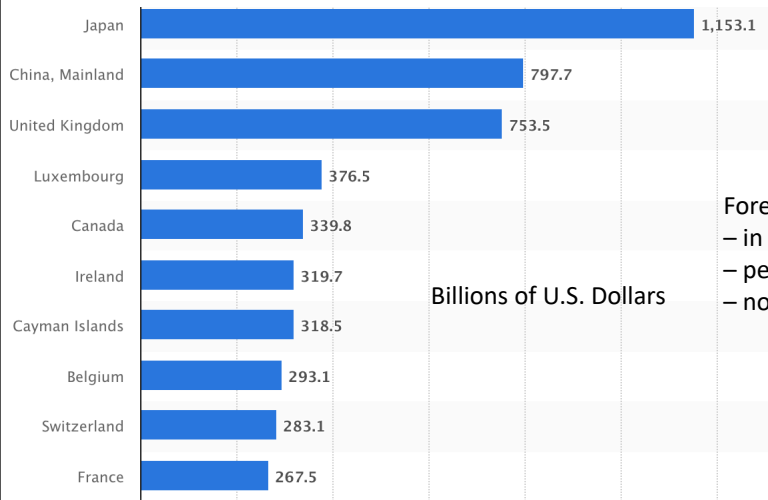
- **It issues debt.**
 - Treasury marketable securities:
 - Treasury bills, notes, and bonds
 - TIPS: Treasury inflation-protected securities
 - Savings bonds
- **Who buys the debt?**
 - Other federal agencies
 - Individuals and businesses
 - State and local governments
 - Foreign government and individuals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

18

Trends in US Debt Holdings Over Time



Who Holds Debt to Foreigners, 1/24



Foreign ownership is relatively recent
 – in 1990 foreign ownership was less than 20%
 – peaked at 40+%
 – now is 29.9%

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.
 - 88% of international transactions involve the dollar.
 - With some exceptions, foreign governments borrow in dollars.



21

Important Points:

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



22

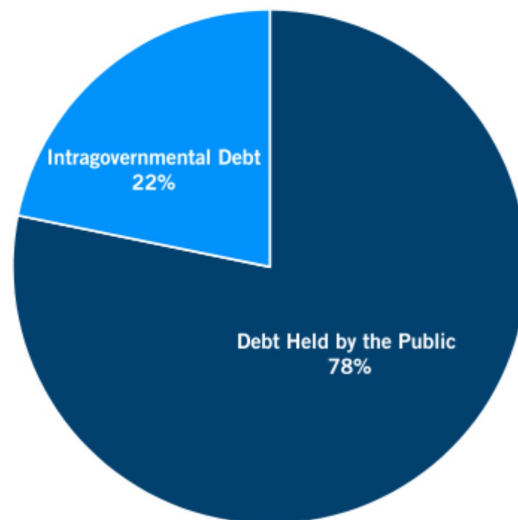
Not All Debt Is Created Equal

- **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.**



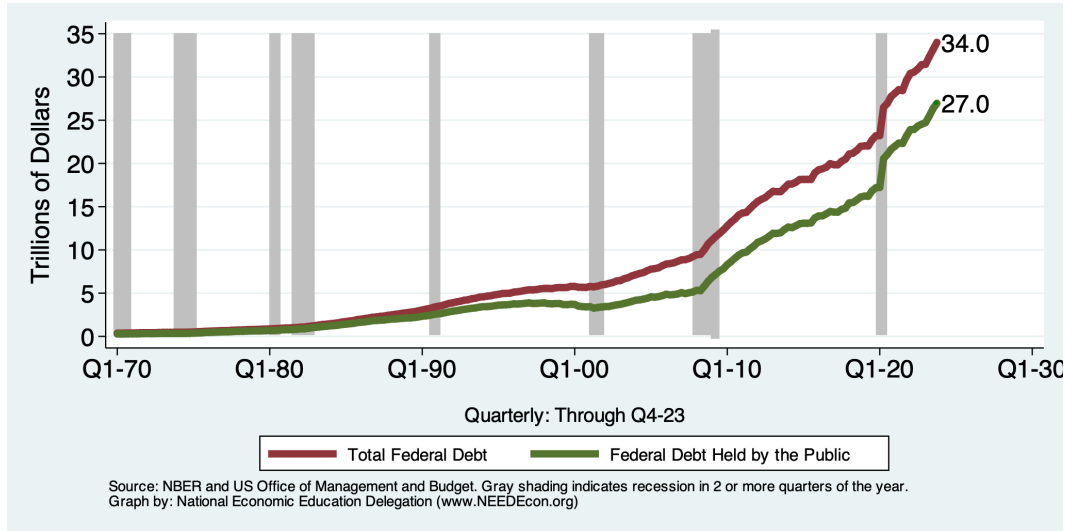
23

U.S. Publicly Held Debt, December 31, 2022



24

Two Measures of the Debt

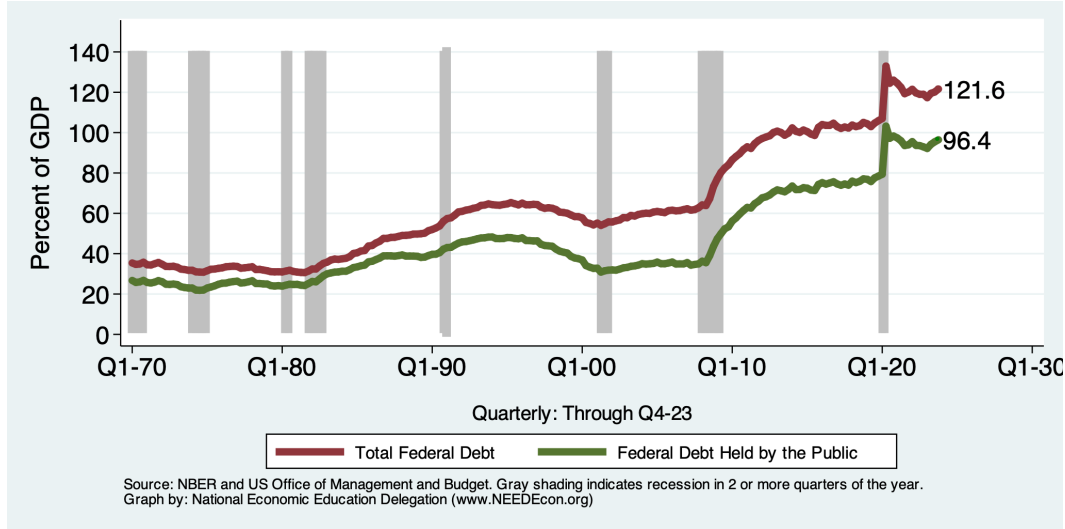


The All-Important *Relative* Debt

- 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.

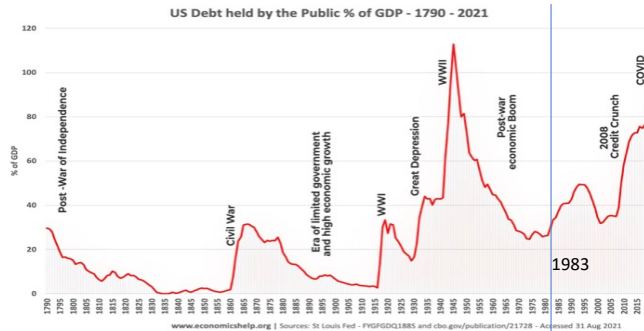
| | Total Public Debt | Relative Debt Debt/GDP |
|---------------|-------------------|------------------------|
| United States | \$27.0 Trillion | 96.4% |
| Greece | \$0.215 Trillion | 170% |

Two Measures of RELATIVE Debt



27

Key Points About US Relative Debt



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

28

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!

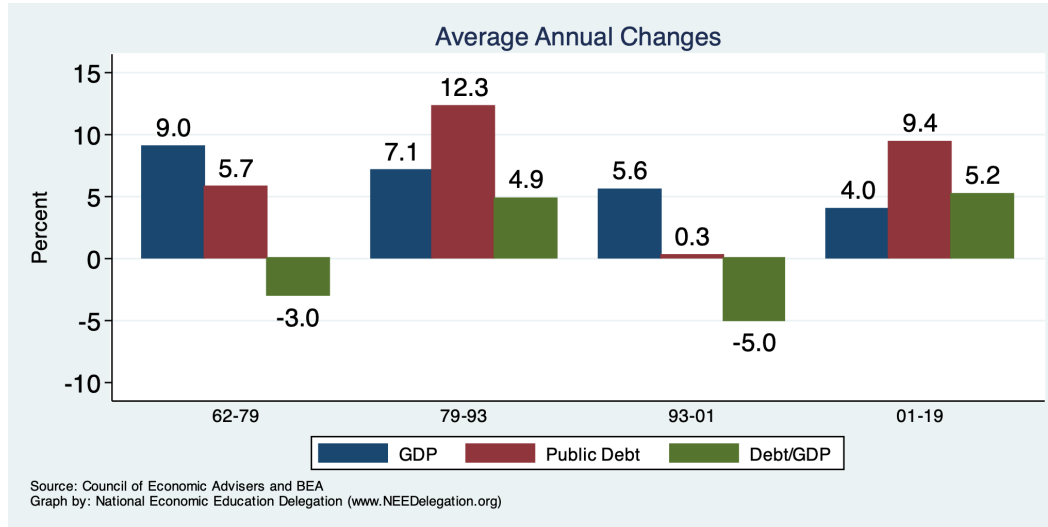
- **Relative debt is a fraction: Debt/GDP; fractions fall if:**

- 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.*

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**.

The Arithmetic of Changes in Relative Debt



NATIONAL ECONOMIC
EDUCATION DELEGATION

31

31

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.**



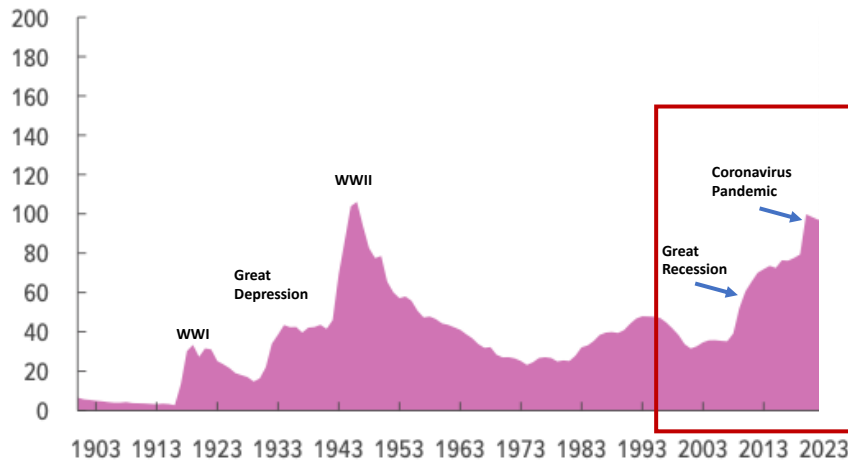
NATIONAL ECONOMIC
EDUCATION DELEGATION

32

32

But Let's Think About Today

Federal Debt Held by the Public, 1900 to 2053
Percentage of Gross Domestic Product



NATIONAL ECONOMIC
EDUCATION DELEGATION

33

33

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:

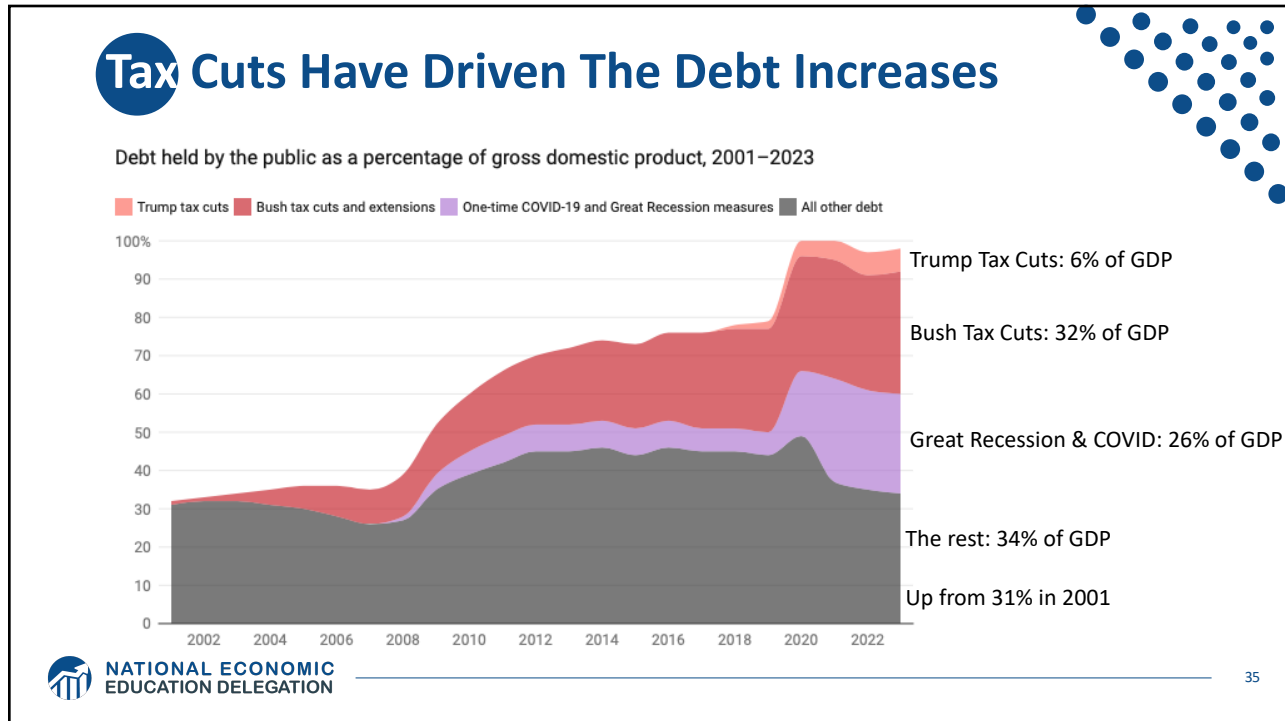
- Declining income tax revenues
 - Stagnant wages
 - Tax cuts
- Social security
 - Declining revenues



NATIONAL ECONOMIC
EDUCATION DELEGATION

34

34



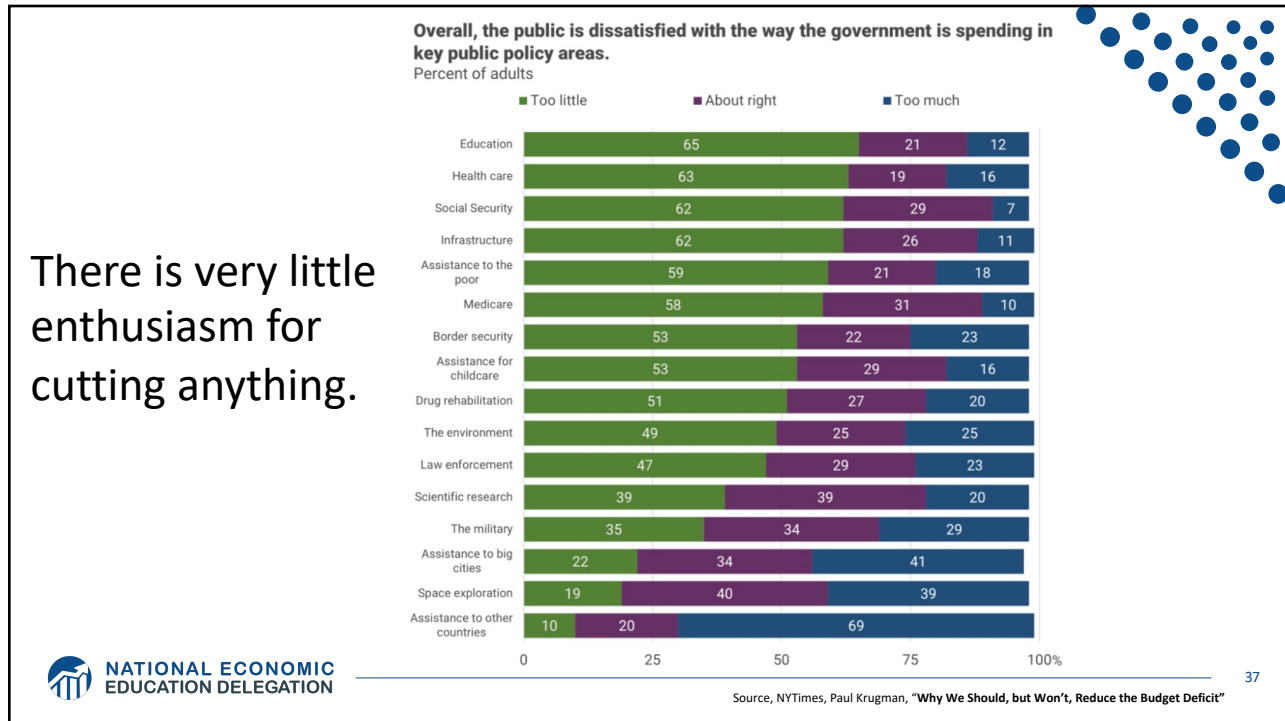
35

Thinking About Today....

- **Do we have:**
 - A spending problem?
 - A revenue problem?
 - Both?

NATIONAL ECONOMIC EDUCATION DELEGATION

36



37

Thinking About Today....

- **Do we have:**
 - A spending problem?
 - A revenue problem?
 - Both?
- **Not much support for it being a spending problem.**

NATIONAL ECONOMIC EDUCATION DELEGATION

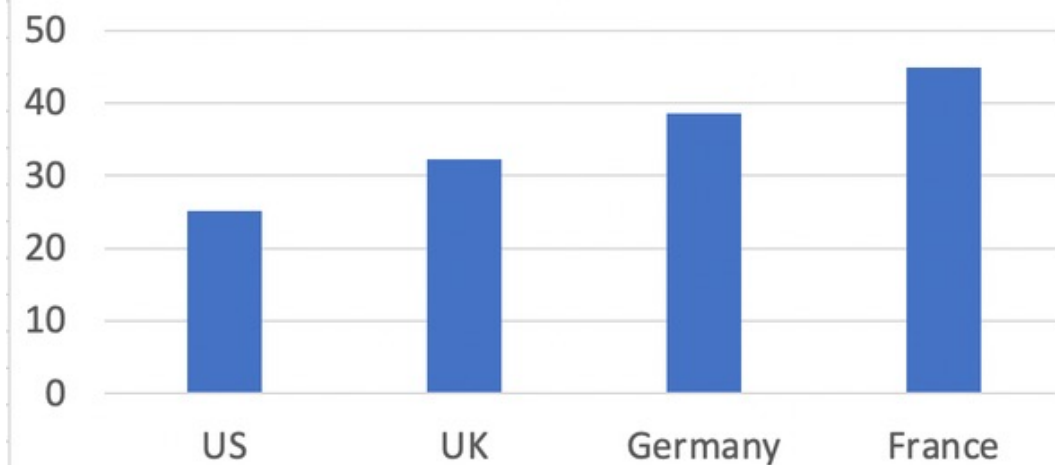
38

How To Address the Debt?

- The question isn't taxes vs spending cuts.
- The question is:
 - Who should bear the burden of solving the problem?
 - Spending cuts will mean primarily lower-income households.
 - Tax increases will mean primarily high-income households.
 - Soc Sec benefit cuts (age limit, actual payments, etc.) will mean primarily lower-income households.

39

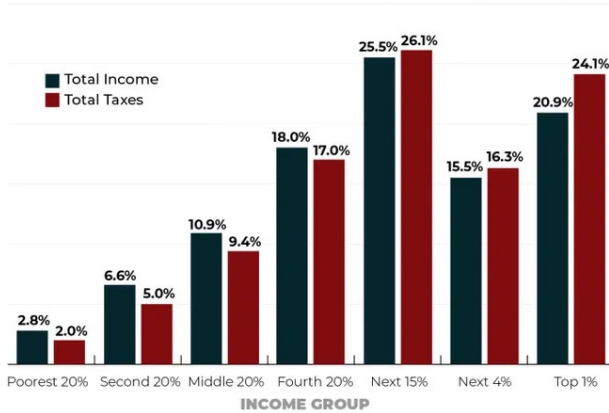
Taxes as % of GDP, 2019



40

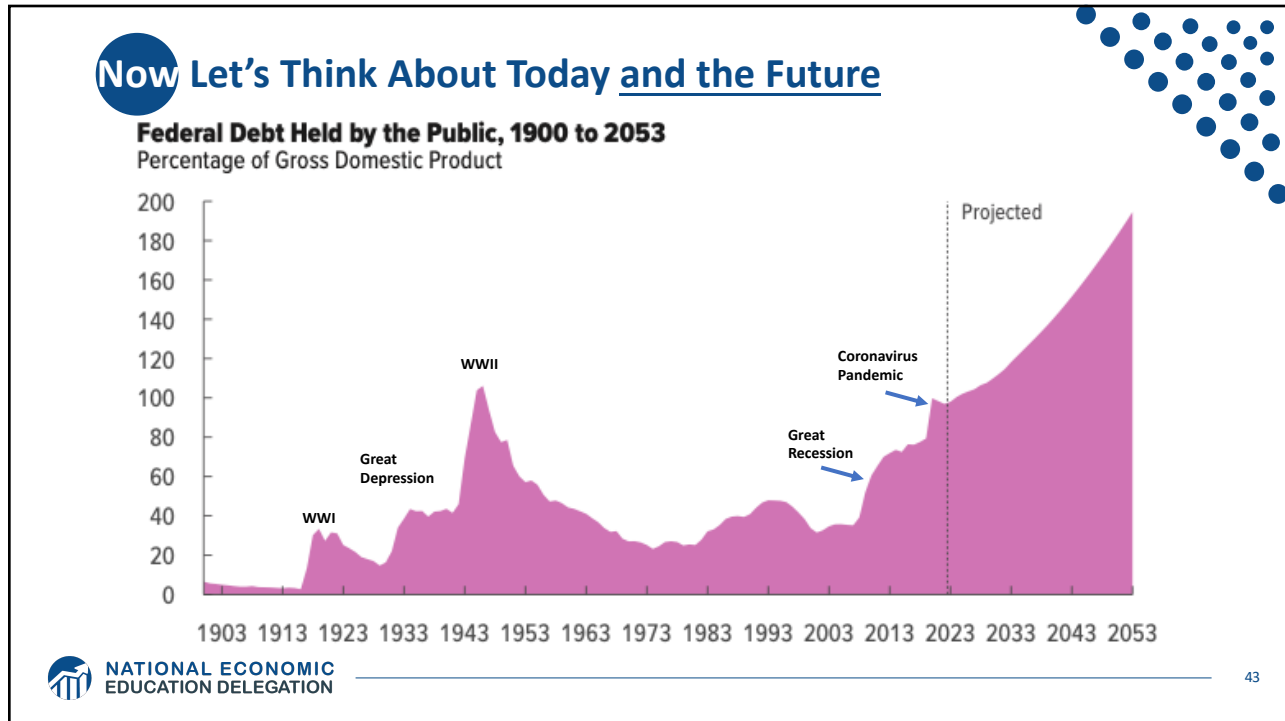
What? It's not 40%? No, it's 24.1%.

Shares of Total Taxes Paid by Each Income Group Compared to Shares of Total Income in 2019

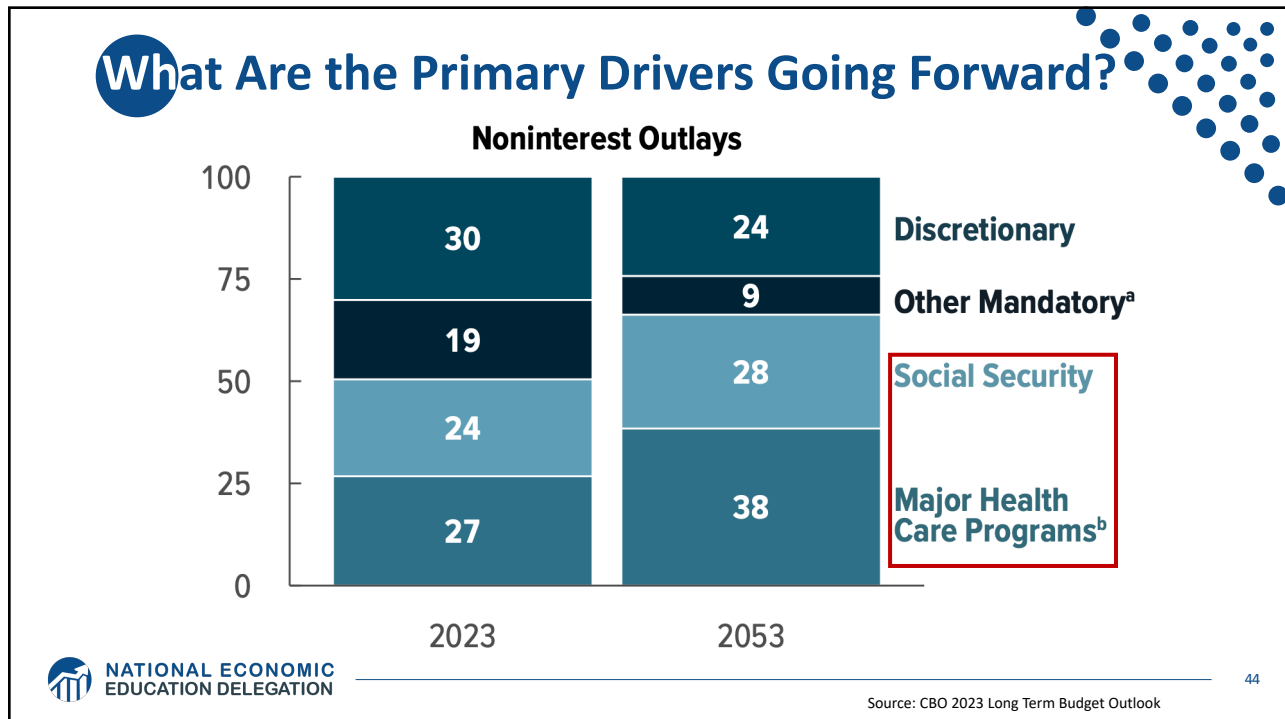


The 400 highest income households:
Paid an average tax rate of 8%.

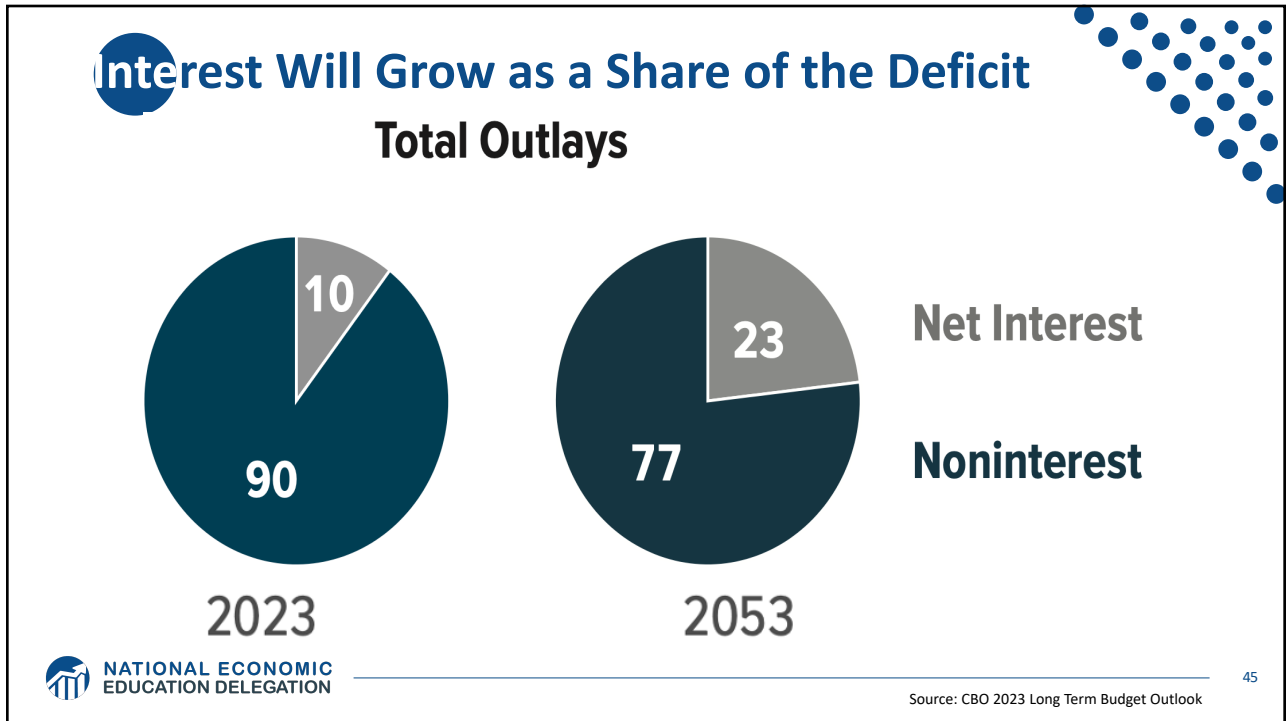
Can't Stop...Thinking About Tomorrow



43



44



45

How to Think About the Debt

NATIONAL ECONOMIC EDUCATION DELEGATION

46

46

Perspectives on Increased Debt

- **Does debt impose a burden on future generations?**
 - Does it inevitably have to be paid off? **No.**
- **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.



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



Is The Debt a Problem Today?

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

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 high is too high.
 - It becomes more difficult to borrow in times of crisis.
 - o War, severe recession
 - 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.

Growth in Relative Debt

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

51

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

52

Summary



53

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.”



54

Major Takeaways: Talking Points

- **The debt is not currently a significant problem.**
- **The current trajectory for the federal debt is unsustainable.**
 - The primary drivers are an aging population and interest.
- **We must enact plans to reduce the future (primary) deficits.**
 - These are driven by Medicare and Social Security spending.
- **The longer we postpone action, the greater the probability of a “fiscal crisis.”**



55

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!**



56

Thank you!

Any Questions?

www.NEEDEcon.org

Jon Haveman, Ph.D.

Jon@NEEDEcon.org

Contact NEED: info@NEEDEcon.org

Submit a testimonial: www.NEEDEcon.org/testimonials.php

Become a Friend of NEED: www.NEEDEcon.org/friend.php



NATIONAL ECONOMIC
EDUCATION DELEGATION

57