*Osher Lifelong Learning Institute, Fall 2022*

# Contemporary Economic Policy

Arizona State University
September, 2022

Jon Haveman, Ph.D.
National Economic Education Delegation



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## 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.



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# Who Are We?

- **Honorary Board: 54 members**
  - 2 Fed Chairs: Janet Yellen, Ben Bernanke
  - 6 Chairs 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 some in government service
  - All have a Ph.D. in economics
  - Crowdsource slide decks
  - Give presentations
- **Global Partners: 48 Ph.D. Economists**
  - Aid in slide deck development

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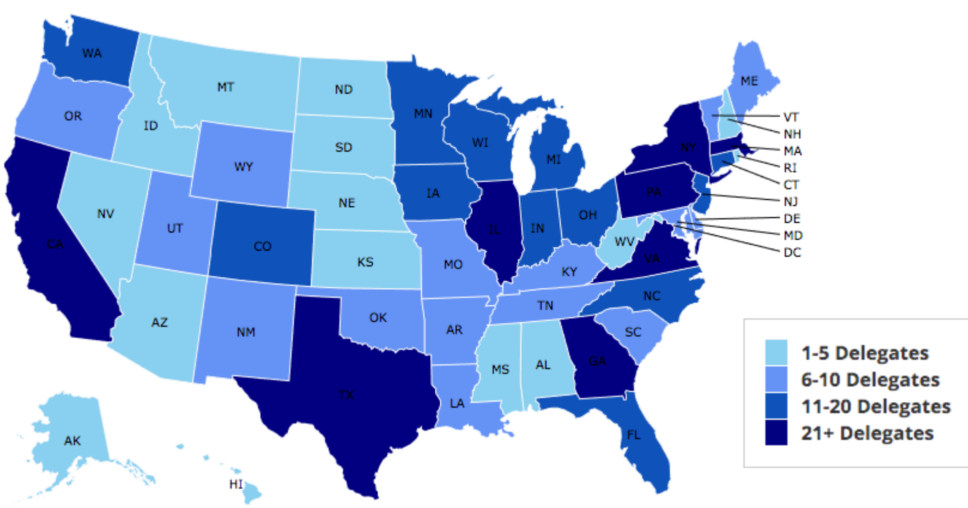
# Where Are We?

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# 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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# Course Outline

- Contemporary Economic Policy
  - **Week 1 (9/12): The U.S. Federal Debt (Jon Haveman, NEED)**
  - Week 2 (9/19): Minimum Wages (Jon Haveman, NEED)

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# The US Federal Debt


Jon Haveman, Ph.D.
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## Credits and Disclaimer

- **This slide deck was created by:**
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- **This slide deck was reviewed by:**
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  - John H. Cochren, 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).

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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.
- OLLI allowing, we can stay beyond the end of class to have further discussion.
- Slides will be available from the NEED website tomorrow (https://needelegation.org/delivered_presentations.php)

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## Outline

- Definitions and Basic Data.
- How do we "stabilize" the debt?
- Traditional Approach
- New Ideas about the Costs of the Debt
- "Debt? What me Worry?" Modern Monetary Theory.
- Recent Congressional Budget Office (CBO) analysis of the Cost of the Debt.
- CBO projections

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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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## Basic Definitions

- **Fiscal year Deficit:** Total Outlays less Revenues between October and September.
- **The deficit is paid for by government borrowing:** (net) issue of new government bonds.
- **Total government debt:** the accumulated value of past borrowing.

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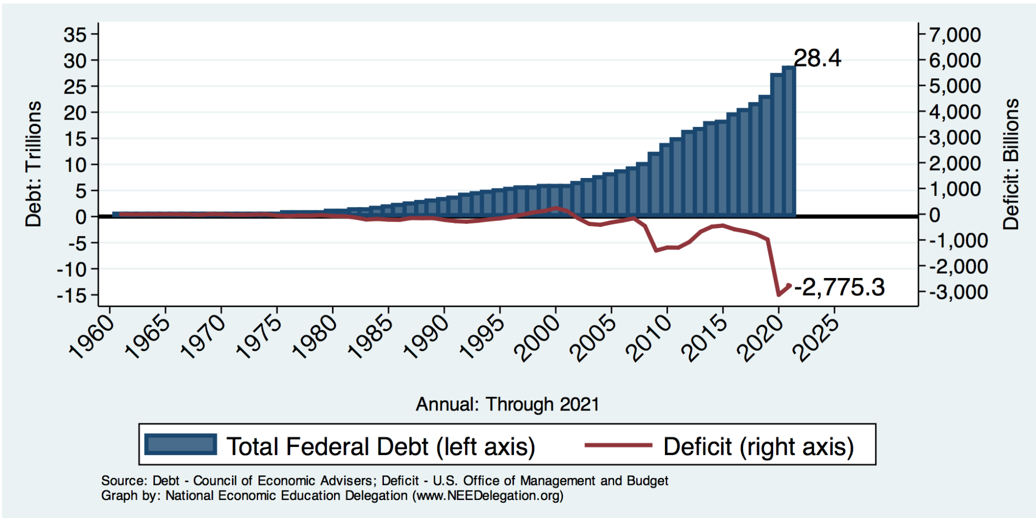
## The Debt and Deficit

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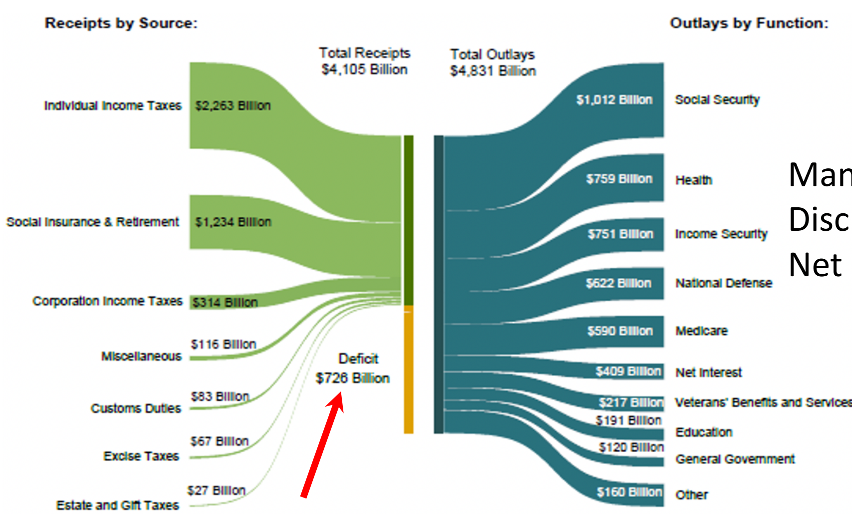
## The Federal Budget in FY2022: Oct. thru July

IIT, 54%
SST, 30%
CIT, 8.0%




Mandatory, 64%
Discret. 29%
Net Interest, 7%

Programmatic Outlays = Mandatory + Discretionary

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Source: Monthly Treasury Report, 7/2022

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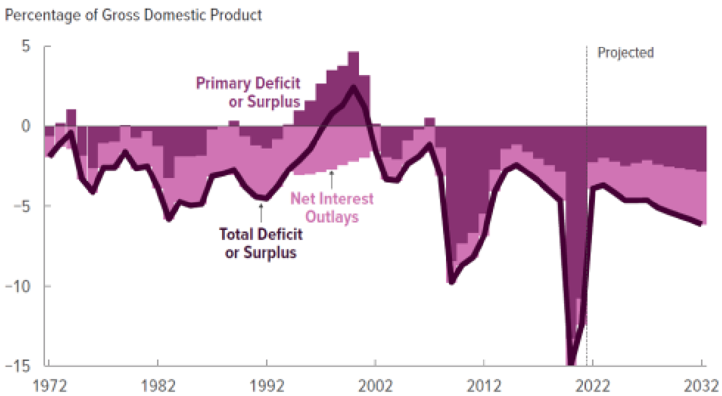
## Past and Future of Deficits




Useful Deficit Decomposition:

*Deficit = (Outlays + Interest) - Revenue*

*=(Outlays – Revenue) + Interest*

***=Primary Deficit + Interest***

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Source: CBO, "The Budget and Economic Outlook: 2022:2032," 5/2022

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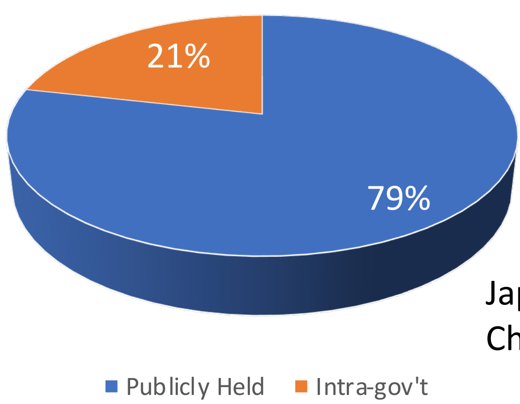
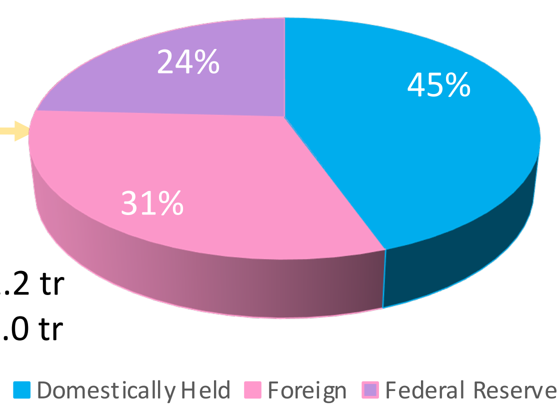
## A Breakdown of the Total Federal Debt

Total Public Debt: $30.4 tr, 4/30




Publicly Held Debt: $23.8 tr, 4/30




Japan, $1.2 tr
China, $1.0 tr

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Sources: US Treasury, Federal Reserve Board

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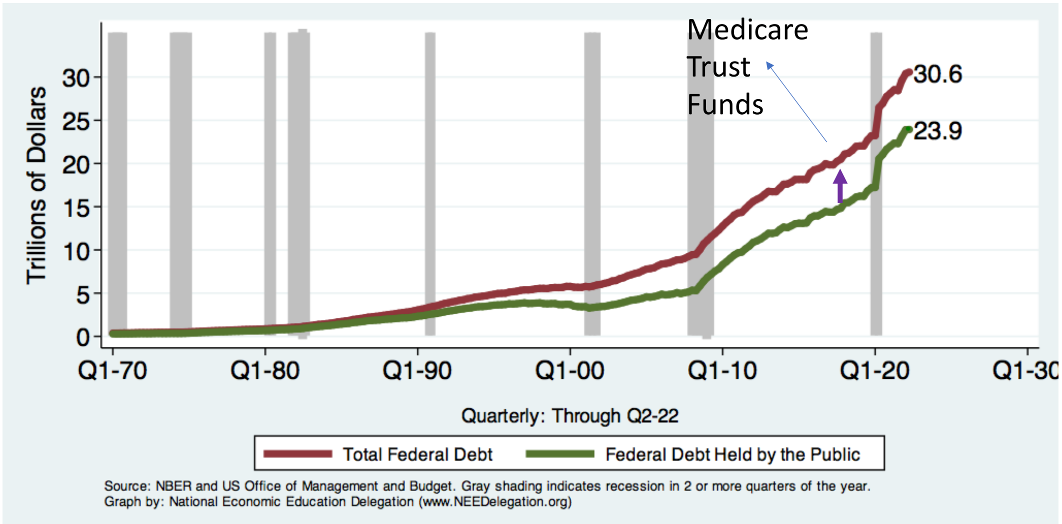
# Two Measures of the Debt

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# 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.

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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 | $30.6 Trillion | 96% |
| Greece | $0.4 Trillion | 176% |

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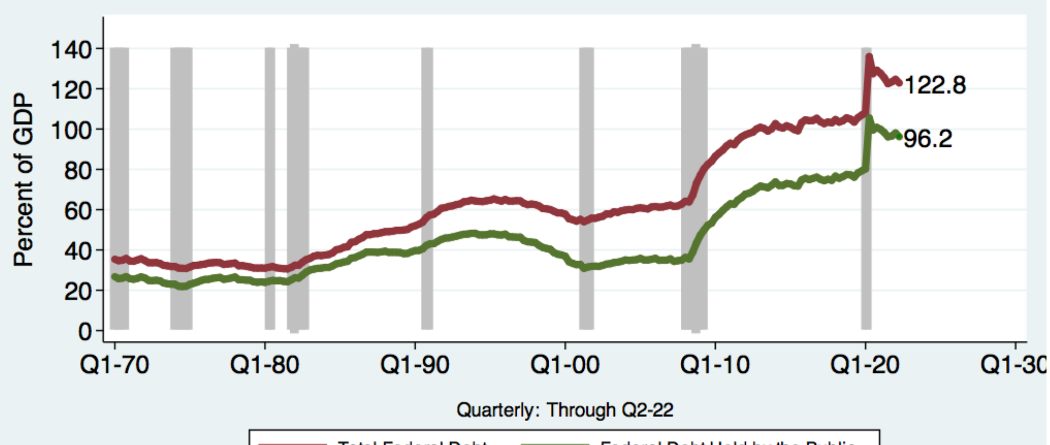
# Two Measures of RELATIVE Debt




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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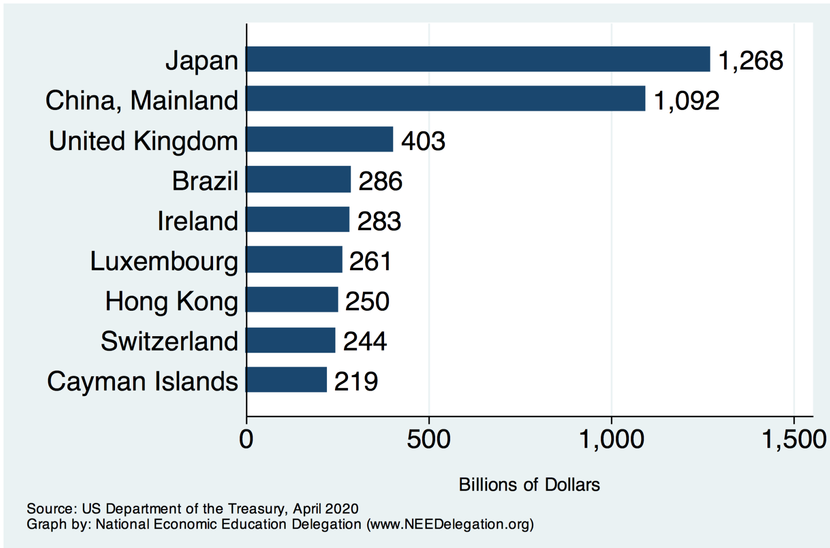
## Who Holds Debt to Foreigners

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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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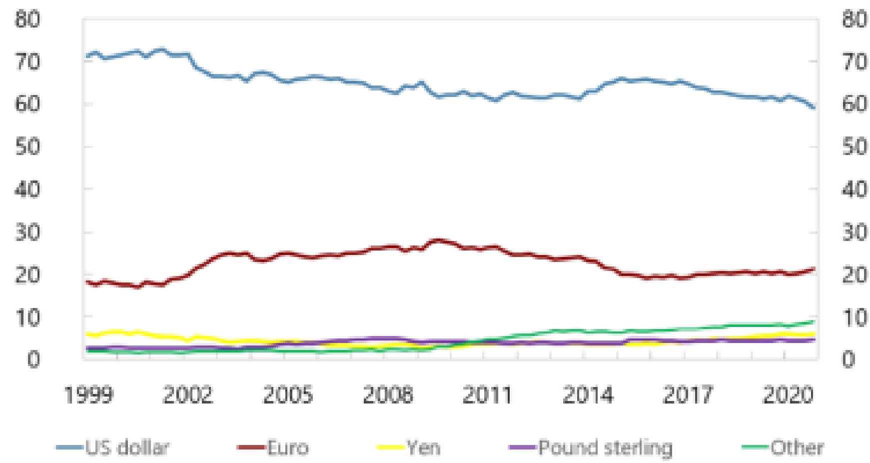
# Demand for Dollars by Central Banks

(currency composition of global foreign exchange reserves, percent)

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Source IMF Currency Composition of Official Exchange Reserves

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# 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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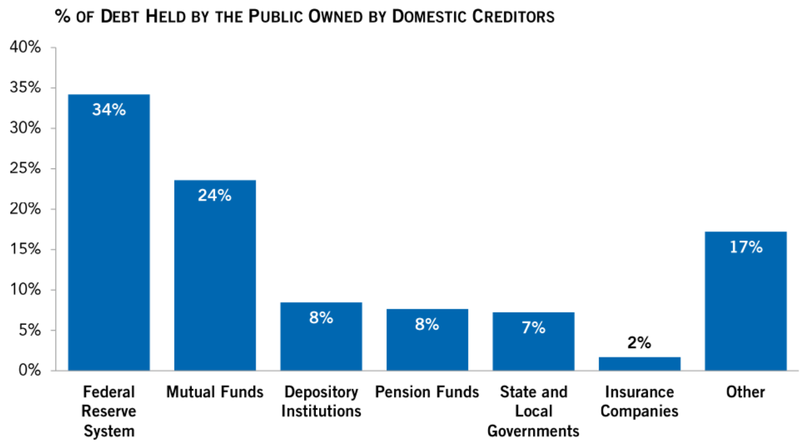
**The Federal Reserve owns one-third of domestically held debt**




SOURCE: U.S. Department of the Treasury, *Treasury Bulletin*, September 2021.
NOTES: Data are for March 2021. The Other category is made up of U.S. Savings Bonds and Other Investors.

PGPF.ORG

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## 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"
    - H.R. 486 Ukraine Religious Freedom Support Act
    - Build Back Better Scoring.
  - Projections of Debt and Deficits – The Budget and Economic Outlook: 2022 to 2032

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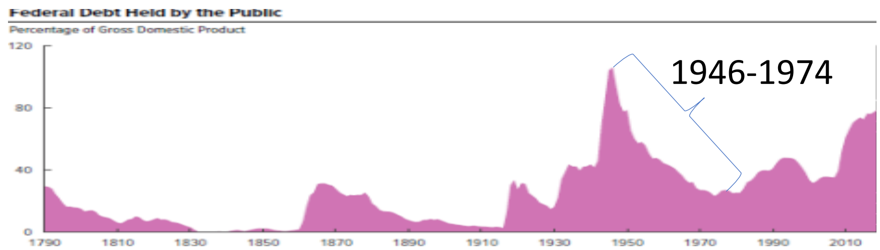
## Key Points About the U.S. Relative Debt




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?**

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## 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.**

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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 tends toward surplus)
  - The ***denominator*** rises (nominal GDP growth)
  - The ***denominator*** grows faster than the ***numerator***

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

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# Relative Debt Dynamics

- **Two Parts to the growth rate the debt:**
  1. The interest rate on the debt.
  2. A portion that reflects a primary deficit (+) or primary surplus (-).

- **Numerical Example: GDP grows at 4%, interest rate is 5%**
  - If there is either a primary deficit or a primary balance of zero, relative debt grows:
    - Growth in debt is greater than or equal to 5%, greater than GDP growth of 4%.
  - To stabilize the debt, there must be a primary surplus.
  - Primary surplus has to be bigger, the higher the relative debt.

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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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# 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
  - Pandemic

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# Traditional View of the Debt

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## 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 ("rolling over" the debt).
- **Economist View of the Debt circa 1980, very little cost because relative debt was falling. That changes in 1983.**

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## Traditional View post-1983: 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: <u>primary surplus needed</u> to stabilize the debt; i.e., less programmatic outlays or higher taxes.
2. **Foreign Borrowing: Higher interest rates lead to foreign capital inflows or foreign borrowing.**
   1. With foreign borrowing, some of our GDP is paid to foreigners as interest.

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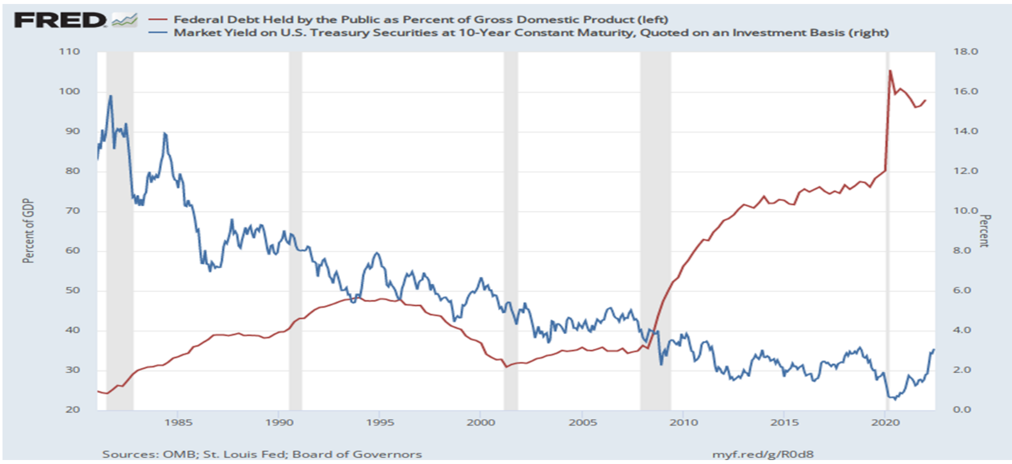
## The Dog that Didn't Bark; Rising Interest Rates?

Blue Line Rate on 10-Yr Treasury Bonds; Red Line Relative Debt

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## Now: A Change in Thinking

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## 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 more than revenues!**
- **Remember our example with GDP growth of 4%. Now assume the interest rate is 3%. Relative debt will fall with a primary balance of zero!**
- **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.

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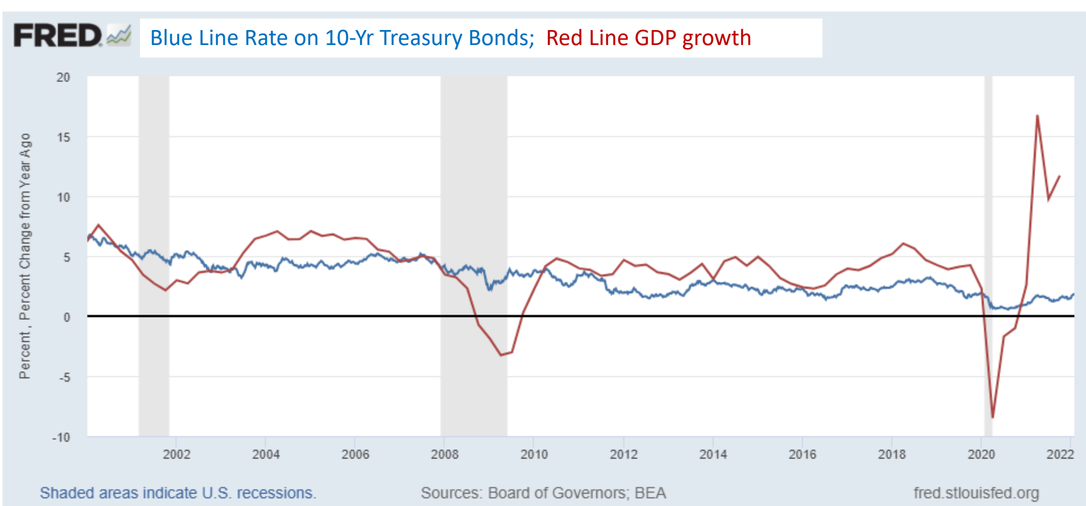
# Blanchard's Evidence

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## 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.

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## 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. And, the recent rise in inflation suggests even Dr Kelton should now be worried about the debt**
- **We rely on foreigners to hold a substantial portion of our debt and they can lose if the exchange value of the dollar falls.**

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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 US assets for Foreign 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,

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## Bottom Line: We Need to Worry about the Debt

1. Interest rates may not stay this low forever. In fact, economist don't really know why they have fallen to such low levels over the past 20 years
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.

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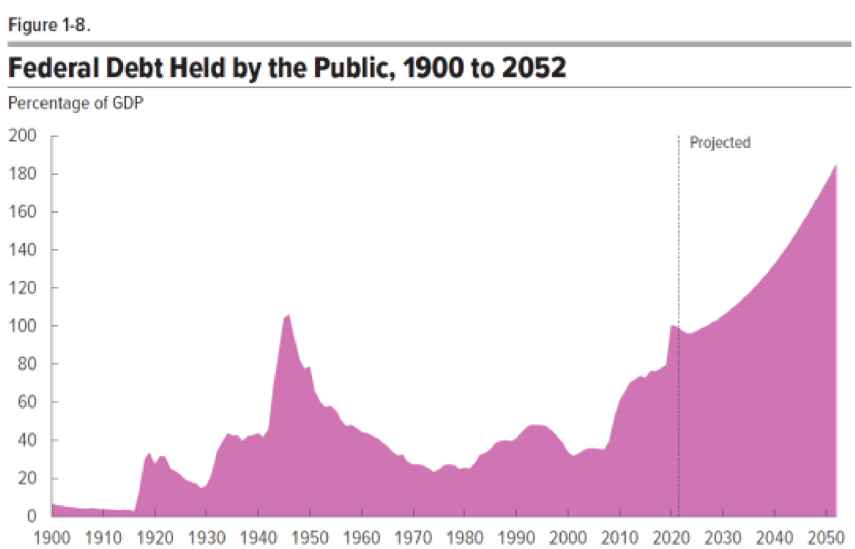
## But is this Problem Impossible?

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CBO, "Budget and Economic Outlook: 2022-2032," May 2022

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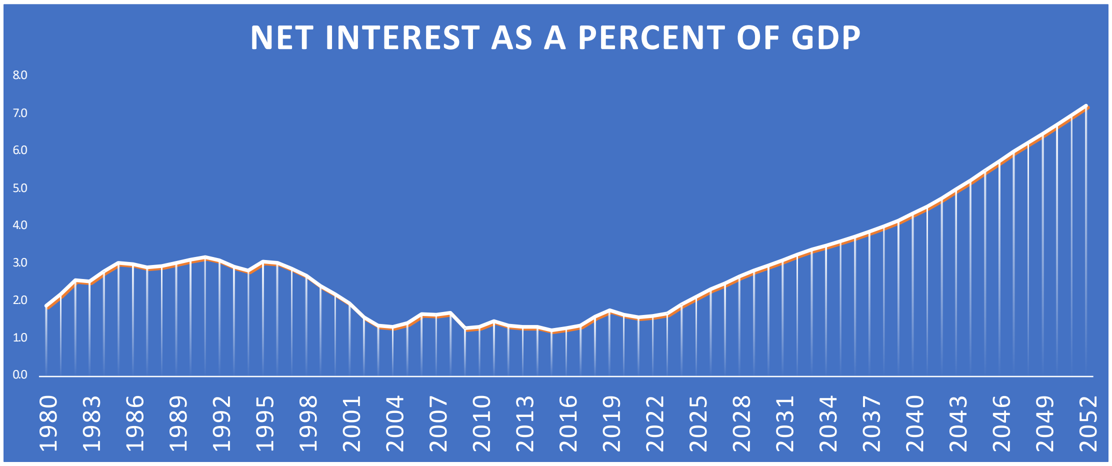
# CBO Baseline Projection

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

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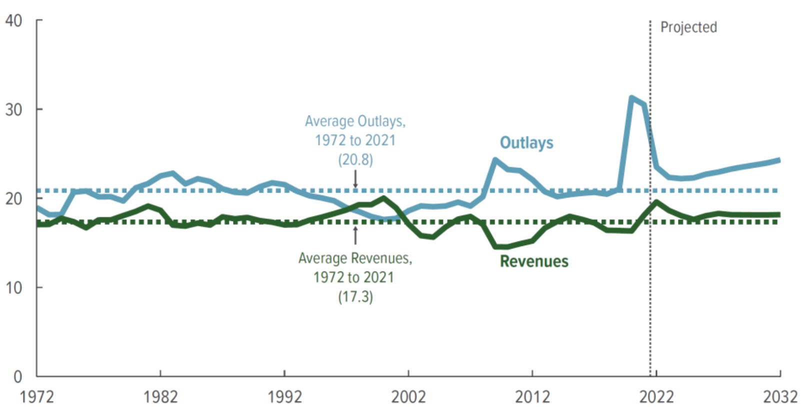
# The Blueprint for a Crisis?

Figure 1-2.

**Total Outlays and Revenues**

Percentage of Gross Domestic Product




But, these are “projections,” not forecasts!

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

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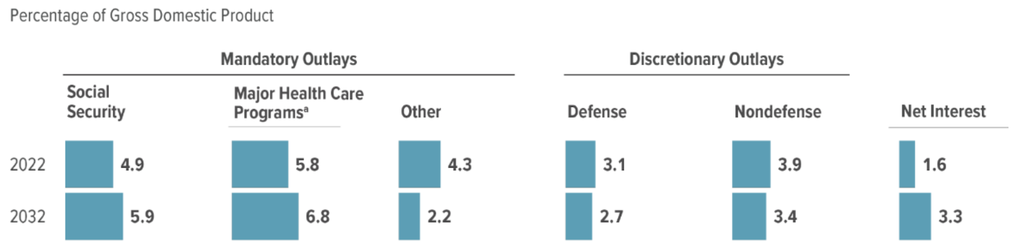
## Outlays based on Current Law

### The Components of Outlays

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## Unfortunately, The Required Changes are Big!

- CBO is allowed to publish, alternative projections.
- To Stabilize the relative debt at the current level of 100% of GDP:
  1. Deficit in 2025 needs to go from projected 4.7 % of GDP to 2.9% and be maintained at the 2.9% level.
  2. This amounts to over $500 billion ***per year***.

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CBO, “2020 Long-Term Budget Outlook, “ Sep 2022

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## Any of these Options Sound Good?

**Options to Reduce the Federal Deficit**

Pick 10!

CBO will publish a new volume of budget options at the end of this year.

Among the options that CBO has previously examined, 13 would have reduced the deficit by at least $500 billion over the next 10 years:

- Reduce the Department of Defense's Budget
- Increase Individual Income Tax Rates
- Impose a 5 Percent Value-Added Tax
- Eliminate Itemized Tax Deductions
- Impose a Tax on Greenhouse Gas Emissions
- Impose a Tax on Financial Transactions
- Increase Excise Taxes on Motor Fuels and Index for Inflation
- Increase the Maximum Taxable Earnings for the Social Security Payroll Tax
- Increase the Payroll Tax Rate for Social Security
- Increase the Payroll Tax Rate for Medicare Hospital Insurance
- Establish Caps on Federal Spending for Medicaid
- Reduce Federal Medicaid Matching Rates
- Reduce Tax Subsidies for Employment-Based Health Insurance

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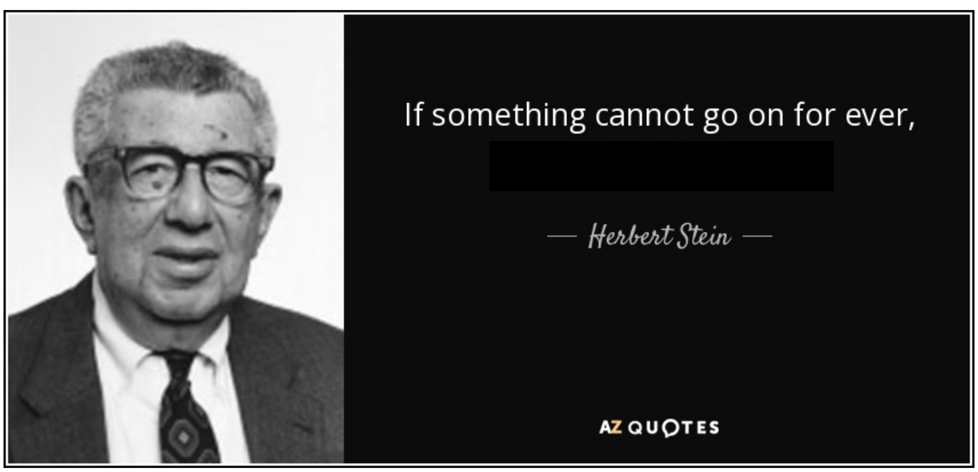
## The Wit and Wisdom of Herb Stein

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# Summary

- **Government debt is not like household debt.**
  - It never truly comes due.
- **That doesn't mean that we should be profligate debtors.**
  - Increased debt comes with costs:
    - Crowding out of other spending priorities (via interest payments).
    - Payments to foreigners.
    - Potential for fiscal crisis.
- **MMT and its prescriptions trouble majority of economists.**
- **The United States is in a unique position.**
  - There is room for more borrowing, but we don't know exactly how much more.
- **The current debt picture is one of instability.**
  - Important and difficult policy decisions are needed to stabilize the debt.



# Bottom-Line Takeaways

- **Relative debt must be stabilized, so it is imperative to reduce primary deficits after the virus has been defeated.**
- **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."

# Major Takeaways: Talking Points

- **The current trajectory for the federal debt is unsustainable.**
- **After the crisis, 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."**
- **Government debt is NOTHING LIKE household debt!**

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# Federal Debt Glossary

- *Total Federal Debt* is the value of all outstanding government bonds (or "Treasuries") that have been issued to finance past federal government deficits.
- *Deficit* is the difference between total federal spending and revenues.
- *Federal Debt in the Held by the Public* is the debt held by the private domestic investors, foreign investors and the Federal Reserve. The concept of the debt excludes intragovernmental debt, such as the debt held by the Social Security and Medicare Trust Funds.
- *The Relative Debt* is the Federal Debt Held by the Public as a fraction of the size of the economy, or GDP.
- *Congressional Budget Office (CBO)* is a congressional think tank that analyzes the effect of legislation on the budget ("scoring") and issues periodic projections on the future of debt and deficits
- *Primary Deficit* is the difference between federal spending on programs and total revenues. The primary deficit excludes interest on the debt.
- *Rolling Over the Debt* the process of paying off maturing government bonds with newly issued bonds

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## Federal Debt Glossary (Cont.)

- *Crowding Out* is the phenomena where government financing of deficits raises interest rates and lowers firms' investment.
- *International Reserve Currency* is foreign holdings of US debt (and other countries debt) to facilitate international trade; e.g., oil is traded in dollars.
- *Default* is when an entity that issues a bond fails to make an interest payment or the repayment of the face amount on time.
- *Foreign Exchange Value of the Dollar* is the purchasing power of the dollar in terms of a foreign currency. When the US exchange rate falls, the dollar has les purchasing power over foreign goods.
- *Budget Reconciliation* is a Senate process for by-passing the filibuster, so that legislation can be enacted with a 51-vote majority. The process can only be used for changing spending or taxes and the legislation cannot increase the deficit after 10 years.

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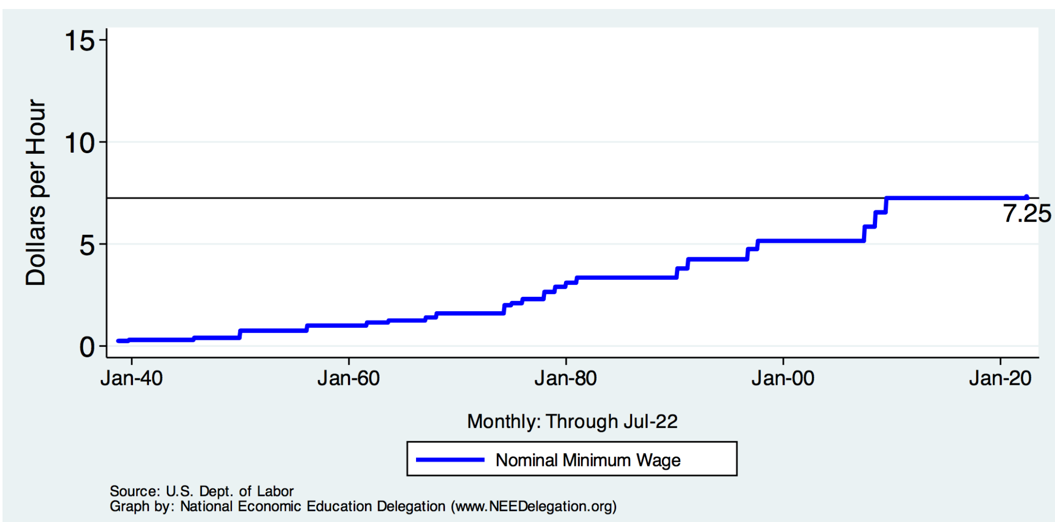
## The Federal Minimum Wage

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Thank you!

# Any Questions?

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