

The US Federal Debt

Money Talks

05/16/2022

Scott Baier, Ph.D.





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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.



-

Credits and Disclaimer



• This slide deck was created by:

- Jon Haveman, Executive Director, NEED
- Geoffrey Woglom, Amherst College, Emeritus
- Scott Baier, Clemson University

Disclaimer

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- 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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US Government Debt



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

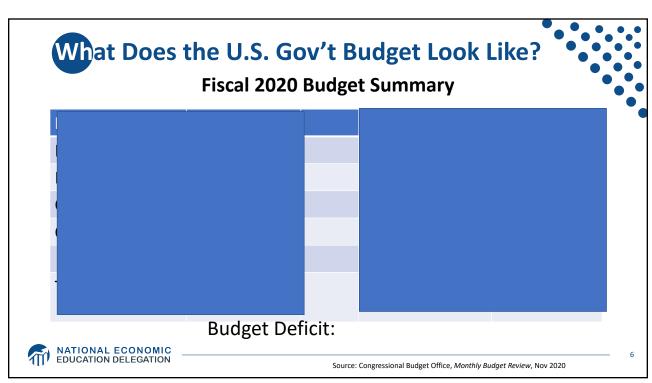
- **Debt**: The accumulation of debt over time.
 - The sum of all past deficits and surpluses.

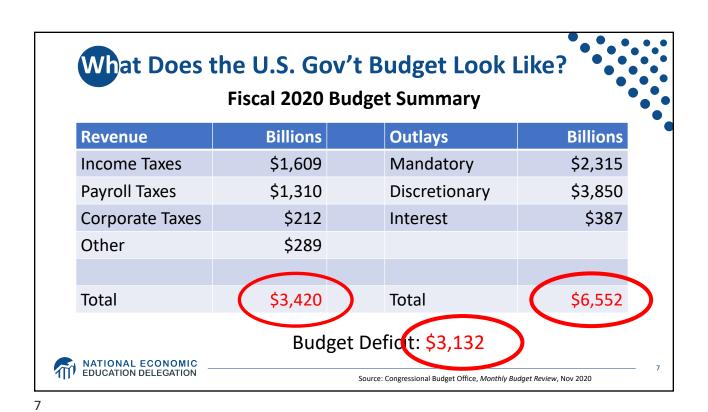




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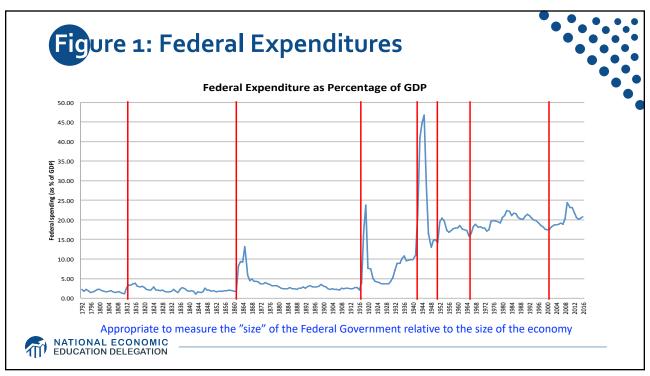


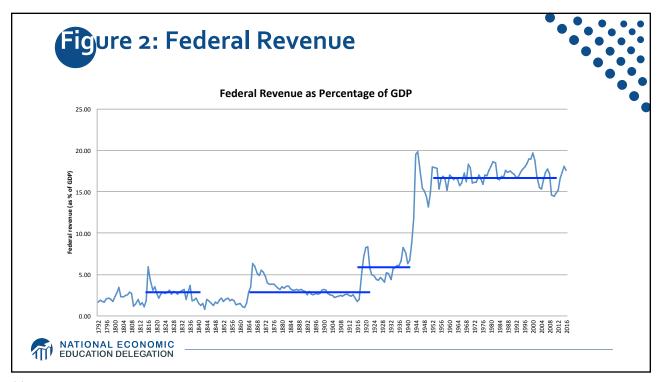
What Does the US Govt. Budget Look Like? 2019 Budget Summary (in billions) **Outlays** Revenue \$2,735 **Income Taxes** \$1,718 Mandatory **Payroll Taxes** \$1,243 \$1,336 Discretionary \$376 \$230 **Corporate Taxes** Interest Other \$271 \$4,447 \$3,462 Total Total Budget Deficit \$984 Billion NATIONAL ECONOMIC EDUCATION DELEGATION Source: Congressional Budget Office, The Budget and Economic Outlook: 2020 to 2030

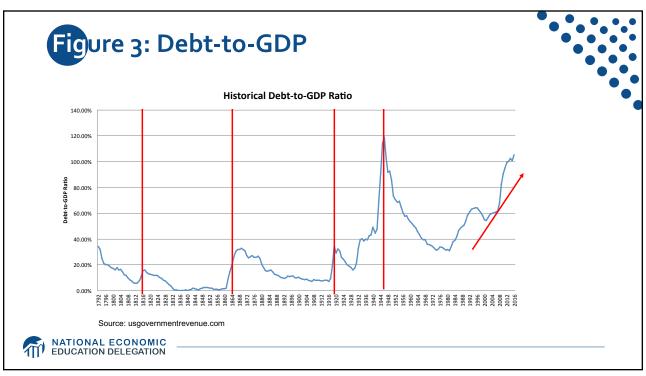


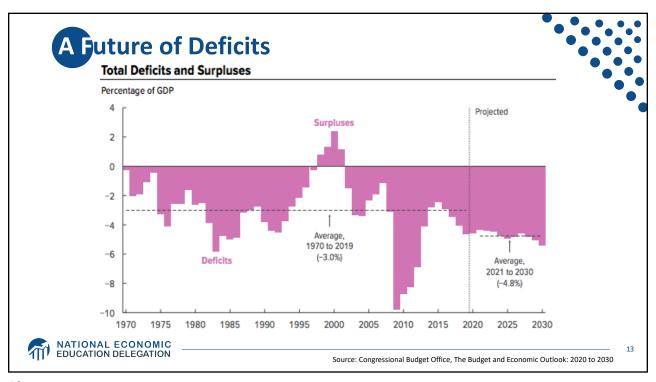
US Government Deficits Over Time

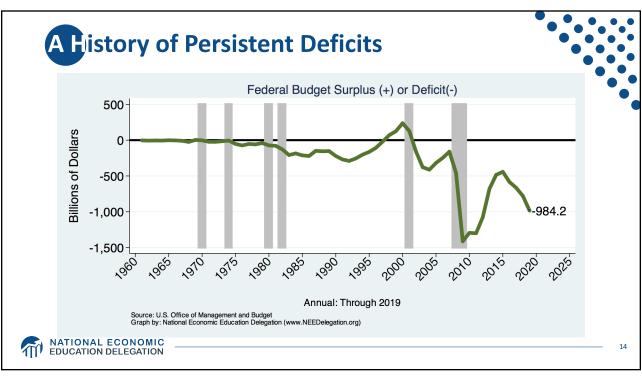


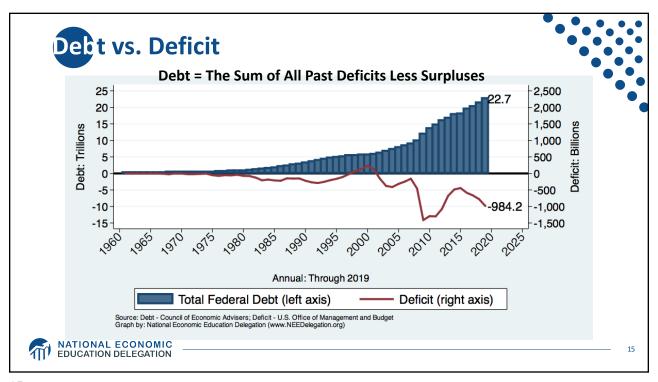




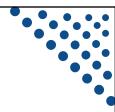








How Does the US Government Borrow?



• It issues debt.

- Treasury marketable securities:
 - o Treasury bills, notes, and bonds
 - o 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



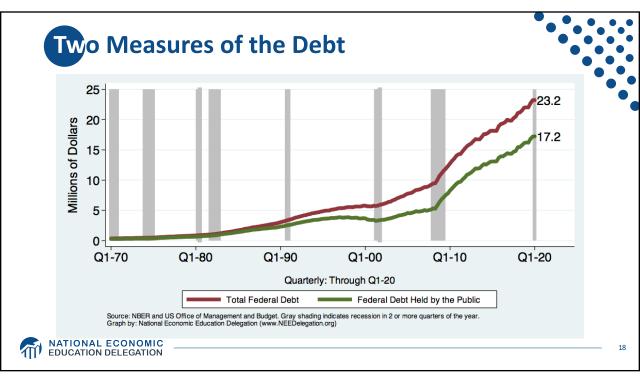
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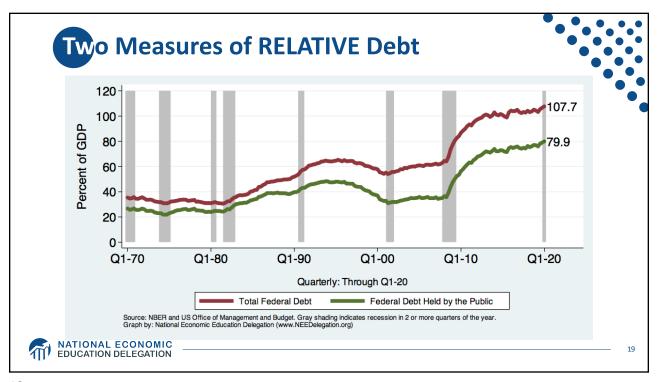


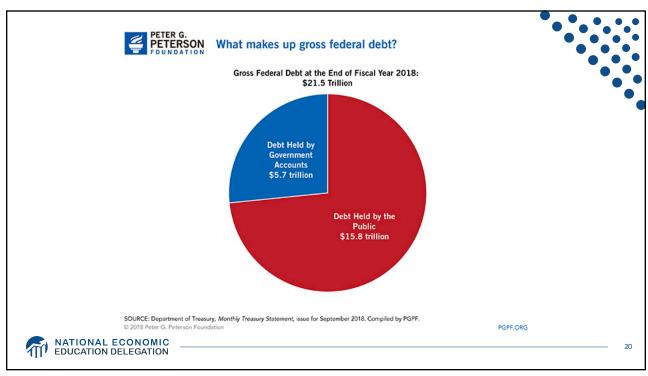
- Some debt can reduce the availability of investment funds to other borrowers.
 - Often referred to as "crowding out" private investment
- Intragovernment debt is (important) bookkeeping.
 - This debt **DOES NOT** crowd out private investment.
- Debt held by the public
 - This debt **MIGHT** crowd out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

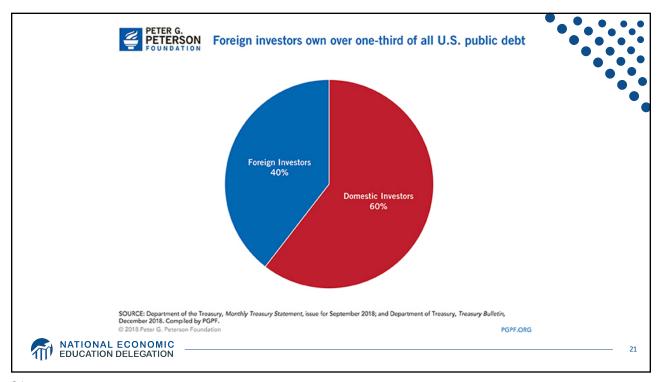


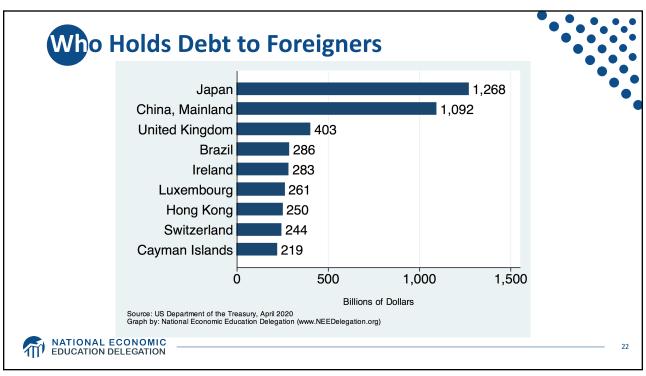
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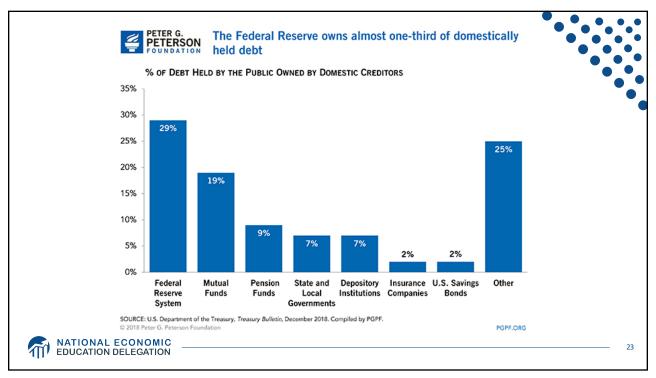


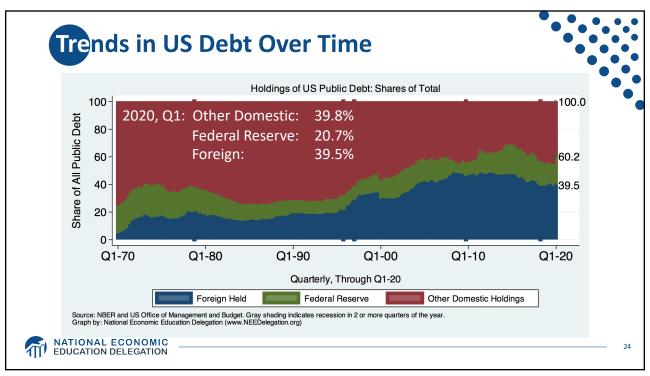
















- 1. Prior to 1983, relative debt rose purposefully (wars and recessions) and then fell.
- 2. Relative debt peaked during World War II, followed by a long decline.
- 3. Relative debt has been and is expected to rise for the next 30 years w/o a strategic purpose.



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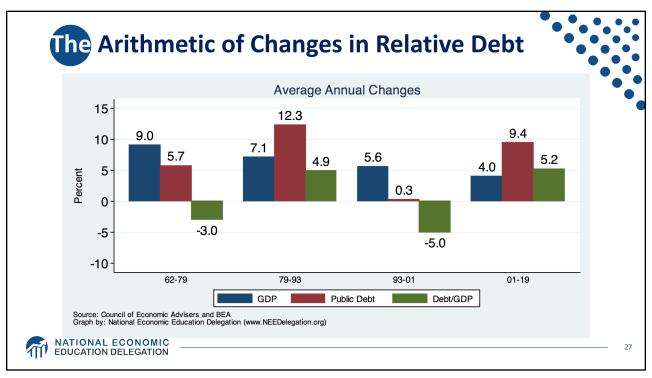
Debt Dynamics

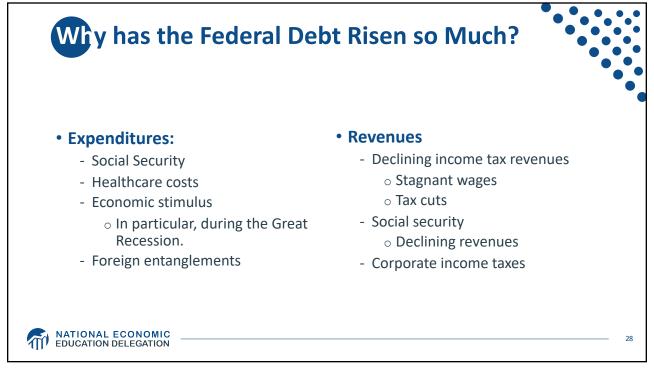


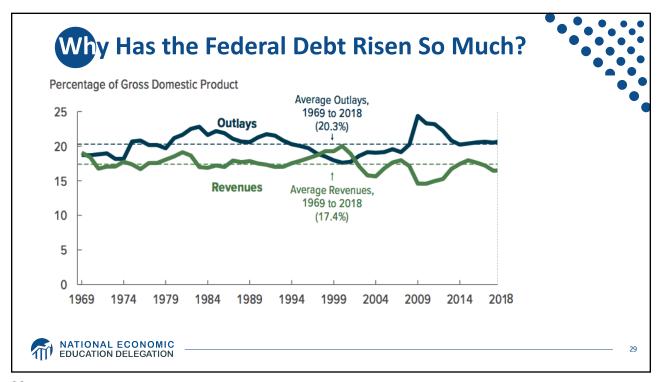
- Surprising (?) Facts
 - From 1945 to 1979, relative debt fell from 100% of GDP to 25% of GDP.
 - During this period, the federal budget was in surplus only once, in 1969.
- Relative debt is a fraction: Debt/GDP; fractions fall if:
 - The *numerator* falls (budget surplus)
 - The *denominator* rises (nominal GDP growth)
 - The *denominator* grows faster than the *numerator*

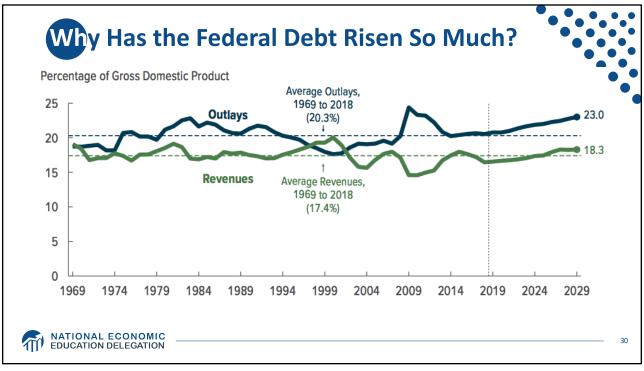


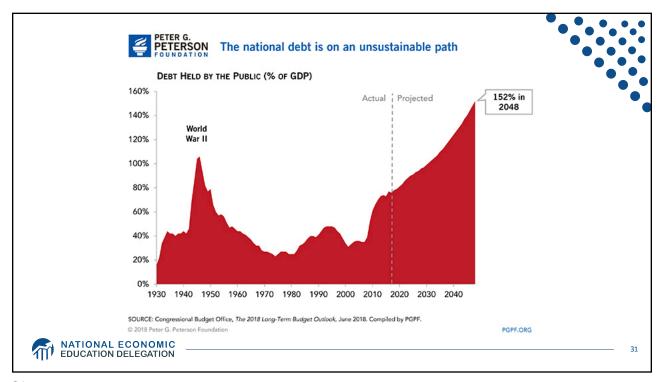
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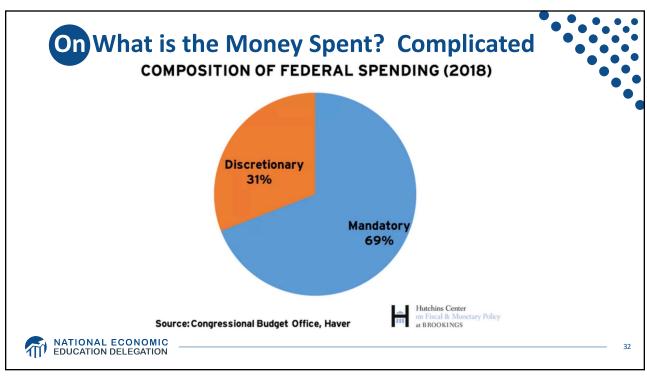


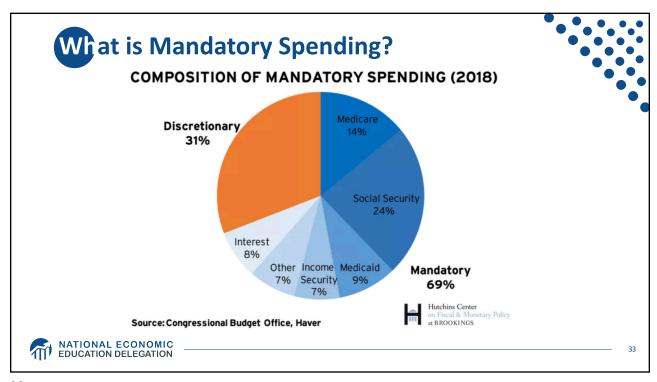


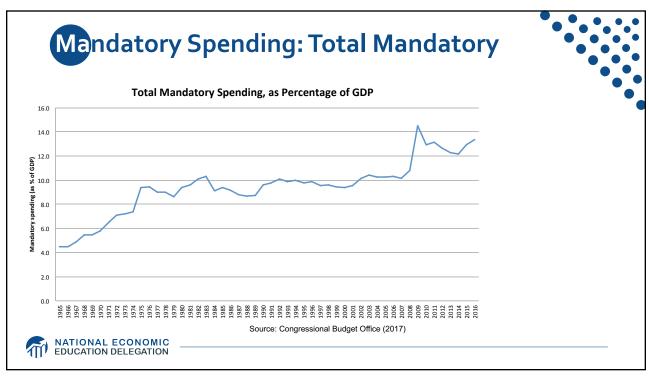


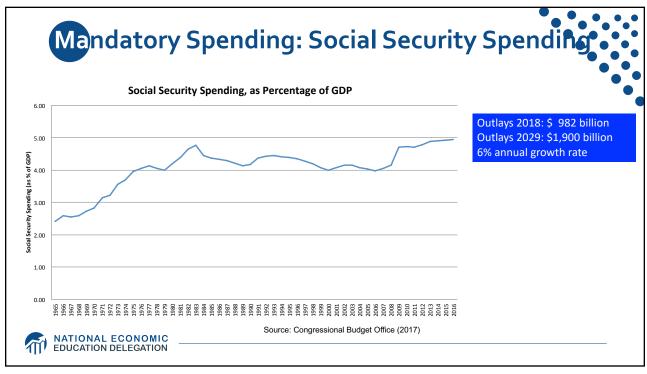












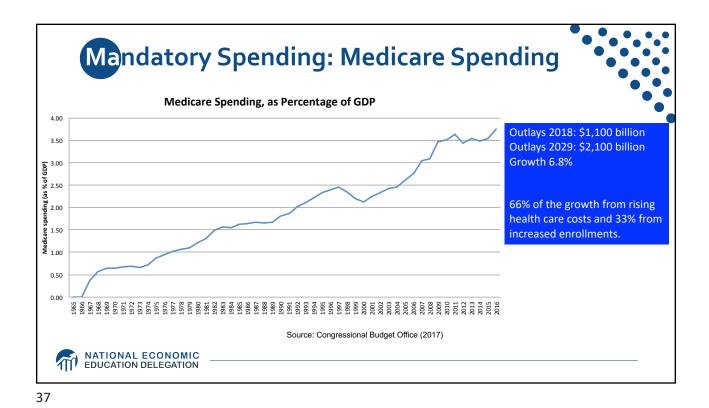
Mandatory Spending: Medicare (14%)



- Part A: Hospital Insurance
- Part B: Physician, outpatient, home health, and other services.
- Part D: Subsidized access to pharmaceuticals.
- Part C: Medicare Advantage Plans offered by private companies approved by Medicare.
 - Medicare Advantage Plans may offer extra coverage, such as vision, hearing, dental, and/or health and wellness programs.



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Medicare Finances in 2018

• Part A:

Income in 2018: \$299 billion
Expenses in 2018: \$297 billion
Surplus: \$2.8 billion

Part B and Part D:

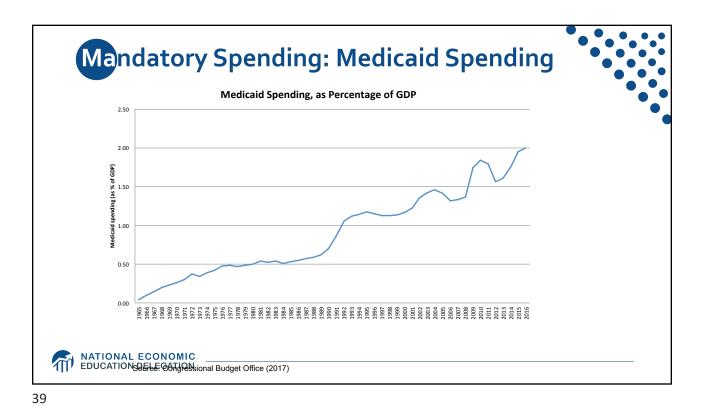
Income in 2018: \$406 billion
Expenses in 2018: \$414 billion
Surplus: \$-7.9 billion

Long term sustainability:

- Deficits began in 2016
- For as far as the eye can see
- Insolvent in 2026 with current parameters.



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Mandatory Spending: Medicaid (9%)

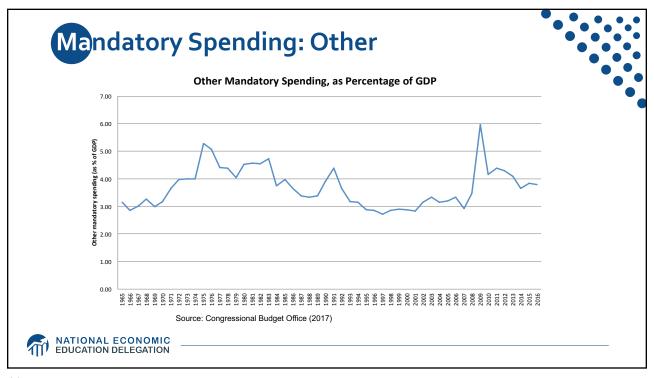
- income
- Medicaid provides medical insurance for those whose income and resources are insufficient to pay for health care.
- It is a program with costs shared with the states.
- Amount spent in 2017: \$576.6 Billion

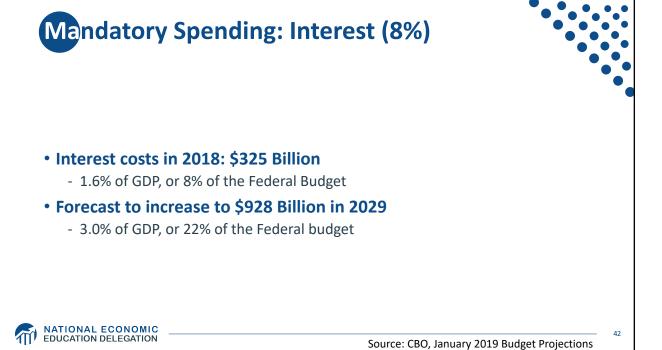
Federal: 61.5% or \$354.6 BillionStates: 38.5% \$222.0 Billion

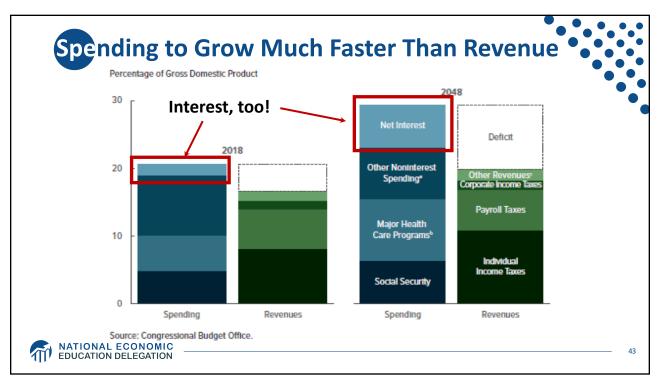
• People served in 2017: 72 million (22% of Americans)

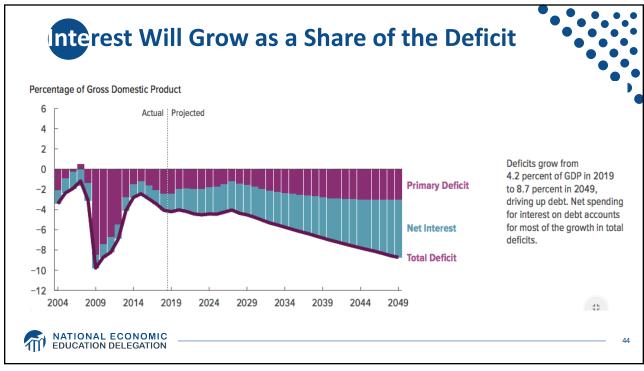


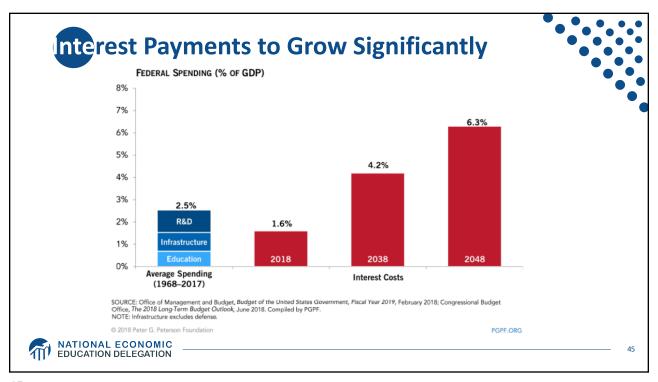
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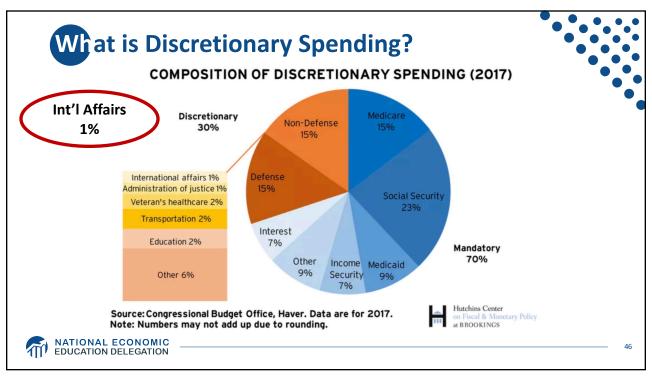


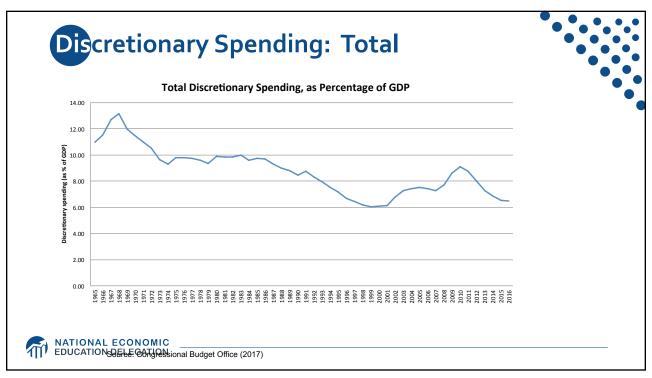


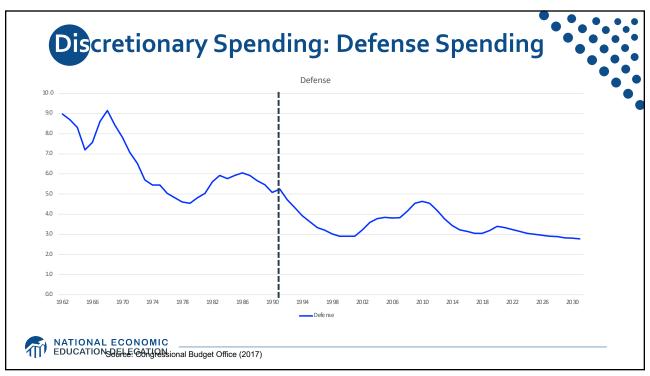


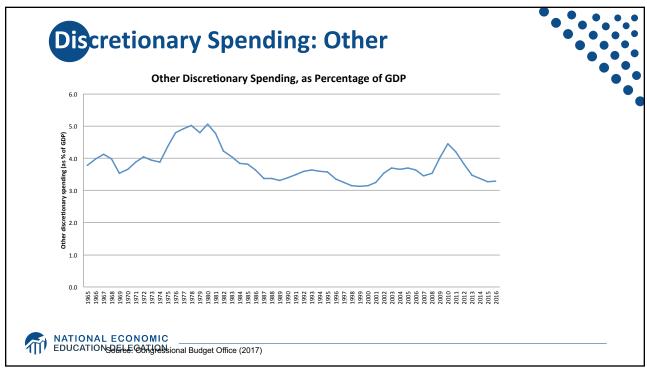


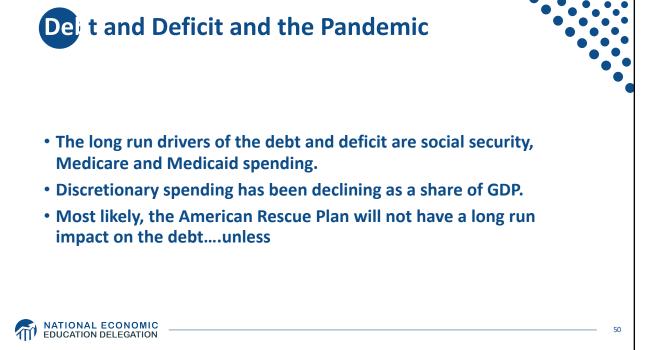


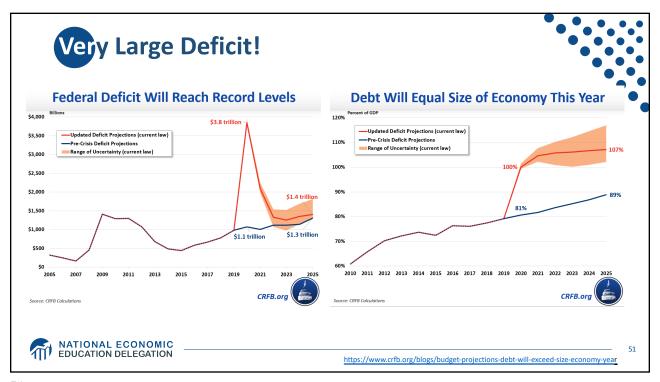


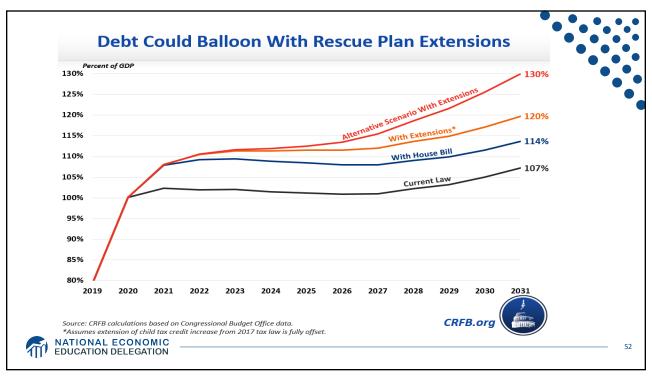














How to Think About the Debt



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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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- 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



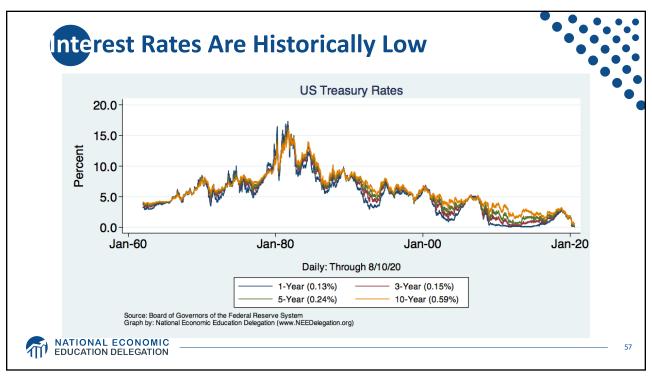
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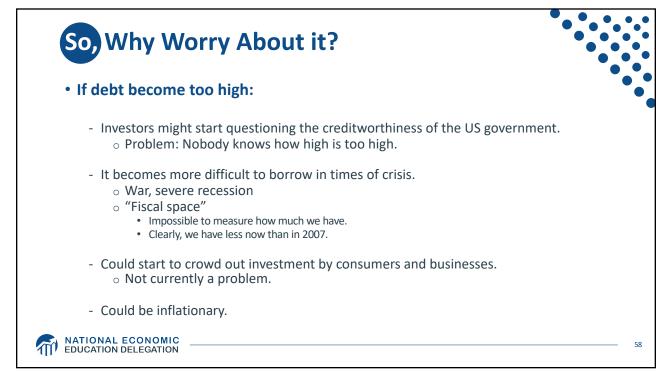
Is The Debt a Problem Today? (Pre-COVID 19)

- Currently borrow about \$100 billion each month with little difficulty.
- Very little evidence of "crowding out."
- Interest rates are very low, less than 1% on 10-year notes.



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So, Why Worry About It?

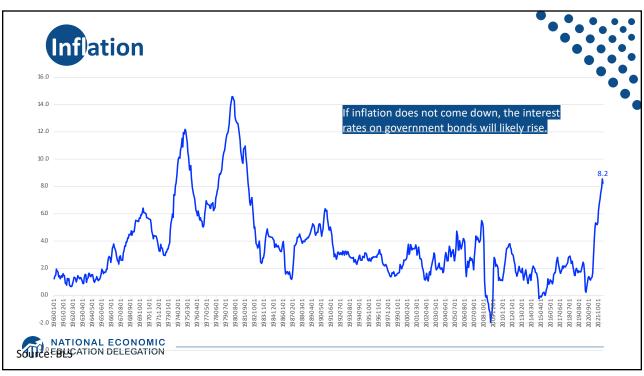
• If debt continues to grow:

- Interest payments will grow with it.
 - \circ 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.



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Economists' Views on the Debt Evolve



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Traditional View: Four True Costs



- The Treasury's borrowing needs compete with private borrowers, so debt and deficits raise interest rates.
- Higher interest rates lead to foreign capital inflows or foreign borrowing.
 - With foreign borrowing, some of the interest on the debt goes to foreign countries.
- Larger primary surpluses are needed to stabilize the relative debt.
 - The larger the relative debt, the bigger the needed primary surplus.
 - Thus, higher taxes or programmatic outlays must be reduced.
- Government bias toward higher inflation
 - GDP grows if either prices rise or real output rises.



Source: CBO, Federal Debt: A Primer, March 2020 pp.24-5

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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.
 - o 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.



EDUCATION DELEGATION

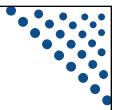
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General Sense on Modern Monetary Theory Question A: Countries that borrow in their own currency should not worry about government deficits because they can always create money to finance their debt. Responses Responses weighted by each expert's confidence 100% 100% 72% 75% 75% 52% 50% 50% 36% 25% 25% Strongly Disagree Strongly Disagree No Opinion strongly strongly © 2019. Initiative on Global Markets Source: IGM Economic Experts Panel Source: IGM Economic Experts Panel www.lgmchicago.org/igm-economic-experts-panel www.igmchicago.org/igm-economic-experts-panel NATIONAL ECONOMIC



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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What Is a Fiscal Crisis?



- Potential manifestations:
 - Sudden major 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)
 - o consumption (interest rates)
 - Government spending
 - Higher interest bill on existing debt



Bottom Line: We Need to Worry about the Debt



- 1. Interest rates will not stay this low forever.
- 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 (after the pandemic is over) we must substantially reduce primary deficits.



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Major Takeaways: Talking Points



- The current trajectory of federal debt is unsustainable.
- Given the historically low interest rates, we can afford to wait until after the crisis to act.
 - How long will interest rates stay low?
- 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."



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- After the pandemic, some combination of spending cuts and tax increases must be enacted.
- The particular combination of spending cuts and revenue increases is a political question.
- But high debt levels should not deter:
 - Productive infrastructure investment.
 - Fiscal responses to crises.
- Given the fiscal challenges of an aging population and climate change, it is better to do this sooner rather than later.



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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):

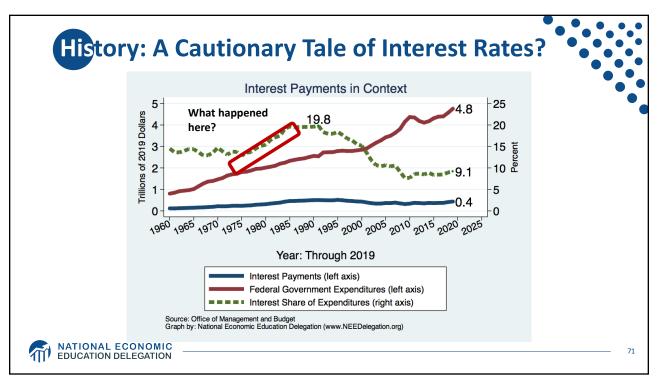
because the United States currently benefits from the dollar's position as the world's reserve currency and because the federal government borrows in dollars, a financial crisis—similar to those that befell Argentina, Greece, or Ireland—is less likely in the United States.

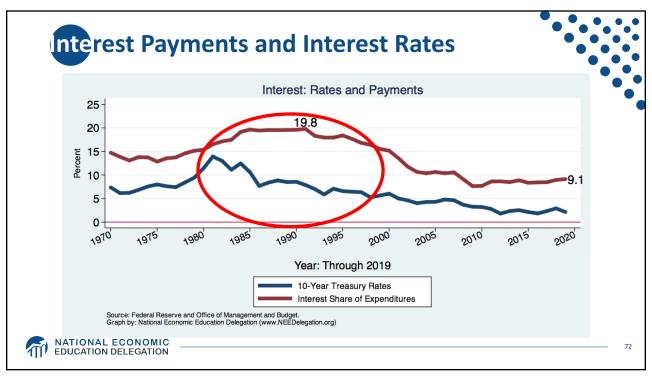
Although no one can predict whether or when a fiscal crisis might occur or how it would unfold, the risk is almost certainly increased by high and rising federal debt.

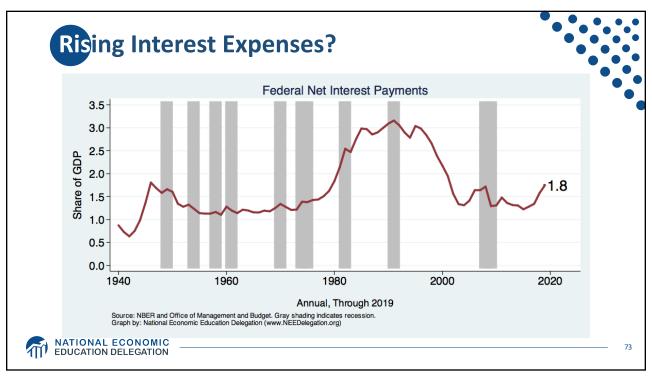
Crises of confidence, in addition to being unpredictable, happen very quickly.



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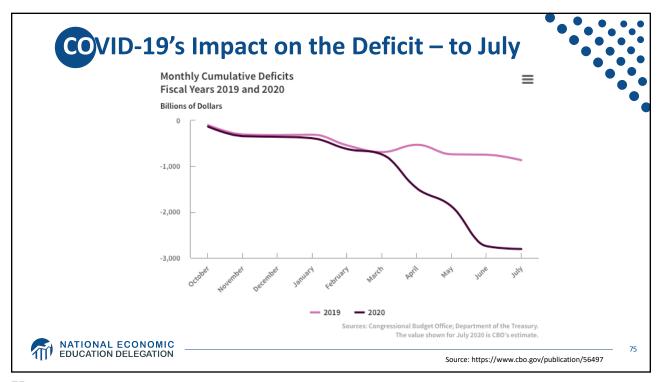


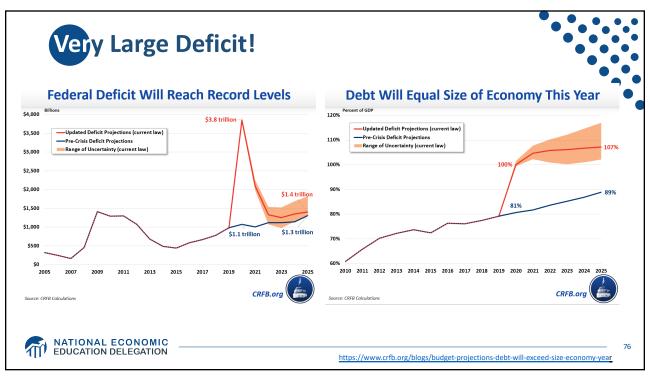


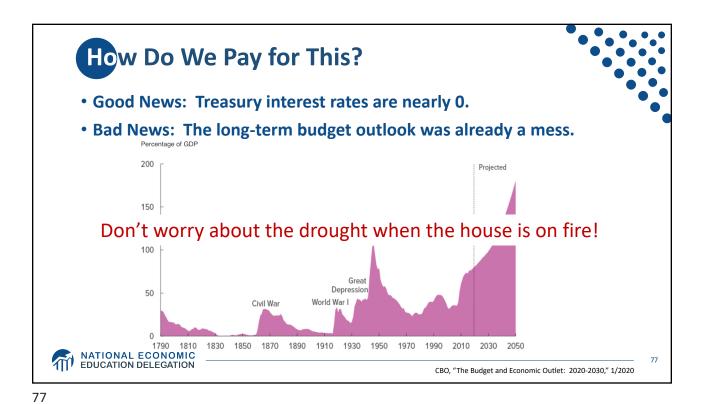
- CBO projections (as of 4/24):
 - The 2020 federal *deficit* will rise from \$1 trillion to \$3.7 trillion.
 - Relative debt: will rise from 80 percent to 101 percent of GDP.
- FY 2019-2020 ends September 30.



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Why Has the Federal Debt Risen So Much?



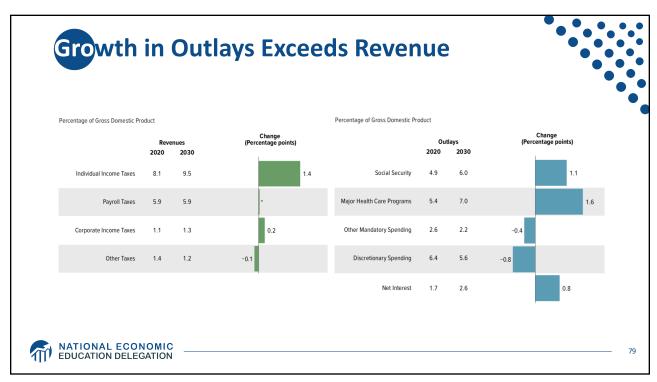
• Expenditures:

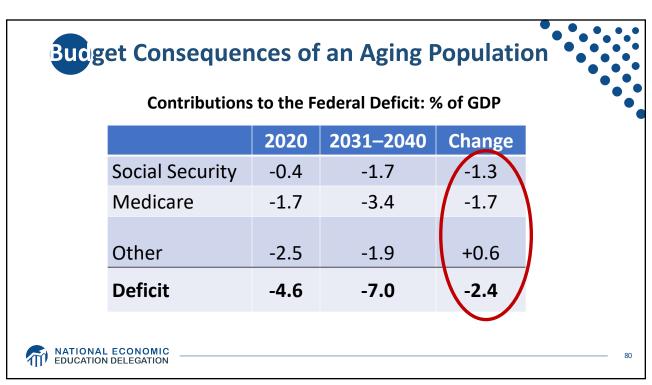
- Social Security
- Health-care costs
- Economic stimulus
 - In particular, during the Great Recession.
- Military engagements overseas

Revenues

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







Bottom-Line Takeaways

- Herb Stein, an expert on fiscal policy and the chairman of the Council of Economic Advisors under Richard Nixon, is famous for observing: "If something cannot go on forever, it will stop." A rising and accelerating ratio of debt to GDP cannot go on forever.
- We have a choice largely between:
 - Fiscal crisis. 1.
 - Reductions in the primary deficit.



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OK: Relative Debt Cannot Grow Forever, But



- Does it matter at what level we stabilize relative debt?
- Relative debt stops growing:
 - when the growth of debt is less the growth in GDP (on average).
- Arithmetic: growth rate of the debt equals the interest rate plus the effect of the primary surplus or deficit.
- The bigger the relative debt, the smaller the effect of the primary surplus or deficit.





CBO on the Possibility of a Fiscal Crisis



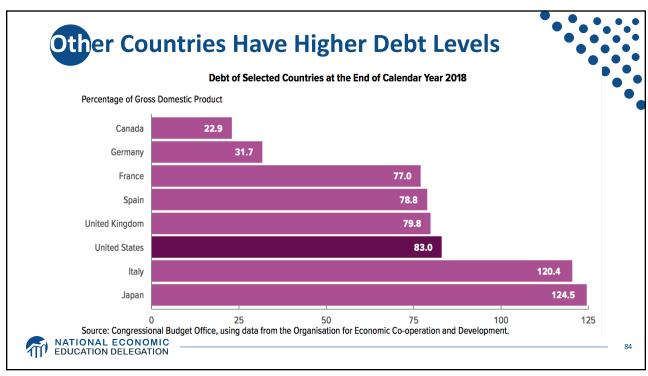
- Moreover,
 - because the United States currently benefits from the dollar's position as the world's reserve currency and
 - because the federal government borrows in dollars,
 - a financial crisis—similar to those that befell Argentina, Greece, or Ireland—is less likely in the United States.
- Although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



Source: CBO - Federal Debt: A Primer, March 2020

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Takeways (Continued)

- euts and
- After the virus is defeated, some combination of spending cuts and tax increases must be enacted.
- The particular combination of spending cuts and revenue increases is a political question.
- But high debt levels should not deter:
 - Productive infrastructure investment.
 - Fiscal responses to crises.
- Given the fiscal challenges of an aging population and climate change, it is better to do this sooner rather than later.



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Bottom Line



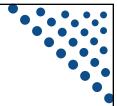
- Question is not WHETHER the US will have to act...
 - but WHEN.
- Some combination of the following **WILL** be necessary:
 - Raising taxes
 - Cutting spending
 - Reining in health-care costs





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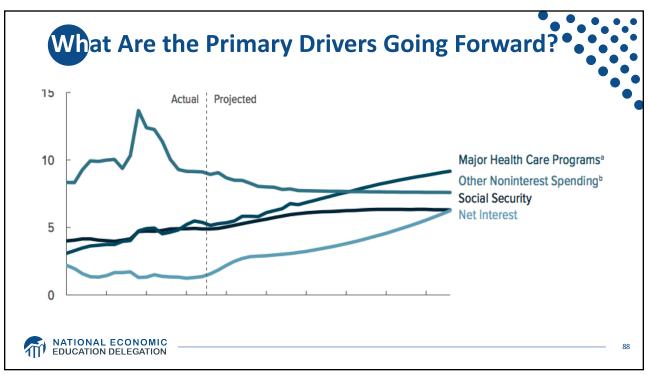




- Very little evidence of:
 - Crowding out
 - Inflationary impact
- Uncertainty about the future
 - Economic growth might render action today unnecessary.
- There are a great many investments to be made by the govt.
 - Infrastructure
 - Education
 - Much, much more ...



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Proposals Do Exist

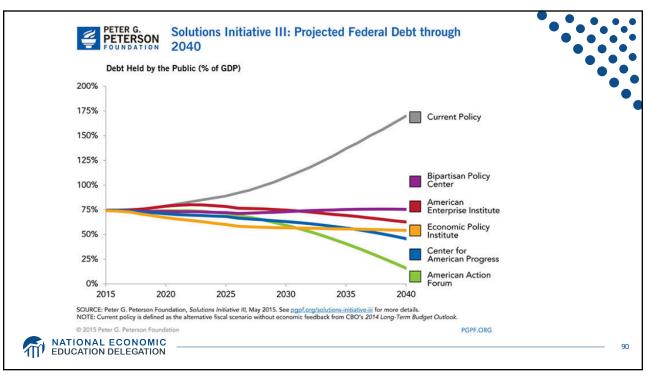


- Simpson-Bowles
- Domenici-Rivlin Task Force
- Solutions Initiative Peter G. Peterson Foundation
 - American Action Forum
 - American Enterprise Institute
 - Bipartisan Policy Center
 - Center for American Progress
 - Economic Policy Institute



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There Are Other (Bad/Costly) Solutions



- Financial repression
 - Using regulation to force down interest rates.
- Paying the interest by printing money.
 - Risks inflation, hyper or otherwise.
- Or defaulting on the debt.
 - This will forever raise the cost of government borrowing.



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Summary: The Debt



- The jury is (sort of) out on the debt.
- Conventional wisdom is being challenged:
 - Previously: inflationary and crowd out private investment
 - New assertion: these things don't matter for a country that can borrow in its own currency.
- Upshot?
 - This is a policy choice.
 - The cautious approach is to rein in the debt.
 - The cautious approach may lead to slower economic growth.



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Relative debt: 107% of GDPPublicly held debt: 79% of GDP

· Deficits drive growth in the debt.

- Likely greater than \$1 trillion per year.

Publicly held debt matters most.

- Will grow from 78% of GDP today to 180% in 2049 pre-COVID-19 estimates.
- Could exceed 100% of GDP by the end of 2020 and 200% by 2050.
- Multiple ways to offset this growth.
- Growing interest payments can constrain budgets.



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Summary: Address the Debt?



• Risks:

- Inflation
- Slower economic growth
 - Higher interest rates
 - o Crowding out
- Default

Reasons to wait:

- Interest rates are very low
- Lots of important investments to make
- Economic growth may take care of it



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Bottom-Line Takeaways

- e
- 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."



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Major Takeaways: Talking Points



- The current trajectory for the federal debt is unsustainable.
- Given historically low interest rates, we can afford to wait until after the crisis to act.
- 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."



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Honorary Board: 48 members

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

• Delegates: 500+ members

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

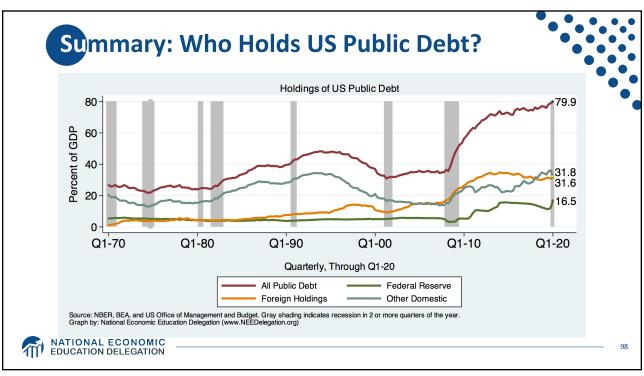
Global Partners: 45 PhD Economists

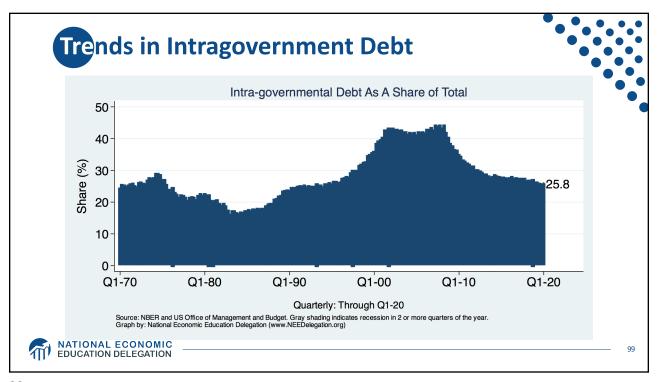
- Aid in slide deck development

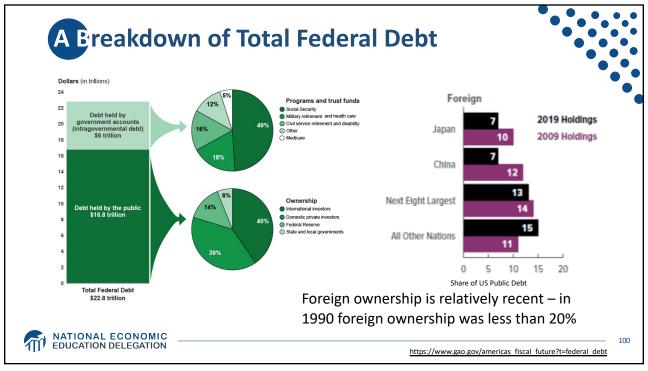


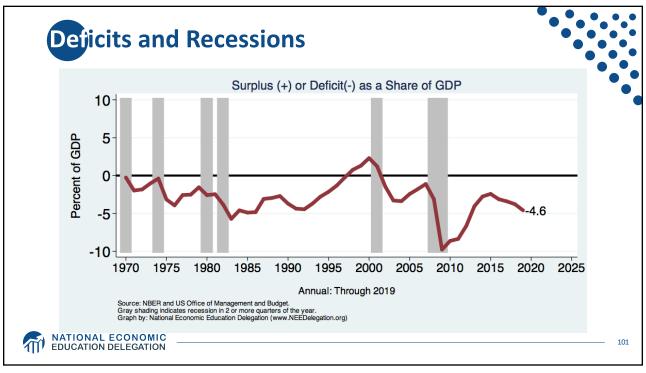
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Reagan's Experiment in Supply-Side Economics

- Tax cuts were supposed to be "investments."
 - Lower marginal tax rates, and people will work more/harder and save.
 - Higher GDP will raise tax revenue to pay for the deficit.
- Sadly, in 1981-89, debt rises from 25% to 40%.
 - For the first time, relative debt rises during a non-recessionary peacetime.
 - Reignites concern about debt and deficits.
- Failed experiment?



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Traditional View: Cost 1



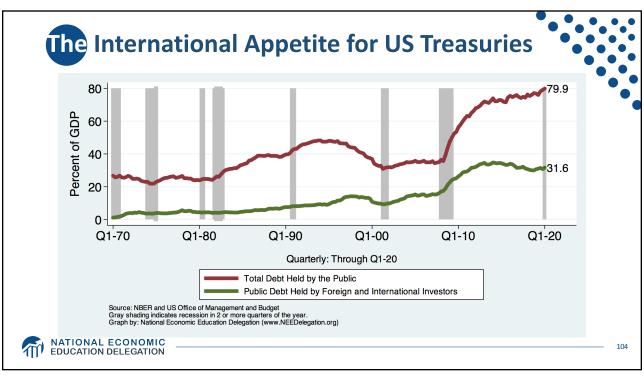
Rising debt reduces investment.

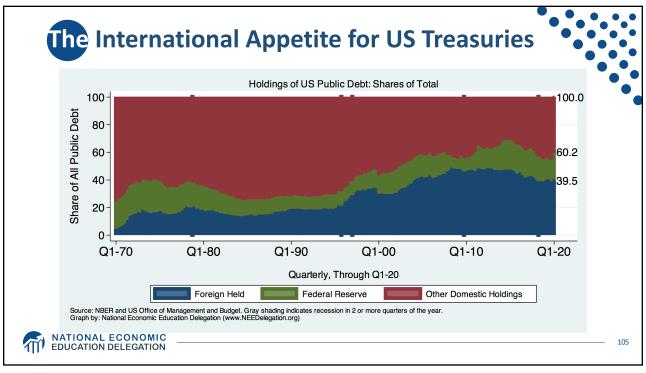
- Deficits and debt raise aggregate demand.
 - o Direct government spending.
 - o Lower taxes lead households to spend more.
- To offset this increase in demand, the Fed has to raise interest rates, reducing investment and future GDP.
- By causing interest rates to rise:
 - o debt and deficits "crowd out" investment.



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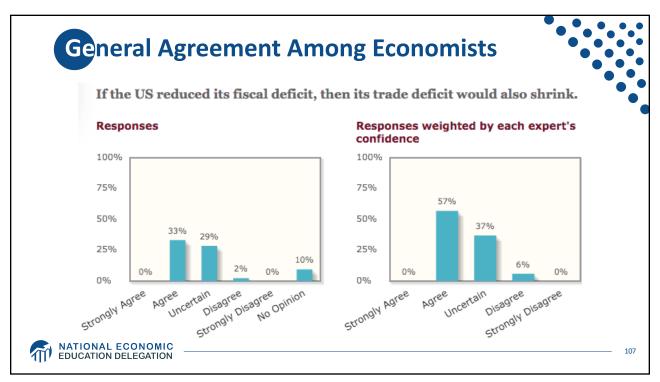
2005: The International Dimension to Debt

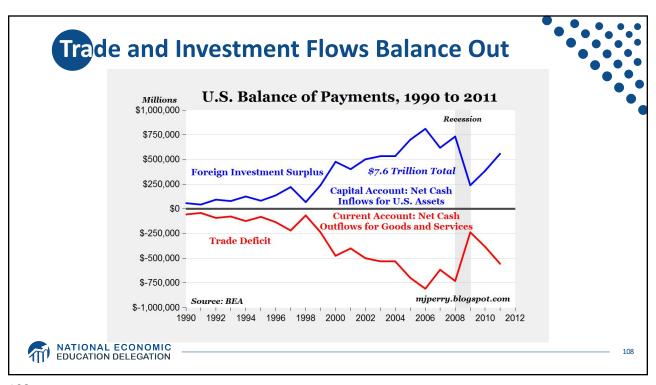


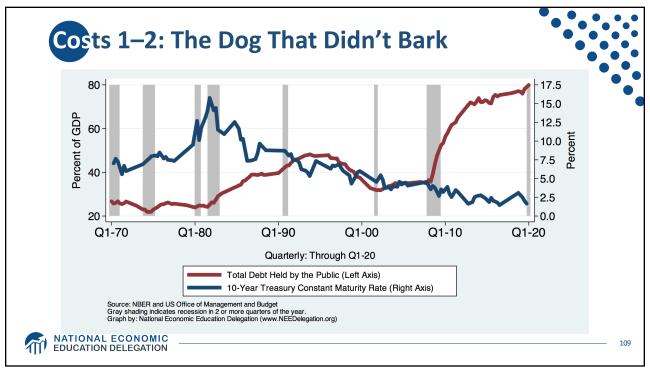
- Interest on foreign-held debt reduces US residents' welfare.
 - Interest payments go to other countries.
- When the Fed raises interest rates, the exchange rate of the dollar rises, causing:
 - 1. Increases in the trade deficit
 - 2. Foreign borrowing.
- Sharp increases in interest rates and the cost of imports raises the possibility of a fiscal crisis or a "run on the dollar."



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Traditional View: Cost 3

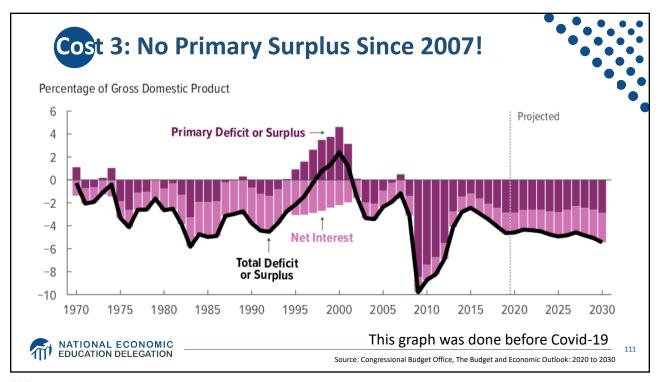


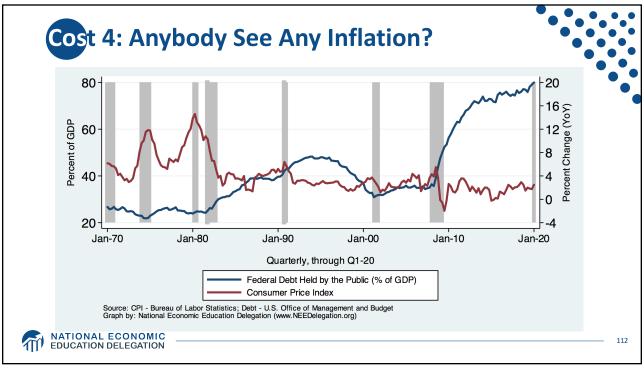
• Rising debt reduces budgetary options.

- More debt means higher interest costs.
- Therefore, greater relative debt:
 - o requires a bigger primary surplus to stabilize the relative debt.
- Larger primary surplus means either higher tax rates or less government spending:
 - o <u>"crowding out" of outlays and/or tax cuts.</u>



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- 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.





A More Reasonable, But Still Optimistic View



Olivier Blanchard:

- Emeritus Professor at MIT
- Chief Economist at the IMF, 2008–2015
- President of the American Economic Association, 2018





AEA Presidential Address, January 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."



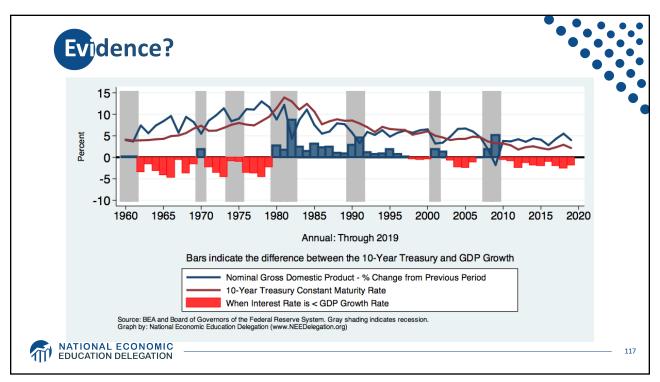
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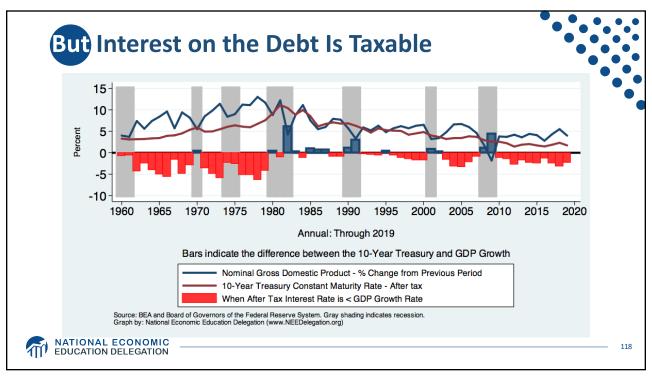
An Almost Free Lunch



- If the interest rate is *less* than the growth rate of GDP, then the contribution from the primary budget can be positive, or
- Debt to GDP can be stabilized with a (small) primary deficit.
- Blanchard is not MMT (when the crisis is over)
 - 1. Relative debt must be stabilized.
 - 2. Primary deficit must be reduced.
 - 3. But the level of debt at which we stabilize may not be crucial.











Any Questions?

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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: HR 6036 VA Family Leave Act of 2020
 - Projections of Debt and Deficits: The Budget and Economic Outlook, 2020 to 2030



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