

Osher Lifelong Learning Institute, Spring/Summer 2024

Contemporary Economic Policy

University of Minnesota

Lead: Geoffrey Woglom, Ph.D. (grwoglom@gmail.com)

National Economic Education Delegation



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National Economic Education Delegation



- 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.



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)
- 3 Nobel Prize Winners
 - o Akerlof, Smith, Maskin

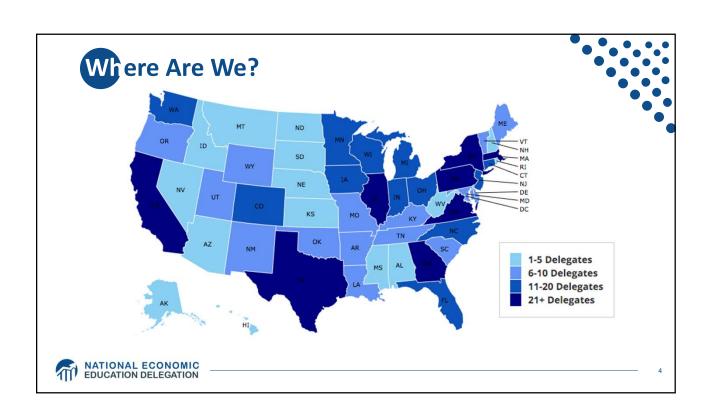
• Delegates: 652+ members

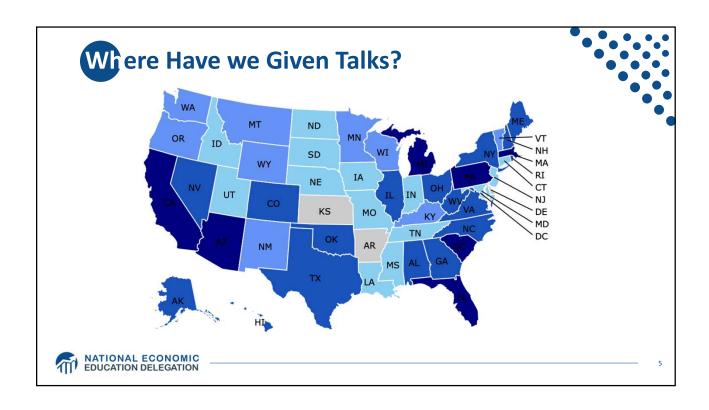
- At all levels of academia and some in government service
- All have a Ph.D. in economics
- Crowdsource slide decks
- Give presentations

Global Partners: 48 Ph.D. Economists

- Aid in slide deck development







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
- US Social Policy



О





- Contemporary Economic Policy
 - Week 3 (6/20): Federal Debt and Deficits (Joseph Carolan, Oakland University)
 - Week 4 (6/27): Economics of Immigration (Robert Gitter, Ohio Wesleyan)



/

Mexican-Born People in the US (next week) 1980 (2,199,000) (4,298,000) (4,298,000) (11,711,000) (10,932,000) 1 in 14 people born in Mexico currently lives in the US NATIONAL ECONOMIC NATIONAL EC

Submitting Questions

- Submit questions in the chat or by raising your digital hand.
 - I will try to handle them as they come up. But with a large class it may be unwieldy and get us too far afield
- We will do a verbal Q&A once the material has been presented.
- Slides will be available from the NEED website tonight (https://needelegation.org/delivered_presentations.php).
- Dr. Wolgrom's macro-site: https://sites.google.com/view/macro-current-issues/home



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The US Federal Debt

University of Minnesota June 20, 2024

Joseph Carolan, Ph.D.
Oakland University









- Feelings about debt often personal
- How you feel....depends on
 - Experiences
 - Risk profile
 - Many other things...
- Let's start with a key definition



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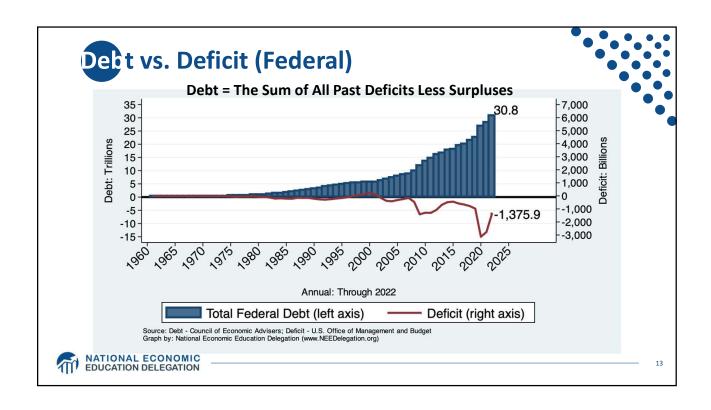
Debt: definition

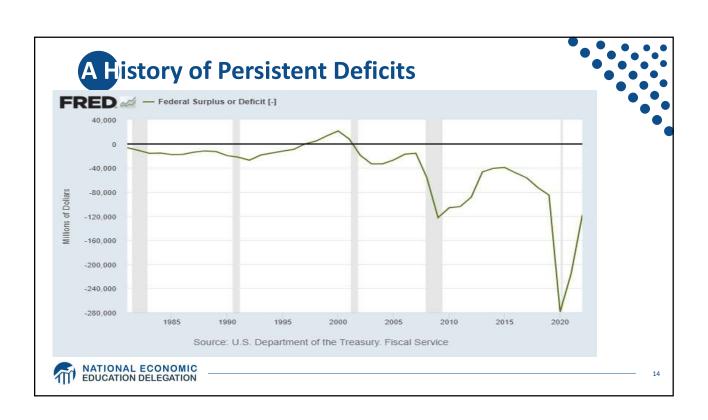
NOTE: Debt = negative savings



- Fiscal year Deficit = Total Outlays Less Revenues
- Accumulated value of past borrowing is total (*government/personal) debt*.







Deficits: Personal





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Debt: Personal (& Federal)



- What do we use it for / why need it?
- From whom / how do we get it? Does is matter from whom?
- When does it become problem?



Debt: What do we use it for?

- Unexpected emergencies we need \$ now!
- Use it for investment (not speculating, economic investment which creates value greater than the cost of capital – ROI>WACC)
 - Education
 - Think: businesses using it to grow!
- Don't make enough to cover expenses
- Buy things you want now, don't have the money → implies you will have it later
- Big purchases
 - Individuals: house, car, education, other
 - Gov't: National Defense, Transportation, Education, other (Discretionary)



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Where do we get it from?



- Friends & family
- Government
- Loan Shark
- Stock market (if publicly traded firm)
- Etc.





Everybody Loves Raymond Robert Needs Money

S7 E6: After deciding to lend Robert \$1,000 when he complains he's struggling with finances, Ray and Debra are surprised when Robert uses the money for a vacation to Las Vegas. After Robert resists taking the money, because he's concerned he can't pay it back, Ray and Debra insist it's a gift.

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- With personal debt answer depends on various moving parts, including
 - How much you make. (Debt/Income ratios, Debt Coverage Ratios...)

NOTE: "relative" debt does matter

with Govt it's Debt/GDP ratio → & rate of GDP *growth* is key

- Where do you get debt from?
- How much does it cost you?
- Can you pay it back?



Debt: When does DEBT become a problem?

- Can't pay it back
- Creditors demand repayment
- Interest rates too high
 - Requires higher ROI
 - Interest payments eat up too much of income
- Gets too big (relative to what?)
- Damages credit rating severely
 - Hurts ability to borrow again
 - Increases cost of borrowing
- Things don't go as planned....
- Others?

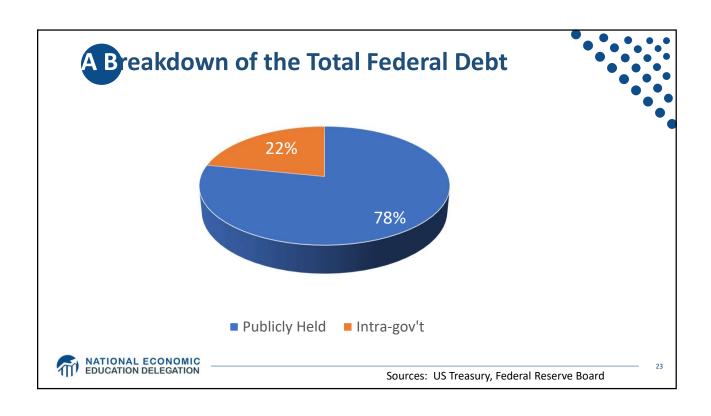


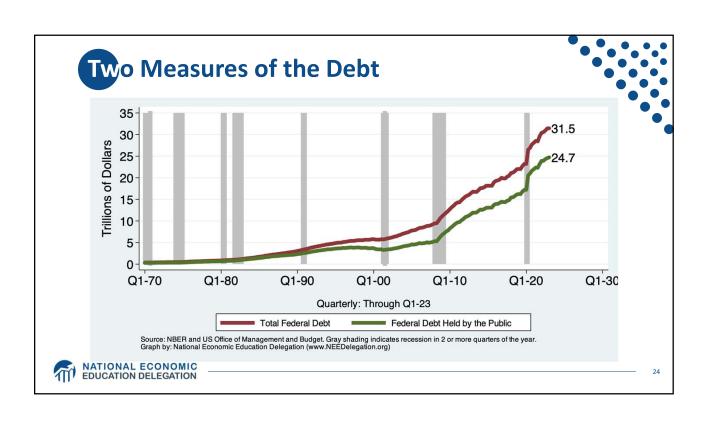
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Federal Debt: measures of debt

- Total Debt vs. Publicly-held Debt
- 'Relative' debt (AKA "debt to GDP ratio")









- Why just public debt? Has to be "repaid" & is subject to interest rate fluctuation
 - Process of repayment: "rolling over" (in a bit)
 - Interest rate fluctuations: will explore a bit later
- For now, consider internal debt just bookkeeping, public debt needs to be "repaid" so we



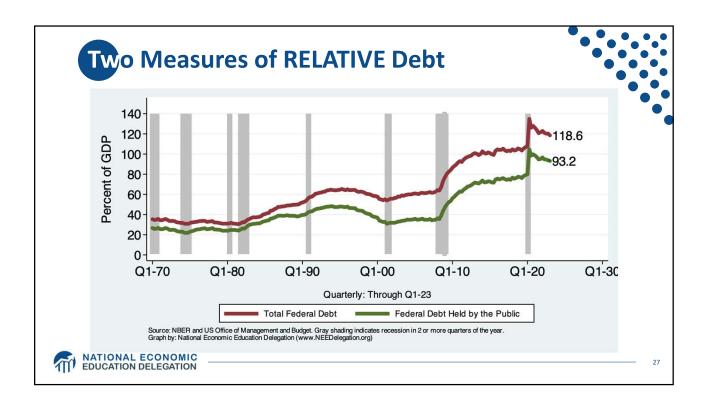
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- Most analyses focus on public debt relative to size of the economy (i.e. GDP)
- Relative debt is a fraction: Debt/GDP
- Can decrease if:
 - The *numerator* falls (means: have budget surplus)
 - The *denominator* rises (i.e. GDP grows)
 - OR, the denominator (GDP) grows faster than the numerator (debt)





Debt: What do we use it for ? (1)

- Unexpected emergencies we need \$ now!
- Economic investment (not speculating, economic investment which creates long term value greater than the cost of capital, i.e. ROI>WACC)
 - Education
 - Think: businesses using it to grow!



Common belief: Not All Govt Borrowing Is Bad!

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



These deficits do not permanently increase relative debt.

- Great Depression, WWII → Great Recession? COVID?
- Public investment expands GDP and tax revenue → ROI > WACC



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What the US Govt. Budget Looked Like 2019 2019 Budget Summary (in billions) Revenue **NOTE: Programmatic** lays Outlays = 'Mandatory' + ndatory \$2,735 Income Taxe 'Discretionary' Payroll Taxe retionary \$1,336 (you learned about these) Corporate T \$376 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

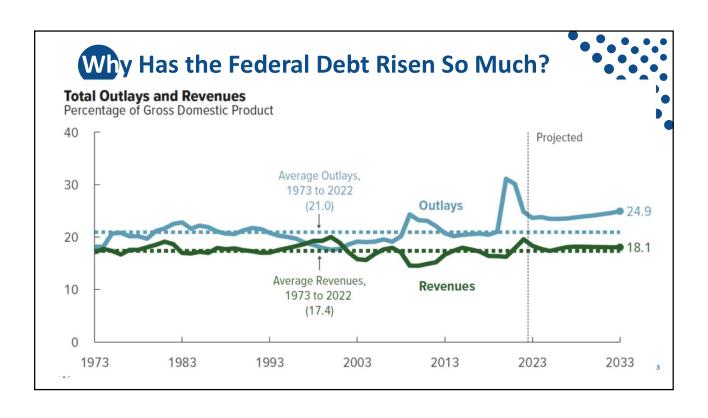


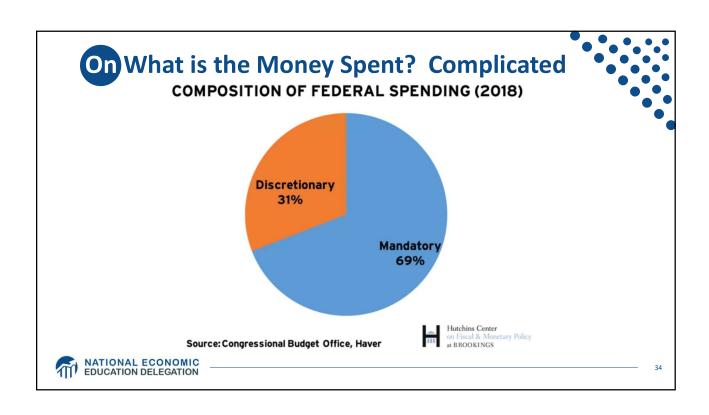


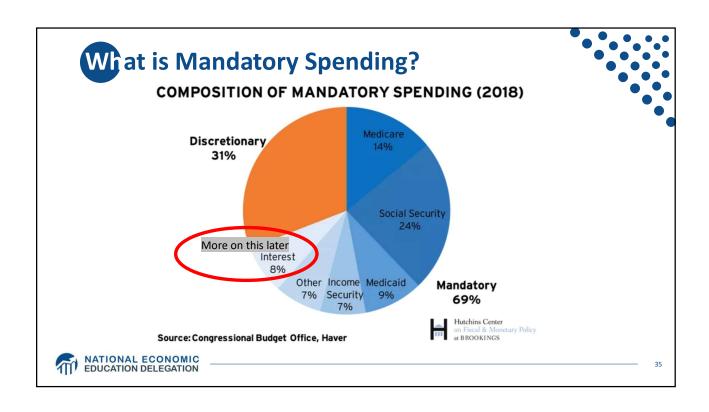


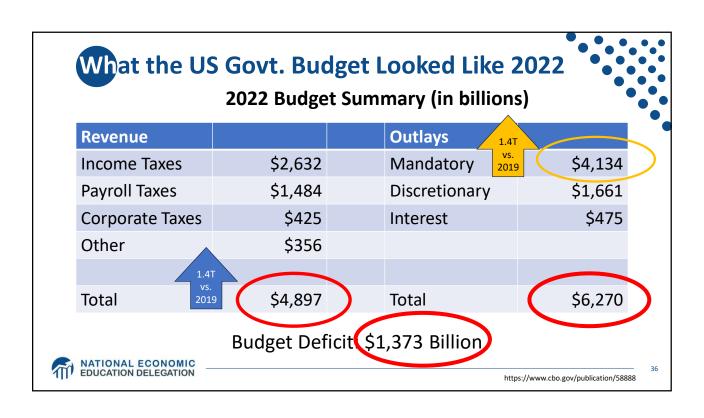
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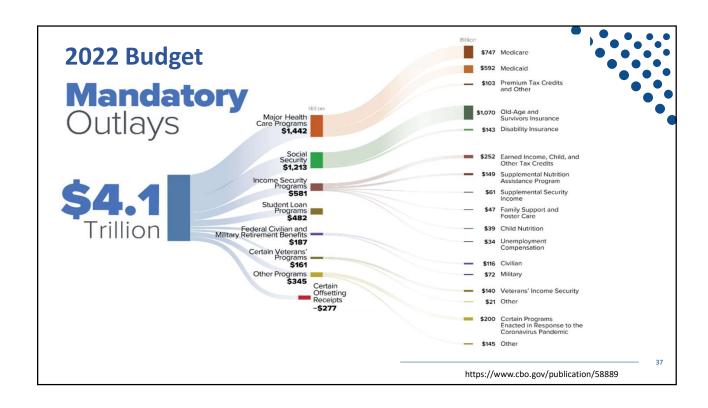


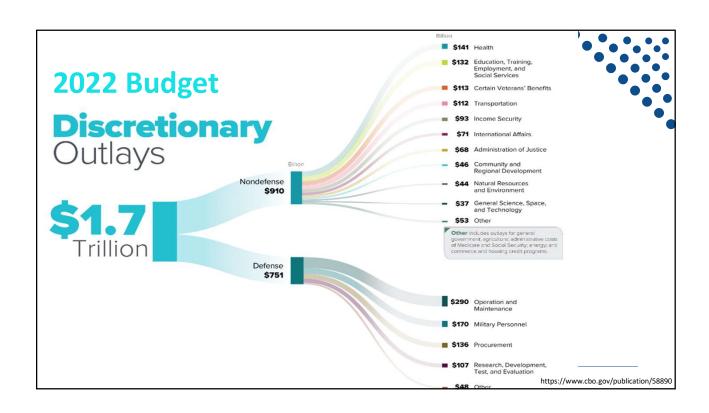


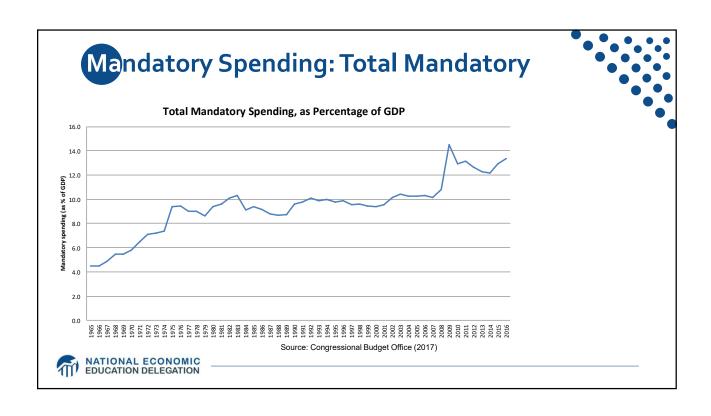


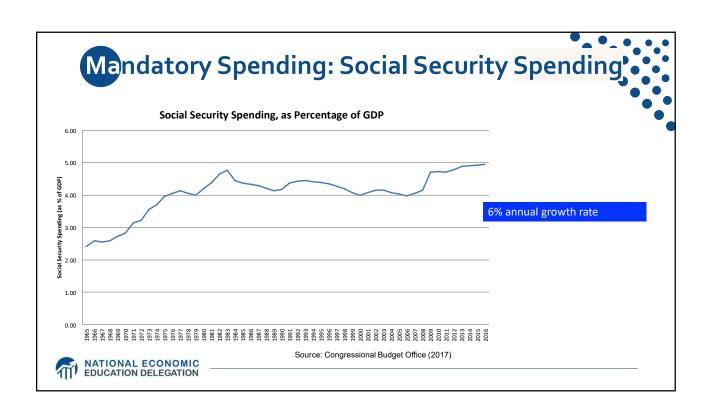


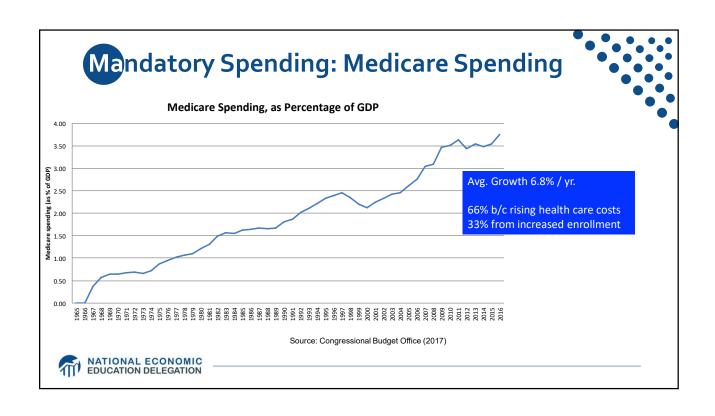


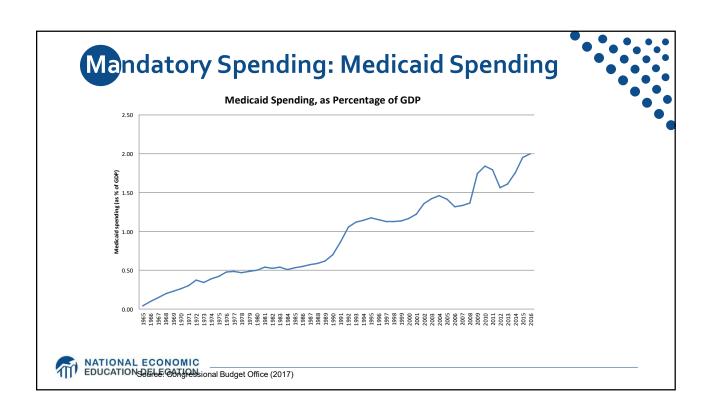


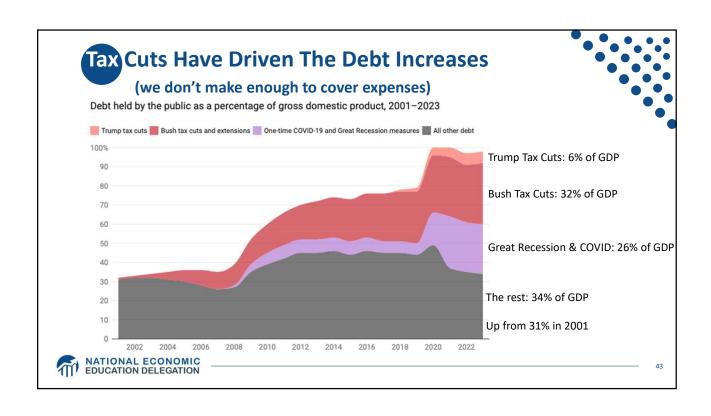


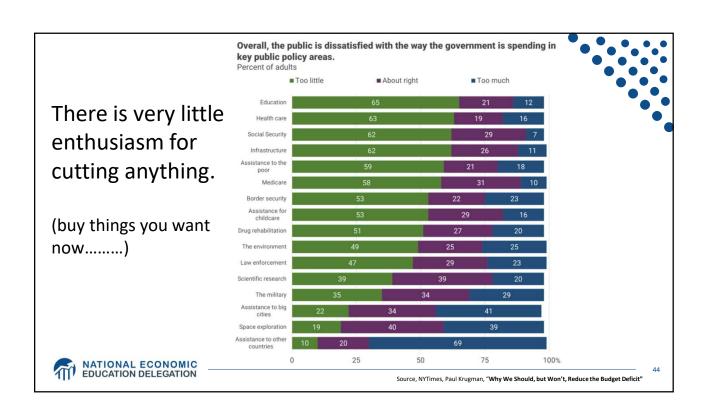








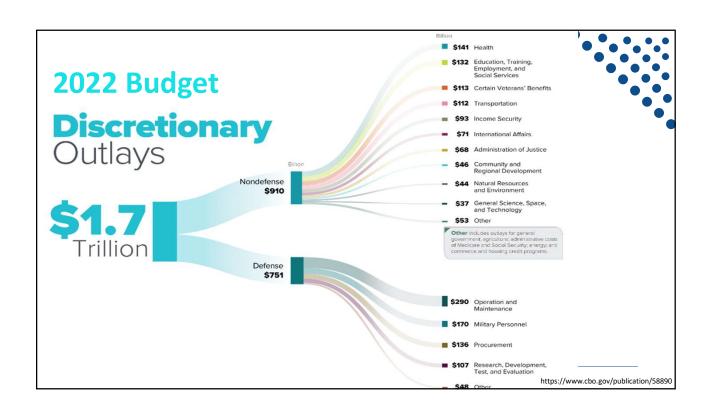


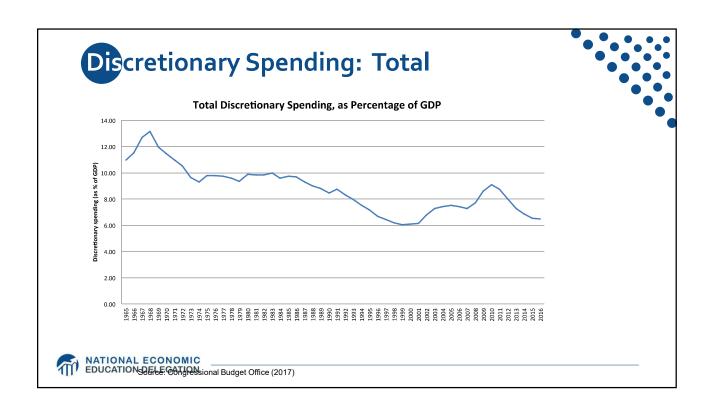


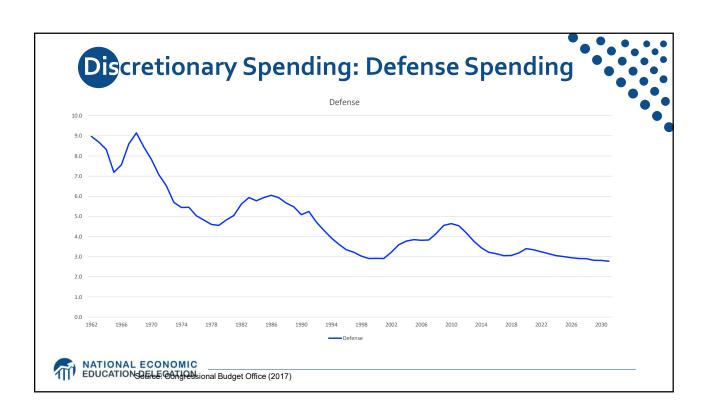
Debt: What do we use it for ? (3)

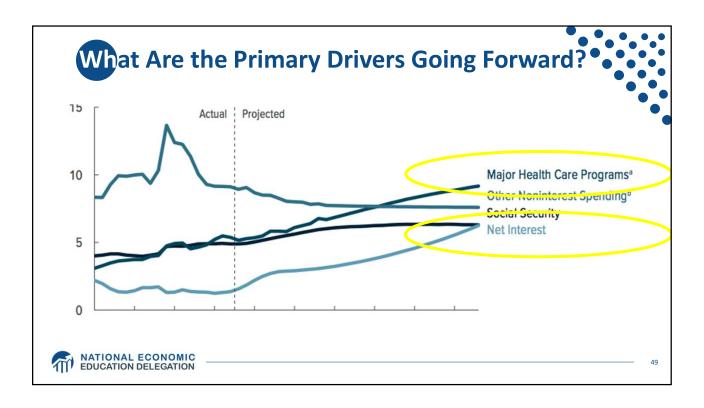
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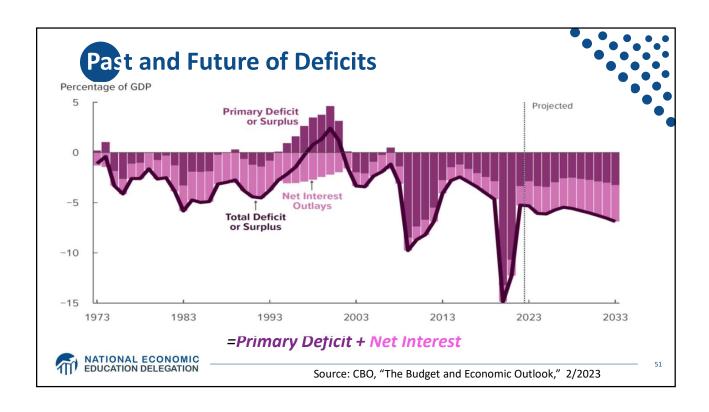


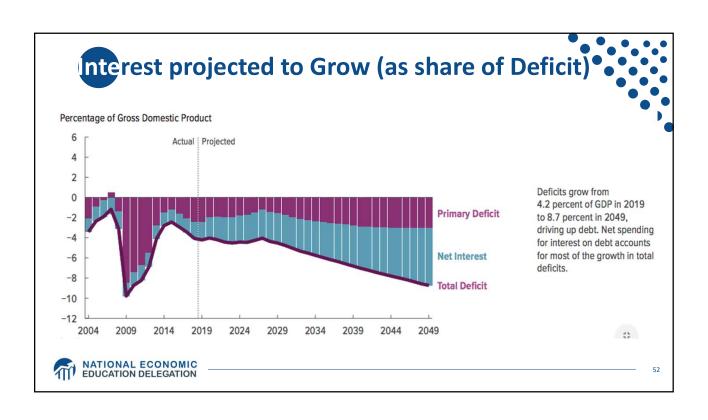


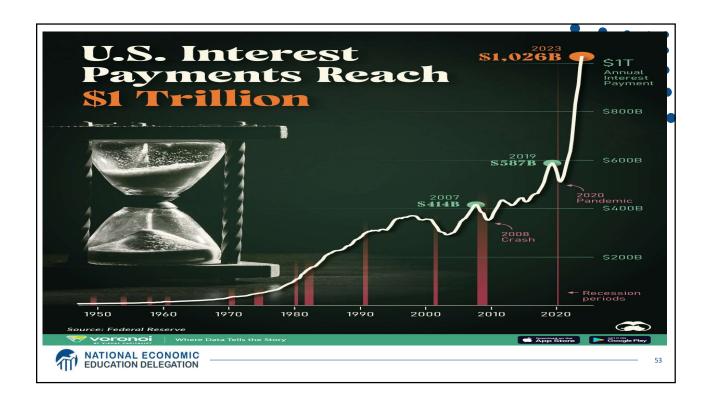


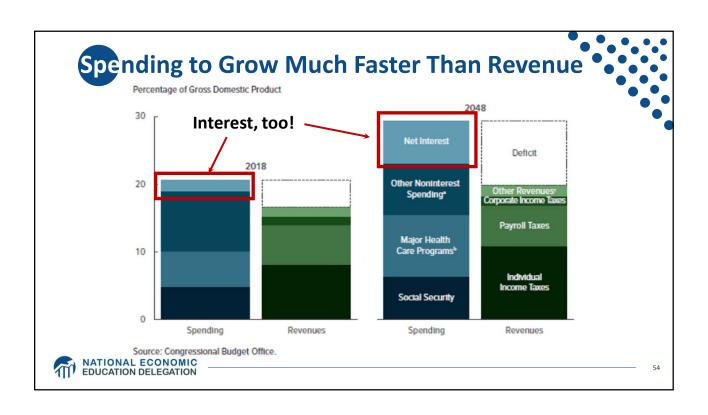
- Primary deficit = current programmatic outlays revenues
- Total deficit = primary deficit + interest
- Interest on debt:
 - Amount owed due to past deficits.
- Distinction becomes important for understanding:
 - Future course of relative debt
 - Costs borne by future generations because of debt



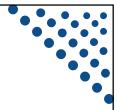








Issue: deficit spending....



- Continued deficit spending increases debt. Is this a problem?
 - If don't want deficit spending, then must
 - o Increase revenue (TAXES)
 - Decrease spending (on What?)
 - o Keep interest on debt from growing....(can we?)
- Continued deficit spending increases debt. Is this a problem?



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Options considered

Options to Reduce the Federal Deficit

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







- How much you make.

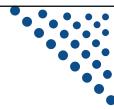
KEY: "relative" debt is Debt/GDP ratio → rate of GDP growth is key component

- Where do you get debt from?
- How much does it cost you?
- Can you pay it back?



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How Does the US Government Borrow?



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

Who buys the debt?

- Other federal agencies
- Individuals and businesses
- State and local governments
- Foreign government and individuals
- Federal Reserve

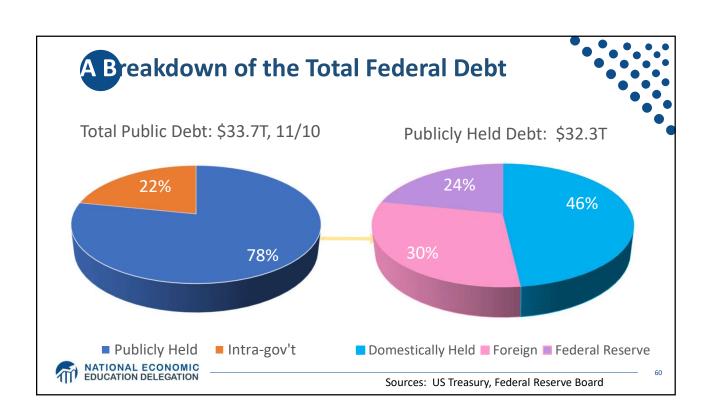


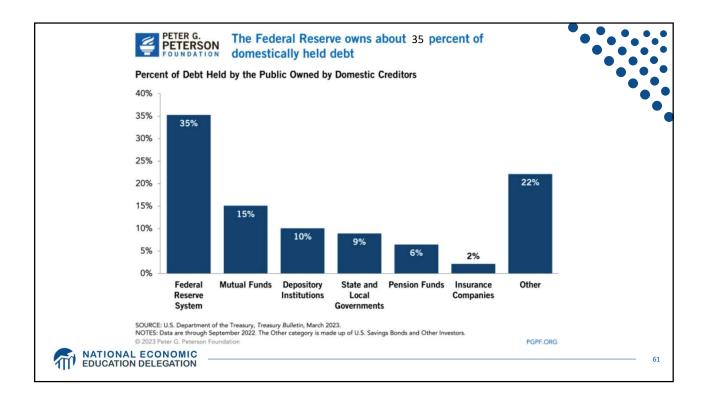
Traditional View



- Government doesn't "pay back" debt.
- Maturing government bonds paid by issuing new bonds ("rolling over" the debt)
- Interest on the debt is essentially paid by the young to previous generation of lenders (who will then get paid off by next generation...and so forth)







Debt from domestic markets



- Might reduce availability of funds to other borrowers.
 - Often referred to as "crowding out" private investment
- Intra-government debt
 - **DOES NOT** crowd out private investment.
 - **DOES NOT** require funding on credit markets
- Debt held by the public
 - **MIGHT** 'crowd out' private investment: less Private sector investment → smaller capital stock → reduced future output.
 - B/C debt funded by borrowing on credit markets and competes with private funding
 - → Think like this: savers have choices bonds, bank, stocks if give to Govt (bonds), then not there for others to borrow
- Little evidence of 'crowding out' (worth asking why? Implies funds available from elsewhere)



NIA identity

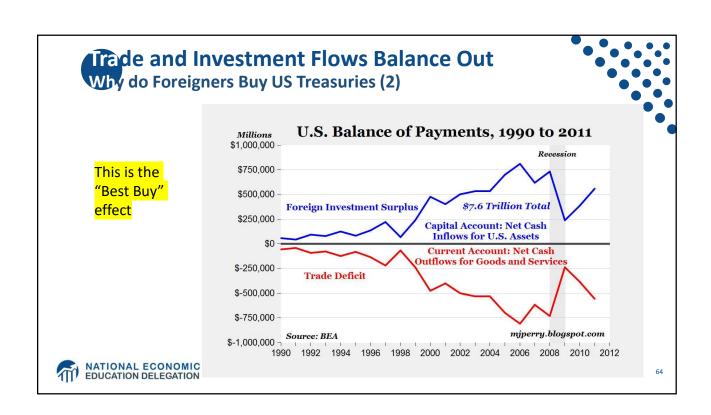


- National Income (Y)= GDP = C + I + G + NX
- $Y T = C + I + (G-T) + NX \rightarrow (G T) = Budget Deficit (BD)$
- Y − T − C = National Private Savings (Spvt)
- Spvt = I + BD + NX \rightarrow if NX = 0, \rightarrow this is "crowding out" effect
- BUT, NX (US) < 0 AND NX = Net Capital Outflow (-NX = NCInflow)
- So.... $S^{pvt} = I + BD + NX \rightarrow S^{pvt} NX = I + BD \rightarrow S^{pvt} + NCI = (I + BD)$

WHAT DOES THIS MEAN???

If we don't have enough savings for Investment & Budget Deficit, we need to get it from elsewhere!







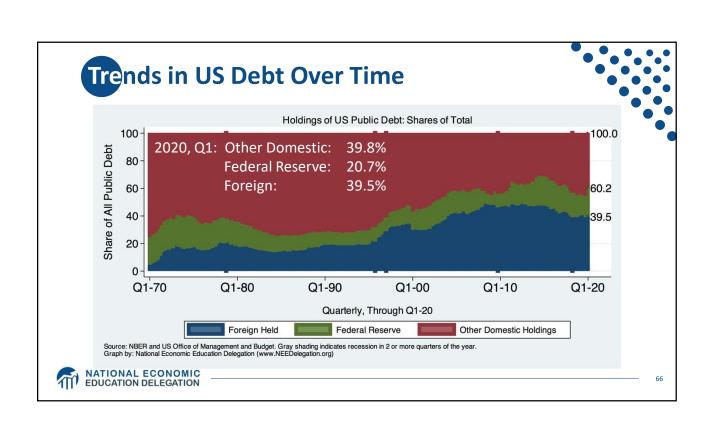
Why do Foreigners Buy US Treasuries

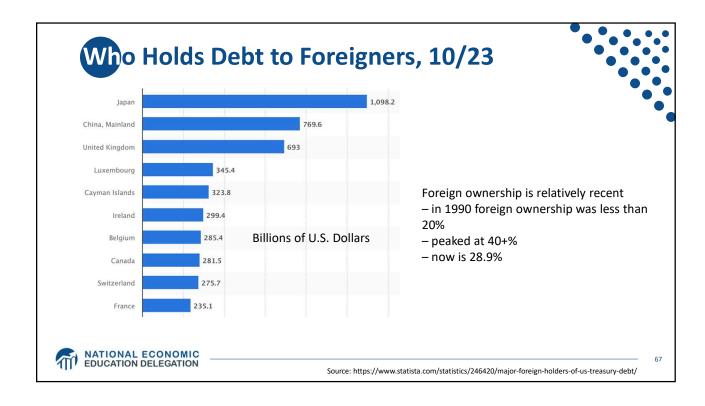


"SAFE HARBOR" (for your savings)

- 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











- Currency used for international trade
- Investors that are looking for stable ROI
- Imports & foreign borrowing go hand in hand (The "Best buy" effect)
- Fed holds foreign debt (the "poker game" idea)

• Why?

- Interest payments go to foreigners
- Possibility of a "fiscal crisis" (later)

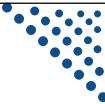


Debt: When does DEBT become a problem?

- Can't pay it back
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- Gets too big (relative to what?)
- Damages credit rating severely
 - Hurts ability to borrow again
 - Increases cost of borrowing
- Things don't go as planned....
- Others?

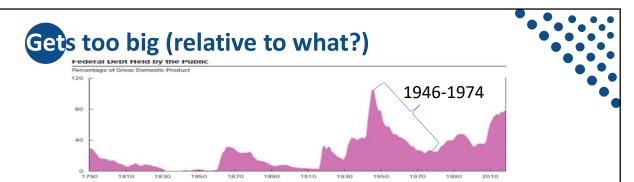


Debt: When does it become problem?



- Can't pay it back
 - Let's consider this...when won't US be able to pay it back?





What can we learn from the 46-74 period, where the relative debt fell continuously?

- Relative debt fell in spite of deficits in 21 of the 29 years, while debt increased by 42%.
- 1946-1974, grew debt, but not as fast as the economy was growing.
- While the debt grew by 42%, GDP grew by 550%

Proof that: 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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- Private sector can default / declare bankruptcy
- Stephanie Kelton (Modern Monetary Theorist)

6-6-2020, NYTimes op-ed, "Learn to Love Trillion-Dollar Deficits."

US Treasury borrows in dollars and therefore cannot default (as opposed to Greece).



Debt: When does DEBT become problem?

- Creditors demand repayment. Consider the following points
 - How government borrows (issues bonds & rolls over)
 - o Mechanics of "repayment"
 - Why lenders buy US debt
 - o 'Safe Harbor'
 - ∘ 'Best Buy' effect
 - o Investment in US Economy what do you want from investment? Failure?
 - BUT...fiscal crisis could materialize...



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What would a Fiscal Crisis Look Like?



- 1. Sale of Treasuries raises interest rates, worsening our fiscal outlook.
- 2. Trading of Foreign for US assets 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? - the "poker game"

- 1. Yes It could buy Treasuries and prevent the rise in interest rates.
- 2. But Insufficient foreign assets to prevent the fall in the exchange rate,





Debt: When does it become problem?



- Interest rates too high
 - Requires higher ROI
 - Interest payments eat up too much of income



Issue: rising interest payments



- More debt means more interest to pay as debt matures
- Rising interest rates → cost more to "roll over" debt
- Are days of very low interest rates gone?
- IF Government spending 'Crowds Out' → higher interest rates & fewer loanable funds:
 - Increases Foreign Borrowing & FDI:
 - Higher interest rates lead to foreign capital inflows or foreign borrowing.
- When the Fed raises interest rates, the exchange rate of the dollar rises, causing:
 - 1. Increases in the trade deficit
 - 2. Foreign borrowing.
- IF foreign owners panic, rates up!



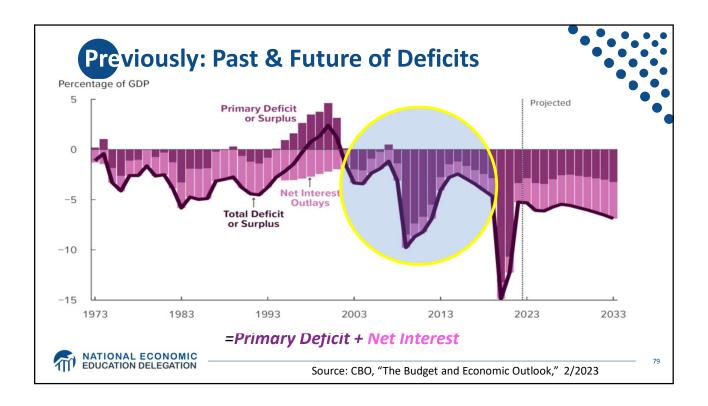


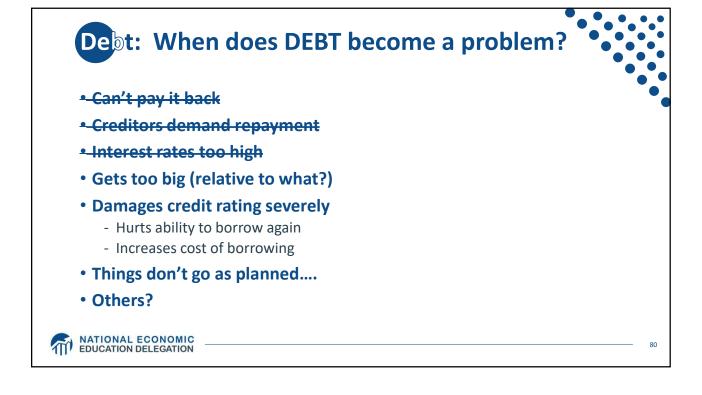
What Traditional Economic Theory Got Wrong

- 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.
- BUT....interest rates didn't behave that way



The Dog that Didn't Bark; Rising Interest Rates Blue Line Rate on 10-Yr Treasury Bonds; Red Line Relative Debt Federal Debt Held by the Public as Percent of Gross Domestic Product (left) Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quote 18.0 12.0 10.0 NATIONAL ECONOMIC EDUCATION DELEGATION





ssue: how big is too big?



- Debt is growing b/c
 - Primary deficits continue to grow
 - Interest payments continue to grow
- When should we start to worry that it's getting too big?
- Economists: if traditional view, wrong, then what to think?
 - MMT (Kelton)
 - Blanchard



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New(er) View: MMT's 'Free Lunch'



- 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."
- Dr. Kelton again
 - 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





- Recent rise in inflation suggests free and easy application of MMT theories – acting boldly in times of emergency, finding money via Fed, etc – might lead to problems.
- Deficit spending needs to be reigned in....?



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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*

Olivier Blanchard (economist @ MIT, Head of IMF..):

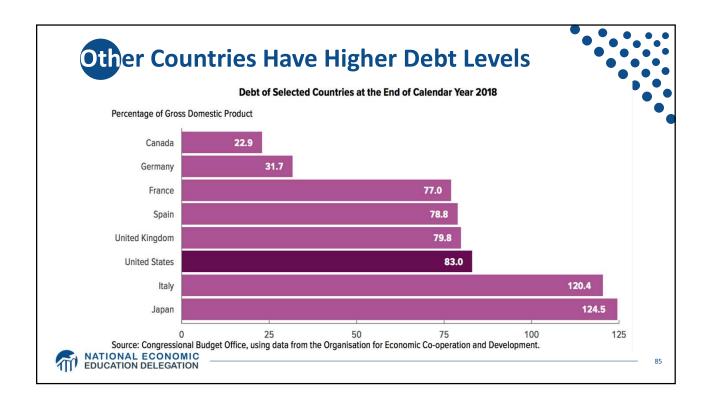
"If the future is like the past [with low interest rates],...the issuance of debt without a later increase in taxes may well be feasible. Put bluntly, public debt may have no fiscal cost."

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."

- Blanchard does believe that the relative debt must be stabilized
 - 1. At some point current deficits should be reduced.
 - 2. But it may not be crucial at what level of debt we stabilize.





• IF Relative does grow, then we encounter issues with lenders - Interest payments will grow with it. - Investors might start questioning the creditworthiness of the US government - Interest rates might increase - It becomes more difficult to borrow in times of crisis. - Could start to crowd out investment by consumers and businesses. - Could be inflationary. • May not present a problem if GDP > Interest rates (Blanchard)

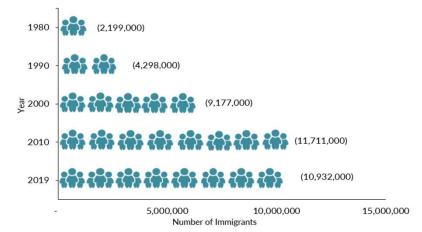
Takeaways / talking points

- Can't technically default, nor technically have to "repay"
 - "Rolling over" debt may cost more in future
- The current trajectory for the federal debt seems unsustainable
- · Persistence of deficit spending will increase need to borrow
 - What should we cut?
- Debt service will increase due to
 - Deficit spending, thus more borrowing
 - Possible increased interest rates
- Good borrowing may become more difficult if relative debt grows
 - Economic investment may lack
 - Emergency borrowing ability may be constrained
- Increased debt service may "crowd out" private investment
- Debt held by foreigners increases may lead to 'fiscal crisis'
- Relative debt stabilization may be handled by combination of GDP growth and low interest rates



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Reminder, next: Mexican-Born People in US



1 in 14 people born in Mexico currently lives in the US









www.NEEDEcon.org Joseph Carolan, Ph.D. carolan@oakland.edu

Contact NEED: info@NEEDEcon.org

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Fee eral 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



Fee eral 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.

