



# The US Federal Debt

Alameda Chamber of Commerce  
November 18, 2020

Geoffrey Woglom  
Amherst College  
Professor of Economics (Emeritus)




 NATIONAL ECONOMIC  
EDUCATION DELEGATION

1

1

## National Economic Education Delegation

- **Vision**
  - One day, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.
- **Mission**
  - NEED unites the skills and knowledge of a vast network of professional economists to promote understanding of the economics of policy issues in the United States.
- **NEED Presentations**
  - Are **nonpartisan** and intended to reflect the consensus of the economics profession.

 NATIONAL ECONOMIC  
EDUCATION DELEGATION

2

2

## Who Are We?

- **Honorary Board: 48 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: 500+ 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: 45 Ph.D. Economists**

- Aid in slide deck development



3

## Available NEED Topics Include:

- **US Economy**
- **Climate Change**
- **Economic Inequality**
- **Economic Mobility**
- **US Social Policy**
- **Trade and Globalization**
- **Trade Wars**
- **Immigration Economics**
- **Housing Policy**
- **Federal Budgets**
- **Federal Debt**
- **2017 Tax Law**
- **Autonomous Vehicles**



4

## Credits and Disclaimer

- **This slide deck was authored by:**
  - Jon Haveman, Executive Director, NEED
  - Geoffrey Woglom, Amherst College, Emeritus
- **Disclaimer**
  - NEED presentations are designed to be nonpartisan.
  - It is, however, inevitable that the presenter will be asked for and will provide their own views.
  - Such views are those of the presenter and not necessarily those of the National Economic Education Delegation (NEED).



5

## Outline

- I. **Debt Basics**
  1. *Definitions and Data.*
  2. *Not all deficits are bad, but since 1982, deficits have not served economic purpose.*
- II. **Economic Costs of the Debt**
  1. *Traditional View: based on rising interest rates*
  2. *But interest rates haven't risen; causing economists to rethink traditional view*
  3. *Two New Optimistic Views*
    1. *Modern Monetary Theory (MMT): Federal Debt Free Lunch!*
    2. *Olivier Blanchard: Stable debt has little cost.*
  4. *A Scarier (More Realistic) View with a Silver Lining*
- III. **The Path Forward**



6

# What Does the U.S. Gov't Budget Look Like?

## Fiscal 2020 Budget Summary

Revenue	Billions	Outlays	Billions
Income Taxes	\$1,609	Mandatory	\$2,315
Payroll Taxes	\$1,310	Discretionary	\$3,850
Corporate Taxes	\$212	Interest	\$387
Other	\$289		
<b>Total</b>	<b>\$3,420</b>	<b>Total</b>	<b>\$6,552</b>

Budget Deficit **\$3,132**



Source: Congressional Budget Office, *Monthly Budget Review*, Nov 2020

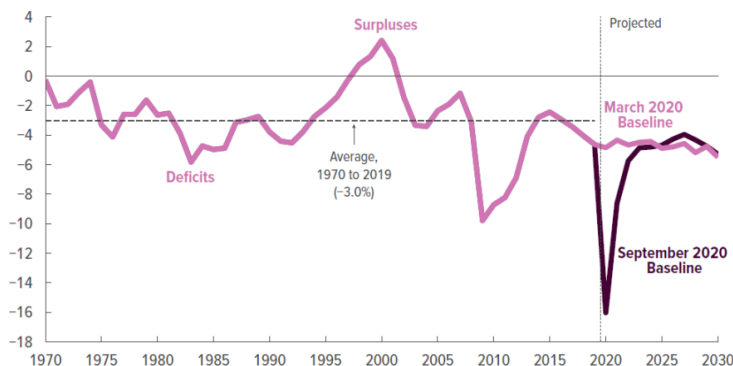
7

# Past and Future of Deficits

Figure 1.

## Deficits in CBO's September 2020 Baseline Versus Its March 2020 Baseline

Percentage of Gross Domestic Product



The deficit in 2020 will be the largest since 1945 as a percentage of GDP. Under current law, it is projected to shrink over the following few years, eventually returning to levels similar to those CBO projected before the coronavirus pandemic. Nevertheless, annual deficits would exceed their 50-year average throughout the 2021–2030 period.

Source: Congressional Budget Office.

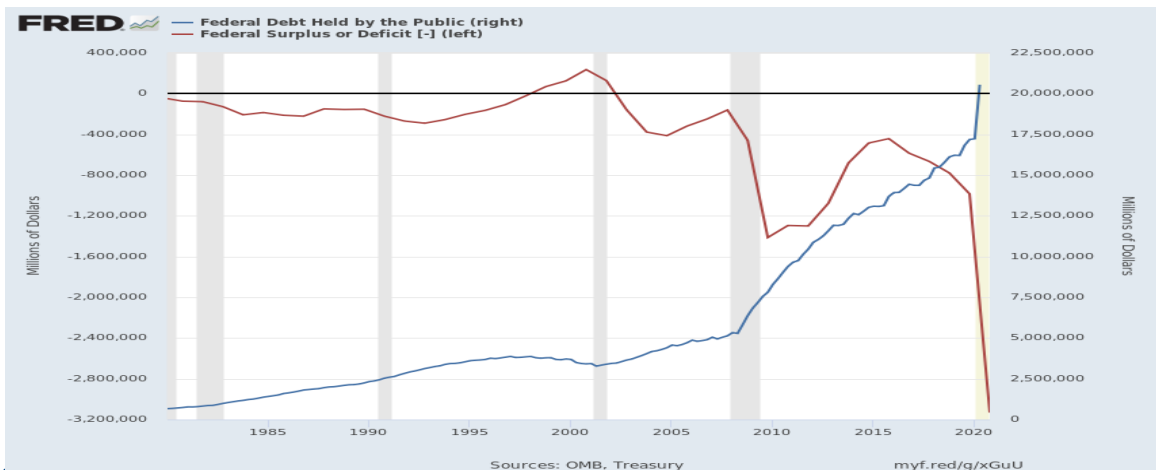


Source: Congressional Budget Office, *The Budget and Economic Outlook: 2020 to 2030*

8

# Debt vs. Deficit

## The Sum of All Past Deficits Less Surpluses Equals the Debt

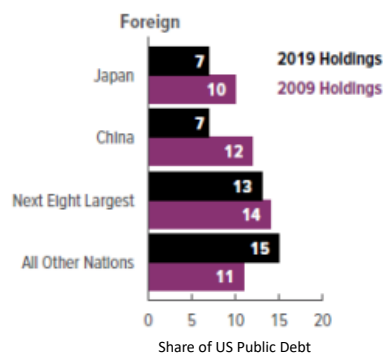
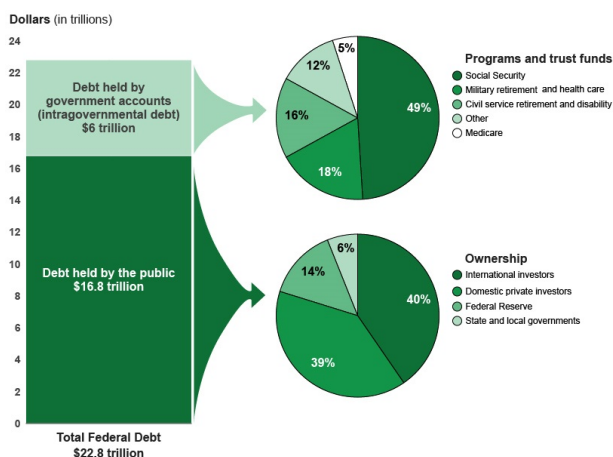


NATIONAL ECONOMIC EDUCATION DELEGATION

9

9

# A Breakdown of the Total Federal Debt



As of 8/20, Japan holds \$1.3 trillion  
China Holds \$1.1 trillion,  
<https://ticdata.treasury.gov/>

NATIONAL ECONOMIC EDUCATION DELEGATION

<https://www.cbo.gov/system/files/2020-03/56165-CBO-debt-primer.pdf>

10

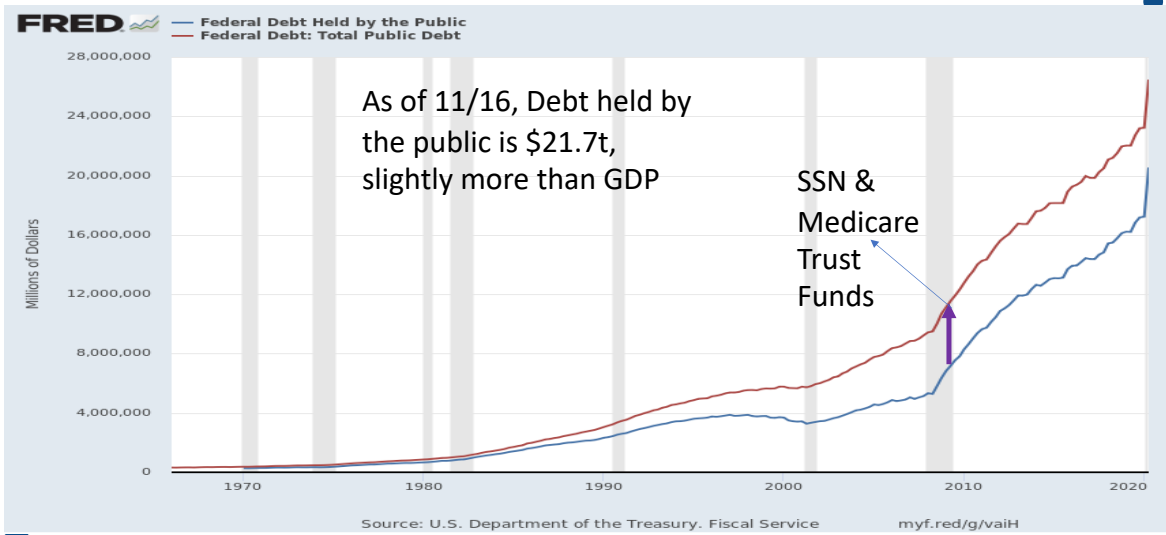
10

## Not All Debt Is Created Equal

- **Some debt can reduce the availability of investment funds to other borrowers.**
  - Often referred to as “crowding out” private investment
  
- **Intra-governmental debt is important bookkeeping.**
  - This debt **DOES NOT** crowd out private investment.
  
- **Debt held by the public**
  - This debt **MAY** crowd out private investment.
  
- **Most analyses of debt focus on the federal debt held by the public.**

11

## Two Measures of the Debt



12

## 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



13

## The All Important *Relative* Debt

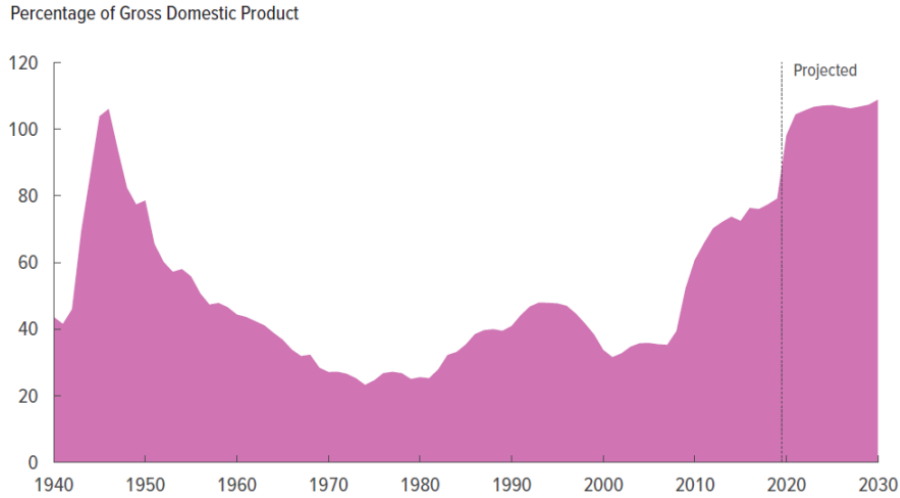
- CBO, analyzes the debt *relative* to GDP because:
  - To the extent that debt and deficits have burdens these burdens depend on the size of the debt *relative* to the size of the economy.

2018	Total Public Debt	Relative Debt Debt/GDP
United States	\$17.0 Trillion	80%
Greece	\$0.4 Trillion	176%



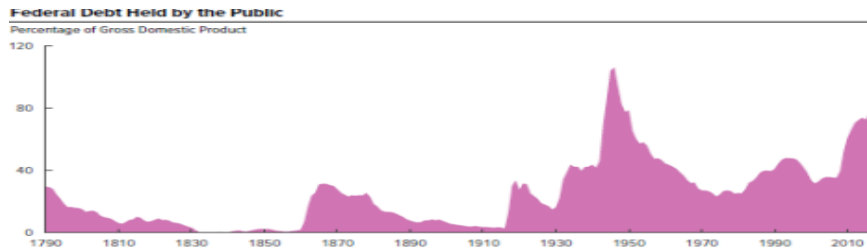
14

## Relative Debt since 1940 and Projections



15

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



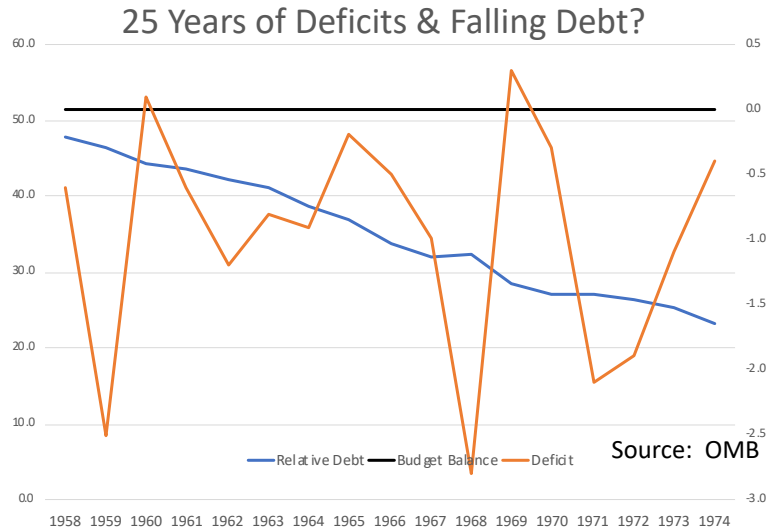
1. Relative debt peaked during WWII (106%) - followed by a steady decline until the 1980s.
2. Prior to 1983, relative debt rose purposefully (wars and recessions) and then fell.
3. Recently, relative debt has been and is expected to continue to rise for the next 30 years w/o strategic purpose.

16



## What Caused the Post WWII Rel. Debt to Fall?

Between 58 and 74, relative debt fell by more than 50%, 47.8% to 23.4%, in spite of only 2 years of tiny surpluses.



17

## Debt Dynamics

- **The 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*
- **1958-1974, deficits caused the debt to grow, but not as fast as GDP.**

18

## Traditional Views of the Cost of the Debt

- **First a non-issue: The analogy between household and government debt is inaccurate.**
  - The government does not have to pay back the debt.
  - Retirees cash in maturing bonds which are financed with new bond issues sold to younger people.
  - Interest on the debt is essentially paid by the young to their parents
- **Economist View of the Debt circa 1980, very little cost because relative debt is falling**

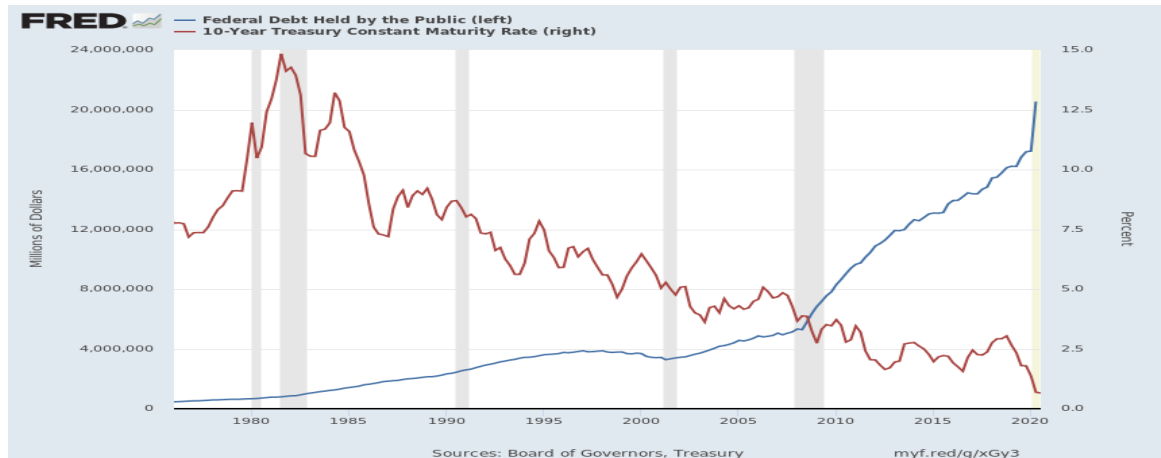


## Traditional View: Debt and Deficits Raise Interest Rates

1. **Crowding Out: Higher interest rates lead to less investment and over time to a smaller capital stock and reduced future output.**
2. **Foreign Borrowing: Higher interest rates lead to foreign capital inflows or foreign borrowing. With foreign borrowing, some of our GDP is paid to foreigners as interest.**



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



21

## Maybe Debt Isn't a Problem After All: MMT

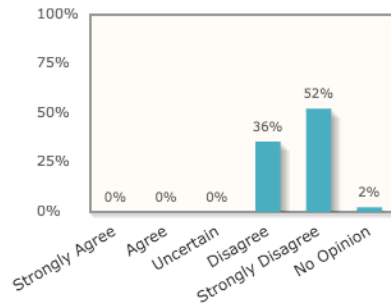
- **Stephanie Kelton provided a prominent and recent exposition of Modern Monetary Theory in her June 6<sup>th</sup> *NYTimes* op-ed, "Learn to Love Trillion-Dollar Deficits."**
  - US Treasury borrows in dollars and therefore cannot default (as opposed to Greece).
  - She argues that we can always find the money to increase federal spending.
  - Too bad the second part is not true.

22

# Don't Just Take My Word for It

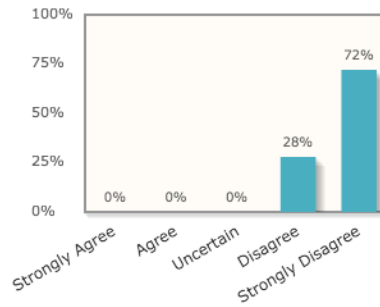
**Question A: Countries that borrow in their own currency should not worry about government deficits because they can always create money to finance their debt.**

**Responses**



© 2019, Initiative on Global Markets.  
Source: IGM Economic Experts Panel  
[www.igmcchicago.org/igm-economic-experts-panel](http://www.igmcchicago.org/igm-economic-experts-panel)

**Responses weighted by each expert's confidence**



© 2019, Initiative on Global Markets.  
Source: IGM Economic Experts Panel  
[www.igmcchicago.org/igm-economic-experts-panel](http://www.igmcchicago.org/igm-economic-experts-panel)



# 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

- **Stabilizing the Relative Debt, Debt/GDP, requires that the growth rate in debt equals the growth rate of GDP.**
- **The growth rate in debt has 2 parts:**
  1. The growth rate from interest on the debt which is just the interest rate.
  2. A contribution due to the difference between programmatic outlays less revenues
- **The traditional view assumes that the interest rate on debt is greater than the growth rate of GDP**
  - So, 2. must be negative to offset excess of 1.
  - i.e., programmatic outlays must be less than revenues.



25

## An Almost Free Lunch

- **If the interest rate is *less* than the growth rate of GDP, then Debt to GDP can be stabilized with a (small) *deficit* in programmatic outlays relative to revenues.**
- **Blanchard is not MMT (when the crisis is over)**
  1. Relative Debt must be stabilized by reducing the size of deficits
  2. But it may not crucial at what level of debt we stabilize.



26

## But why must the relative debt be stabilized

- **MMT is right that for practicable purposes the US cannot default on its debt, but...**
- **International investors, however, can still lose if the exchange value of the dollar falls.**
- **Remember, foreign holdings of the public debt amount to 40 percent of the total**



27

## Why do Foreigners Buy US Treasuries?

- **Market for Treasuries is the deepest, (usually) the most liquid capital market in the world.**
- **US economy has a history of political and economic stability.**
- **The dollar is the largest international reserve currency.**
  - Most international transactions are quoted in dollars, e.g., oil.
  - With some exceptions, foreigners borrow in dollars. E.g., Yankee bonds

**What would happen if foreigners lost confidence in the stability of the dollar?**



28

## Fiscal Crisis, or a Run on the Dollar

Concerns about the government's fiscal position could lead to a sudden and potentially spiraling increase in people's expectations of inflation, a large drop in the value of the dollar, or a loss of confidence in the government's ability or commitment to repay its debt in full...

The risk of [such] a fiscal crisis appears to be low in the short run despite the higher deficits and debt stemming from the pandemic.... Nonetheless, the much higher debt over time would raise the risk of a fiscal crisis in the years ahead.

*CBO, The 2020 Long-Term Budget Outlook, 9/2020*



## 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 or 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?**

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



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

1. Interest rates may not stay this low forever.
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.
4. Stabilizing the relative debt would substantially reduce the possibility of the crisis

But, we must substantially reduce deficits after the pandemic

CBO (*The 2020 Long-Term Budget Outlook, 9/2020*):

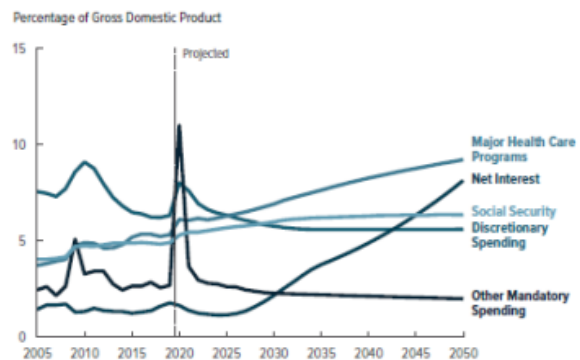
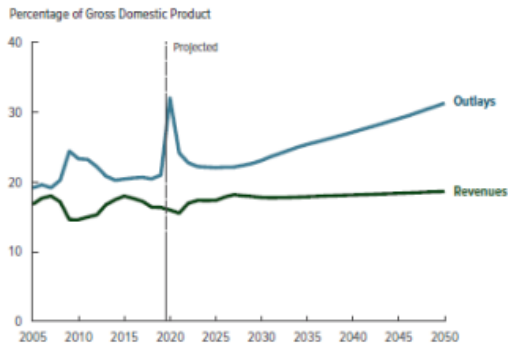
By 2025, deficit must go from projected 5% to about 3%

By 2030, deficit must go from 5.5% to about 2%



31

## Bending the Curves!



32



## You've Convinced Me: Let's Act Now!

### Cutting Off Your Nose to Spite Your Face?

- "I'm a fiscal hawk from way back, and all of my heebie-jeebies are going off when I see these numbers," said Douglas Holtz-Eakin, a Republican who used to head the Congressional Budget Office and is president of American Action Forum. "But then I look at the scale of the problem, and I think, yeah, that's that. Gotta do it." *Politico*, 4/29



## Thank you!

### Any Questions?

[www.NEEDelegation.org](http://www.NEEDelegation.org)

<Geoffrey Woglom>

<grwoglom@amherst.edu>

Contact NEED: [Info@NEEDelegation.org](mailto:Info@NEEDelegation.org)

Submit a testimonial: [www.NEEDelegation.org/testimonials.php](http://www.NEEDelegation.org/testimonials.php)

Support NEED: [www.NEEDelegation.org/donate.php](http://www.NEEDelegation.org/donate.php)

