The US Federal Debt

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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.

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2

Who Are We?

- **Honorary Board: 48 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: 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

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3

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**

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4

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- **This slide deck was authored by:**
  - Jon Haveman, Executive Director, NEED
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- **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).

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5

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			
Total	$3,420		Total	$6,552

Budget Deficit: $3,132

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

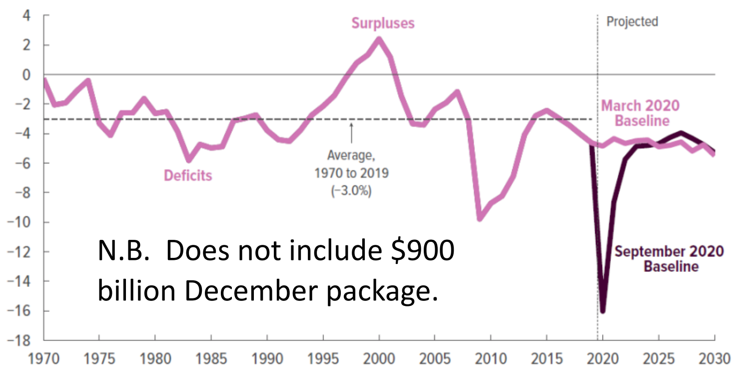
6

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.

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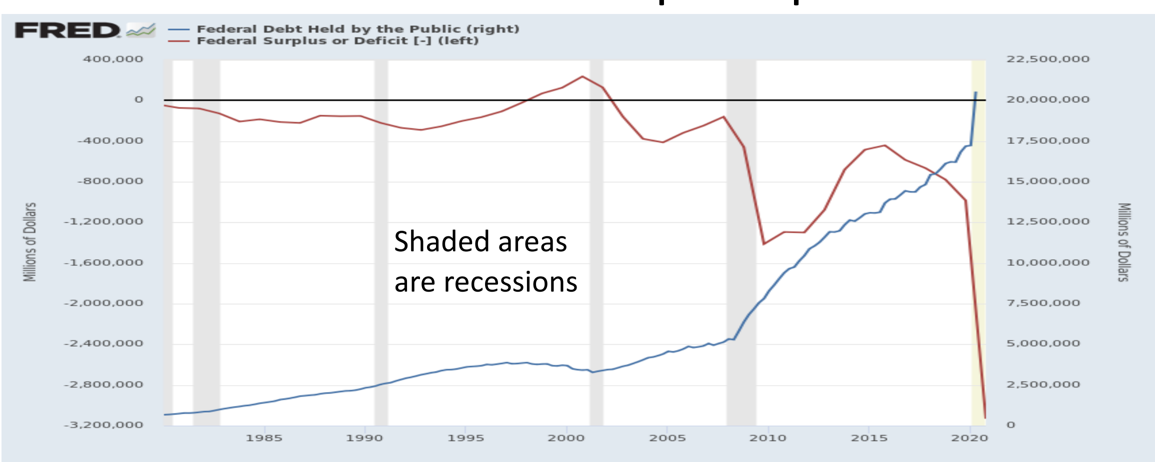
Source: Congressional Budget Office, The Budget and Economic Outlook: 2020 to 2030, 9/20

7

Debt vs. Deficit

The Sum of All Past Deficits Less Surpluses Equals the Debt



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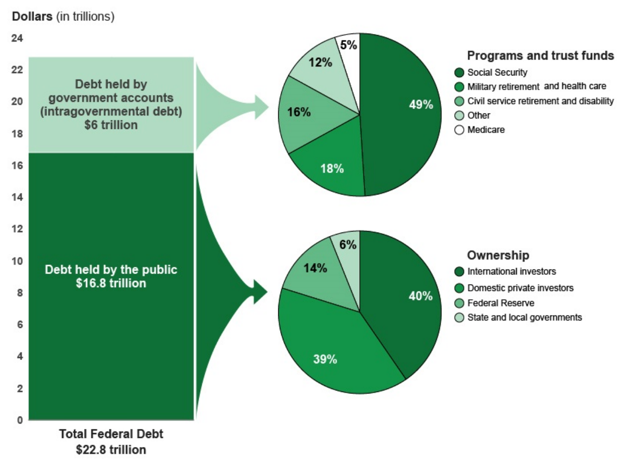
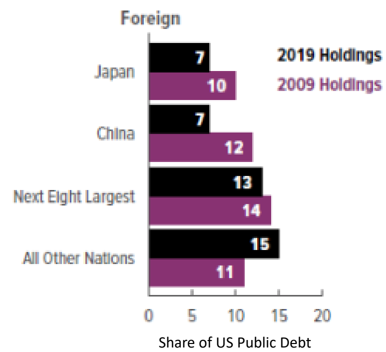
8

A Breakdown of the Total Federal Debt





As of 11/20, Japan holds $1.26 trillion
China Holds $1.06 trillion,
https://ticdata.treasury.gov/

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

9

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.**

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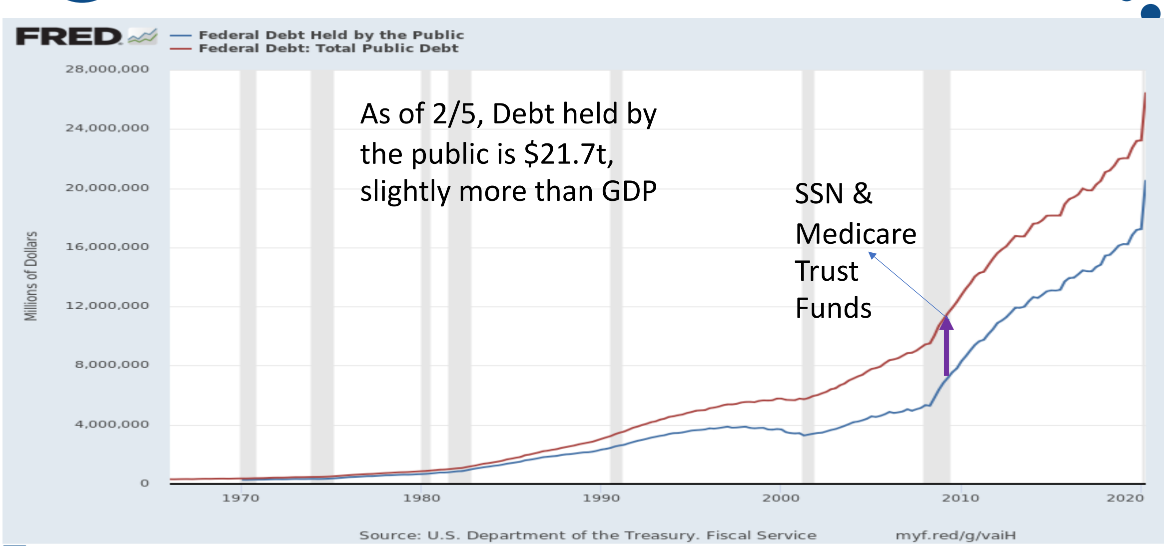
10

Two Measures of the Debt



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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 – Budgetary Effects of Wage the Raise Act of 2021
  - Projections of Debt and Deficits – The Budget and Economic Outlook: 2020 to 2030

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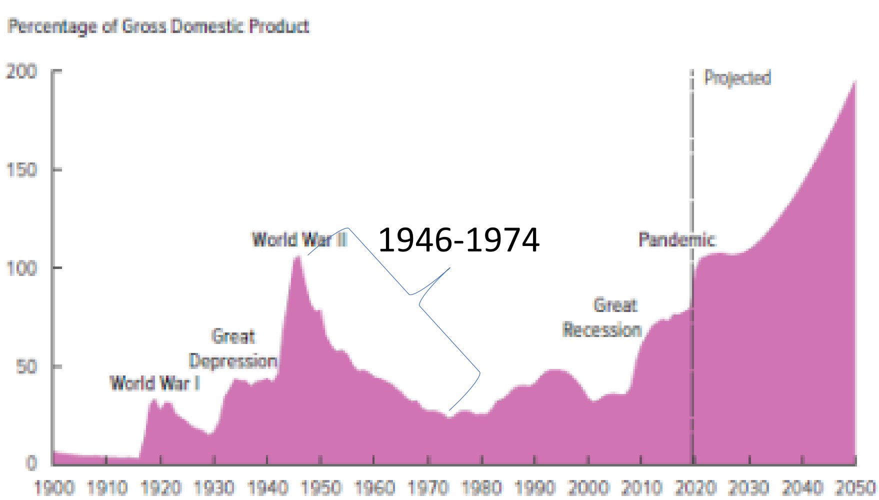
12

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%

Relative Debt since 1900 and Projections



Source: CBO, 9/2020

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.

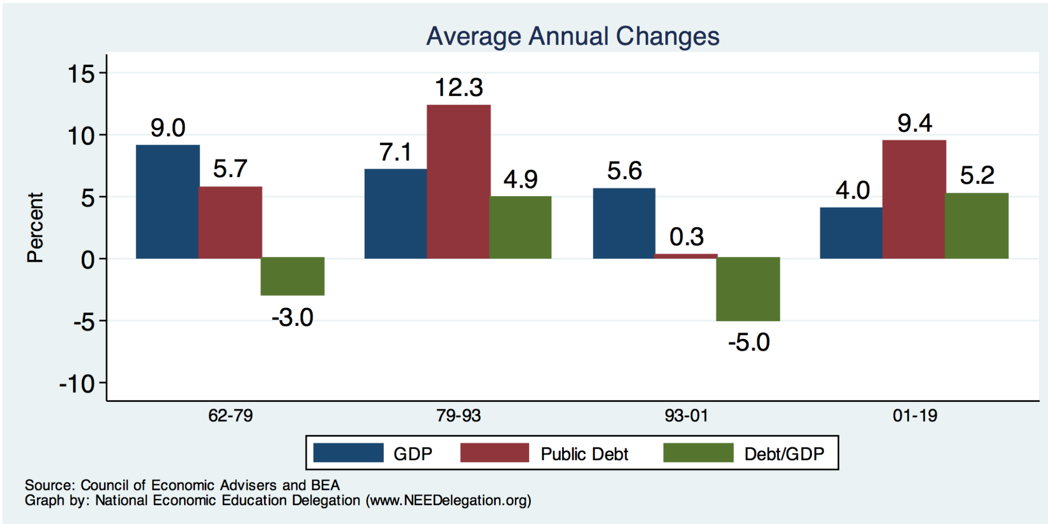
15

Debt Dynamics

- Between 1946-1974, relative debt fell continuously in spite of deficits in 21 of the 29 years, with the debt increasing by 42%. How?
- 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 then the ***numerator***
- 1946-1974, deficits caused the debt to grow, but not as fast as GDP.
- While the debt grew by 42%, GDP (nominal) grew by 550%

16

The Periods of Rising and Falling Rel Debt.



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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. That changes in 1983.**

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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.

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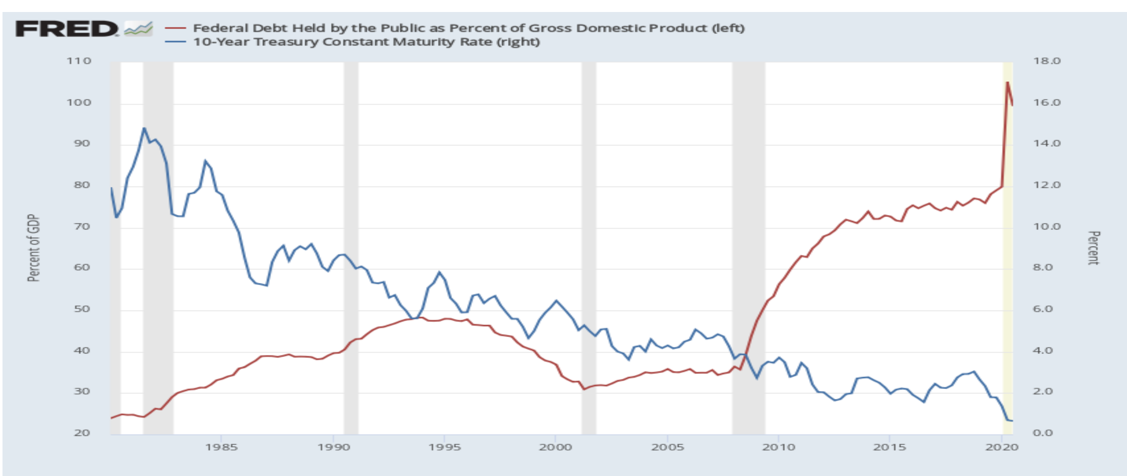
19

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



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20

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."

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21

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.
  3. If programmatic outlays equaled revenues the debt would grow at the interest rate.
- **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.

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22

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

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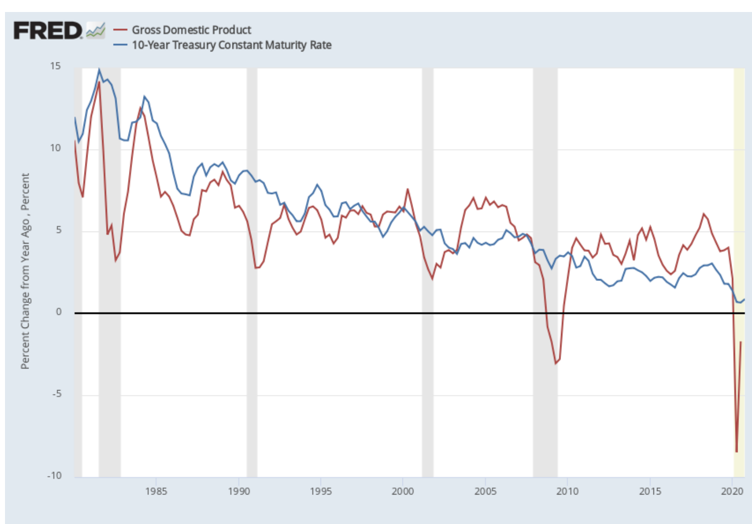
23

Blanchard's Evidence

Since 2000 (except for recessions), which is bigger?



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24

24

Taking It One Step Further: (St. Augustine)

Jason Furman and Larry Summers, 12/1 presentation to Brookings

- **Low Interest Rates are Here to Stay, but not clear why.**
  - private saving higher due to longer retirement periods, increased inequality, and rising uncertainty.
  - Bernanke's "Savings Glut" from China and Japan
- **Low Interest Rates Are a Problem:**
  - Fed fights recessions by lowering interest rates. This time by 2.25 pct. pts, vs. 6.3 pct. pts on average in the past recessions.
  - Low interest rates lead to financial instability in "search for yield."

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https://www.brookings.edu/wp-content/uploads/2020/11/furman-summers-fiscal-reconsideration-discussion-draft.pdf

Furman & Summers Conclude

1. **Low Interest Rates Imply Public Investment may be quite profitable.**
2. **Expand Debt-Financed Public Investment *as long as* there are profitable investments and interest rates are at moderate levels (Good Reason to Borrow #2).**

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But why must the relative debt be stabilized

- 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

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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?

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28

Fiscal Crisis, or a Run on the Dollar, ala CBO

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

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29

29

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,

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30

30

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%

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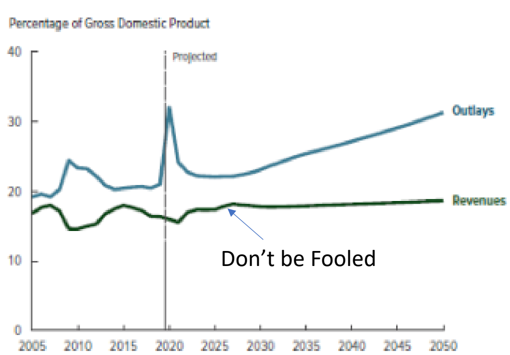
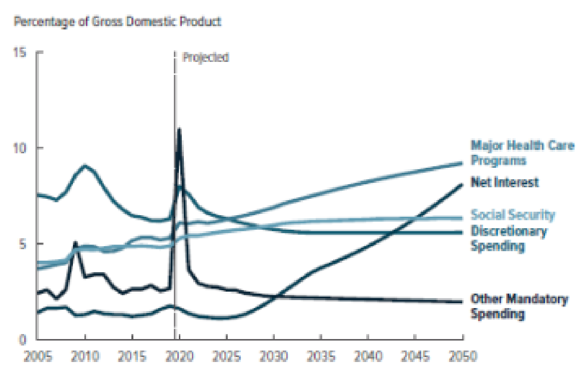
31

31

Bending the Curves!





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32

32

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

Janet Yellen as reported in *Bloomberg,1/19/21:* "Right now, short term, I feel that we can afford what it takes to get the economy back on its feet, to get us through the pandemic," Yellen told the Senate Finance Committee, highlighting that interest rates are historically low…

Yellen said that "it's essential we put the federal budget on a path that's sustainable" over time, but that the situation will be worse if investments aren't made now to support economic growth.

Legitimate Disagreement

Douglas Holtz-Eakin's views have evolved:

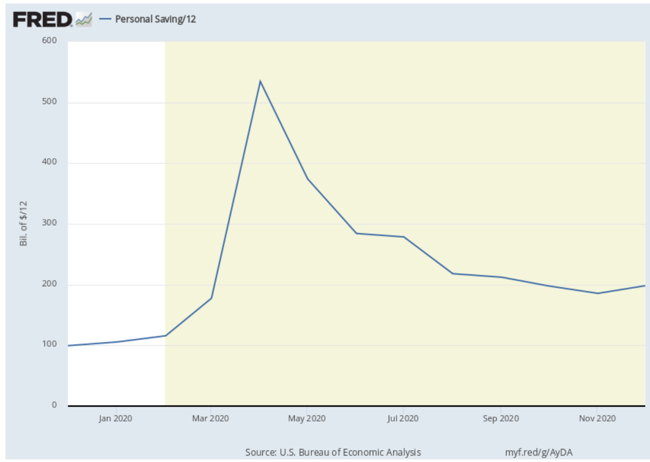
- In April: "I'm a fiscal hawk from way back, and all of my heebie-jeebies are going off when I see these numbers, but then I look at the scale of the problem, and I think, yeah, that's that. Gotta do it." *Politico,* 4/29
- In January: "Facts are stubborn things; and whatever may be our wishes, our inclinations, or the dictates of our passion, they cannot alter the state of facts and evidence." It is useful to remember the words of the 2nd president as we are bombarded daily by administration spokespeople about the dire state of the economy and the need for (another) multi-trillion dollar federal response

Much of the March Stimulus Was Saved

Estimates that personal saving increased by up to $1.56 trillion between March and November, *Why Markets Boomed in a Year of Human Misery, NYT, 1/1/21*

$2,400 was sent to joint filers with AGI of $150,000 (Median Household Income is about $70,000).

Compare this to enhanced unemployment benefits, which are ***targeted*** at households in distress



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35

Advice for Joe

- **Priority should be to control the pandemic**
- **Stimulus is not needed(at the moment); Target spending to rescue:**
  - Poor Households.
  - State and Local governments.
  - Small Firms (e.g., restaurants).
- **Infrastructure Investment should be pursued if it makes economic sense.**
- **Develop a politically feasible plan to raise revenues and lower spending over the longer term.**
- **Listen to Janet Yellen.**
- **And, most of all: Lots of Luck!**

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36

36

What Is and Isn't "Rescue"

Comparing Two Rescue Plans			
	American Rescue	Republican Plan	Difference
Direct Payments	$465 billions	$220	$245
Aid to State and Local Governments	$350	0	$350
Pandemic Unemployment	$350	$130	$220
School Reopening	$170	$20	$150
Vaccines	$160	$160	0
Expand Child Tax Credit	$120	0	$120
Rent and Landlord Support	$30	0	$30
Child Care Providers	$25	$20	$5
Other	~$200	$68	$132
Total	$1,870	$618	$1,252

Thank you!

Any Questions?

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UI Replacement rates and Expanded Benefits

Unemployment Insurance Benefits				
Income Quartile:	Weekly Earnings	Regular Benefits	Expanded ($300)	Expanded ($400)
25%	$445	$231 (52%)	$531 (119%)	$631 (1.42%)
50%	$668	$346 (50%)	$646 (97%)	$746 (1.12%)
75%	$1,207	$456 (38%)	$756 (63%)	$856 (71%)
P. Ganong, P. Noel, and J. Varva, "US Unemployment Insurance Replacement Rates During the Pandemic, Working Paper 202-62, BFI Institute				

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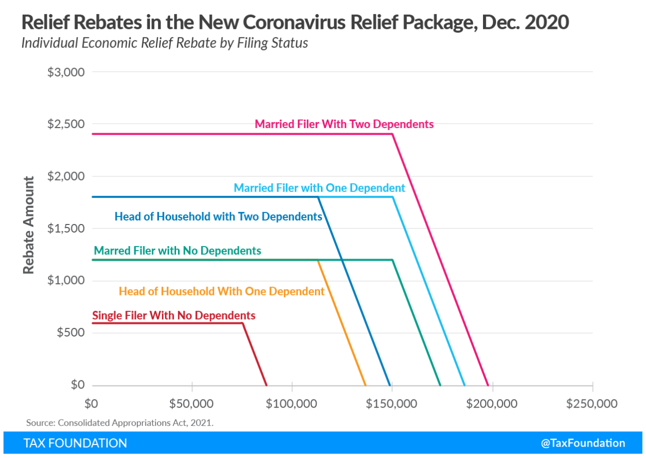
The Problem with Stimulus Checks



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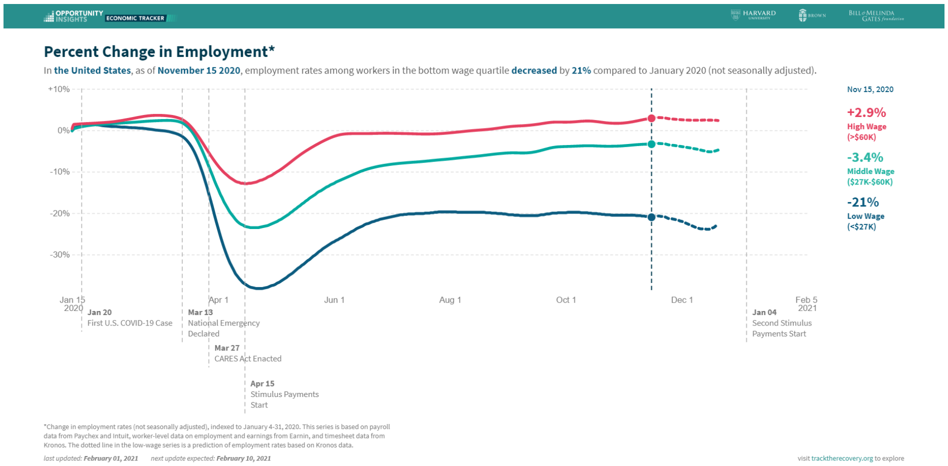
K-Shaped Recovery



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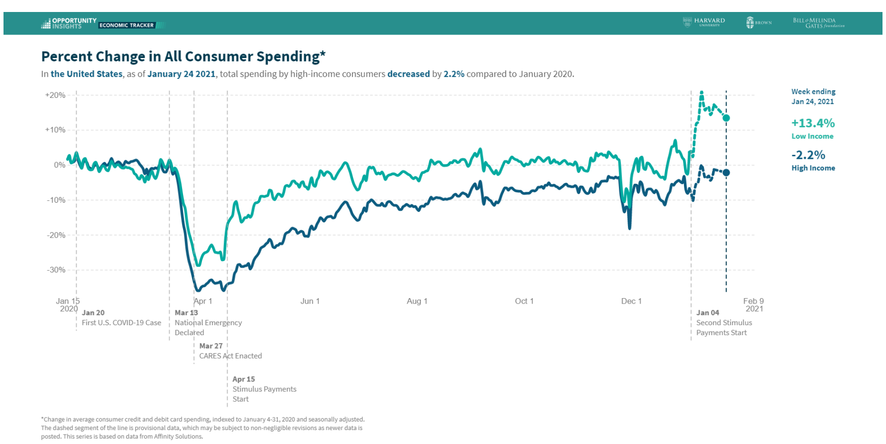
41

How Could This Happen?



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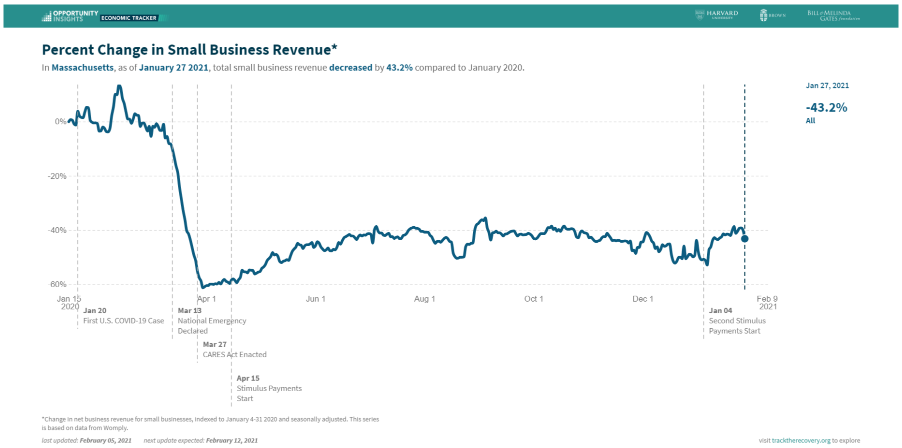
Small Businesses Have Been Clobbered



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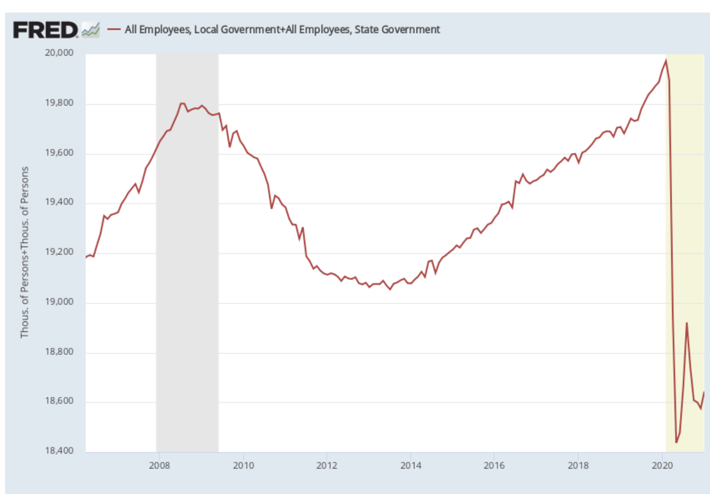
43

State and Local Employment in Two Recessions



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44

44