US Federal Government Deficits and Debt

Key Concepts

- **Budget Balance:** Difference between a government's revenues and its expenditures over some time period, like fiscal or calendar year.
  - When Revenues exceed Expenditures, an unusual outcome, surplus results; for US, only 5 surplus years since 1960.
  - When Expenditures exceed Revenues, deficit results; for US, all post-1960 years other than those mentioned above were deficits.
- **Government Debt, also known as National or Public:** Amount of money government owes creditors at a specific point in time. Approximately equal to accumulated deficits, less any surpluses.
- Deficits cause Debt to rise and Surpluses cause Debt to fall, with the size of Deficits/Surpluses driving speed of Rises/Fall in Debt.
- In judging how large Deficits, Surpluses, Debt are, economists believe they should be scaled as a percent of GDP.

Key Concepts

- Economists also delineate Debt between Gross and Net.
- **Gross Debt** is the total amount of the Debt.
- **Net Debt** is amount of Debt **not** held by non-USG or USG-like entities, such as Social Security, Sallie Mae, Freddie Mac, government pension funds.
- Net debt, technically called Debt in Hands of Public, includes holdings by:
  - US private sector fixed income investors (private pensions/bond funds/insurance);
  - foreign fixed income investors, both government and private (sovereign wealth funds);
  - foreign central banks (China's central bank);
  - and the US Federal Reserve.
- Net debt is thought by economists to be better measure of debt burden or risk as non-net debt is kind of government owing money to itself
- Economists also believe it is useful to know division of Debt between Foreign and Domestic creditors and between Short Term (matures in less than 1 year) and Long Term, with Debt being short term or held by foreigners more worrisome.

Causes of Deficits and Debt

- Deficits / larger Deficits and Debt / faster-rising Debt are caused by Expenditures exceeding Revenue, and occur:
- # When Expenditures are high and/or rising.
- # When Tax Rates are cut, although some economists believe cuts in Tax Rates do not lower Taxes, known as Supply-Side Economics.
- # When economy is in recession and leads to automatic drops in Taxes and rises in Expenditures, like unemployment compensation.
- # In Expansionary Fiscal Policy, which is combination of first 2 actions intentionally undertaken to combat recession.
- # When interest rates are high /rising and causing higher interest payments on the Debt.

- Smaller deficits / slower rising debt / surpluses / falling debt are causes by the opposites of the above factors.

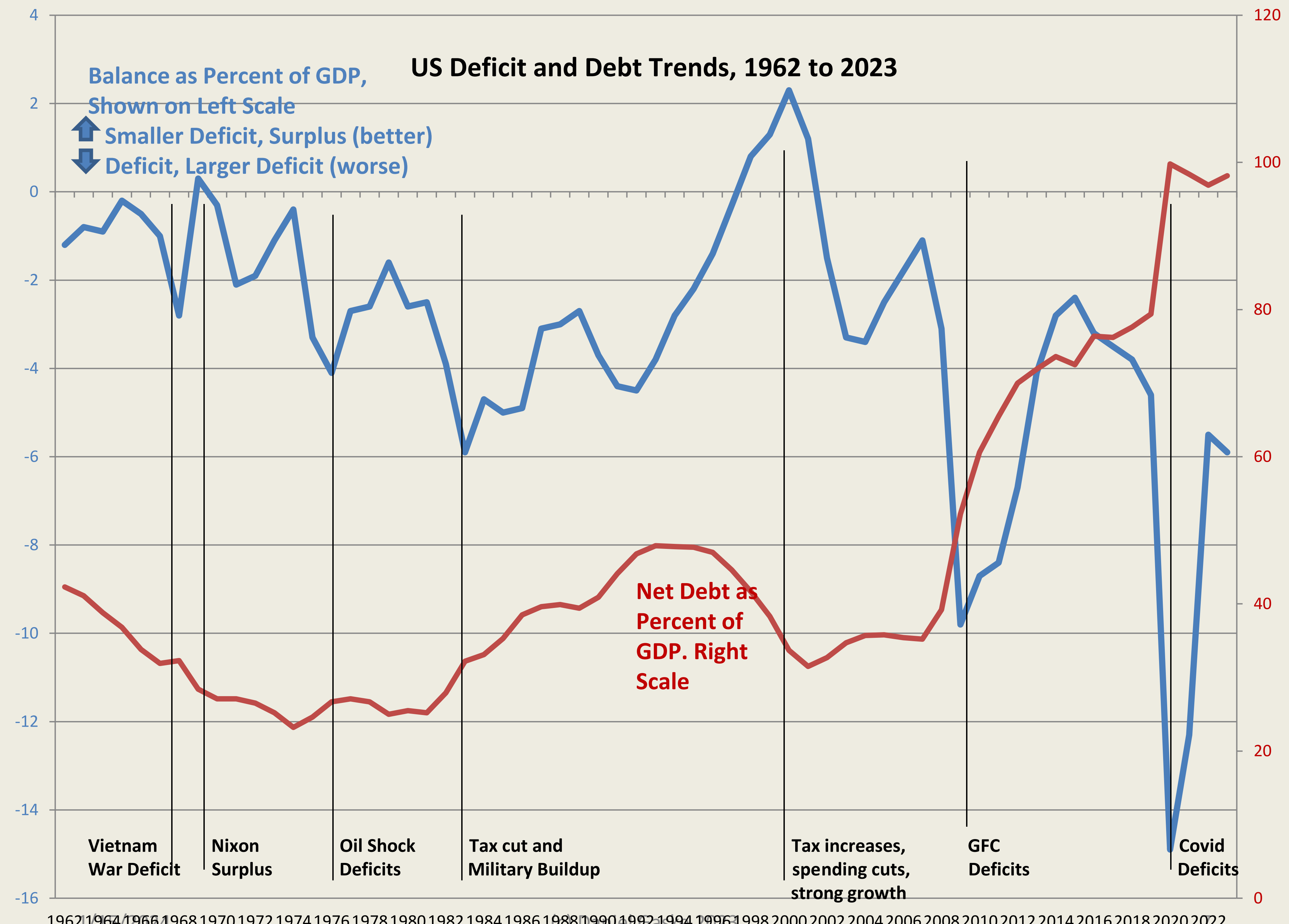
Potential Negative Impacts of Deficits and Debt

- Economists have identified a number of negative impacts of Deficits and Debt, especially if they are large.
- # Because Budget Deficit requires government to borrow money, borrowing can displace private spending and is known as "crowding out" effect.
- # Because higher / faster-growing Debt can make investors nervous about government having to take actions to repay debt in future, in particular raising tax rates, a pullback in private investment can result.
- # If Debt becomes excessively large in minds of government-debt investors – i.e. there is a perception of risk of default – a very major negative impact of investors refusing to purchase new government debt or selling existing government debt can occur (Greece in 2010).
- # If a lot of Debt comes to be held internationally, it negatively impacts national income as interest payments go overseas, and also increases risk of default, as foreign government-debt investors are more prone to "cut-and-run" than domestic investors (also Greece in 2010).

So Where Does US Stand

- The next slides provide various perspectives on the size, and potential impacts, of US deficits and debt, and as we examine them, keep in mind that concern is higher when:

- Deficits are large and getting larger
- Debt is high – as a percent of GDP – and getting higher
- A lot of debt is held internationally
- Country has poor reputation in credit management



US Deficit and Debt Trends, 1962 to 2023
Balance as Percent of GDP, Shown on Left Scale
Smaller Deficit, Surplus (better)
Deficit, Larger Deficit (worse)
Net Debt as Percent of GDP. Right Scale
Vietnam War Deficit
Nixon Surplus
Oil Shock Deficits
Tax cut and Military Buildup
Tax increases, spending cuts, strong growth
GFC Deficits
Covid Deficits
4
2
0
-2
-4
-6
-8
-10
-12
-14
-16
120
100
80
60
40
20
0
1962 1964 1966 1968 1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

Causes of Recent Deficit Trends

	2017	2018	2019	2020	2021	2022	2023p
Net Debt, %GDP	76	78	79	100	98	97	98
Budget Balance %GDP	-3.7	-3.9	-4.7	-15.0	-12.4	-4.2	-3.8
Revenue, % Change	1.5	0.4	4.0	-1.5	18.2	19.9	1.1
Spending, % Change	3.3	3.2	8.2	47.4	4.1	-14.0	0.0
Real GDP Growth %	2.5	3.0	2.4	-2.2	5.7	1.9	2.1

Recent US Government Deficits Compared to Other High Income Countries (IMF)

Country	Units	Scale	2019	2020	2021	2022	2023
Canada	Percent of GDP		-0.017	-10.910	-4.381	-0.814	-0.727
France	Percent of GDP		-3.065	-8.984	-6.484	-4.807	-4.858
Germany	Percent of GDP		1.526	-4.339	-3.587	-2.500	-2.892
Italy	Percent of GDP		-1.507	-9.656	-9.018	-7.956	-4.991
Japan	Percent of GDP		-3.045	-9.061	-6.150	-6.854	-5.607
United Kingdom	Percent of GDP		-2.226	-13.007	-8.256	-5.506	-4.462
United States	Percent of GDP		-5.743	-14.003	-11.620	-3.706	-6.023

US Debt In International Context (Gross Debt to GDP Ratios)

Note that from perusal of the countries that debt levels are in themselves not guarantee of economic failure or success.

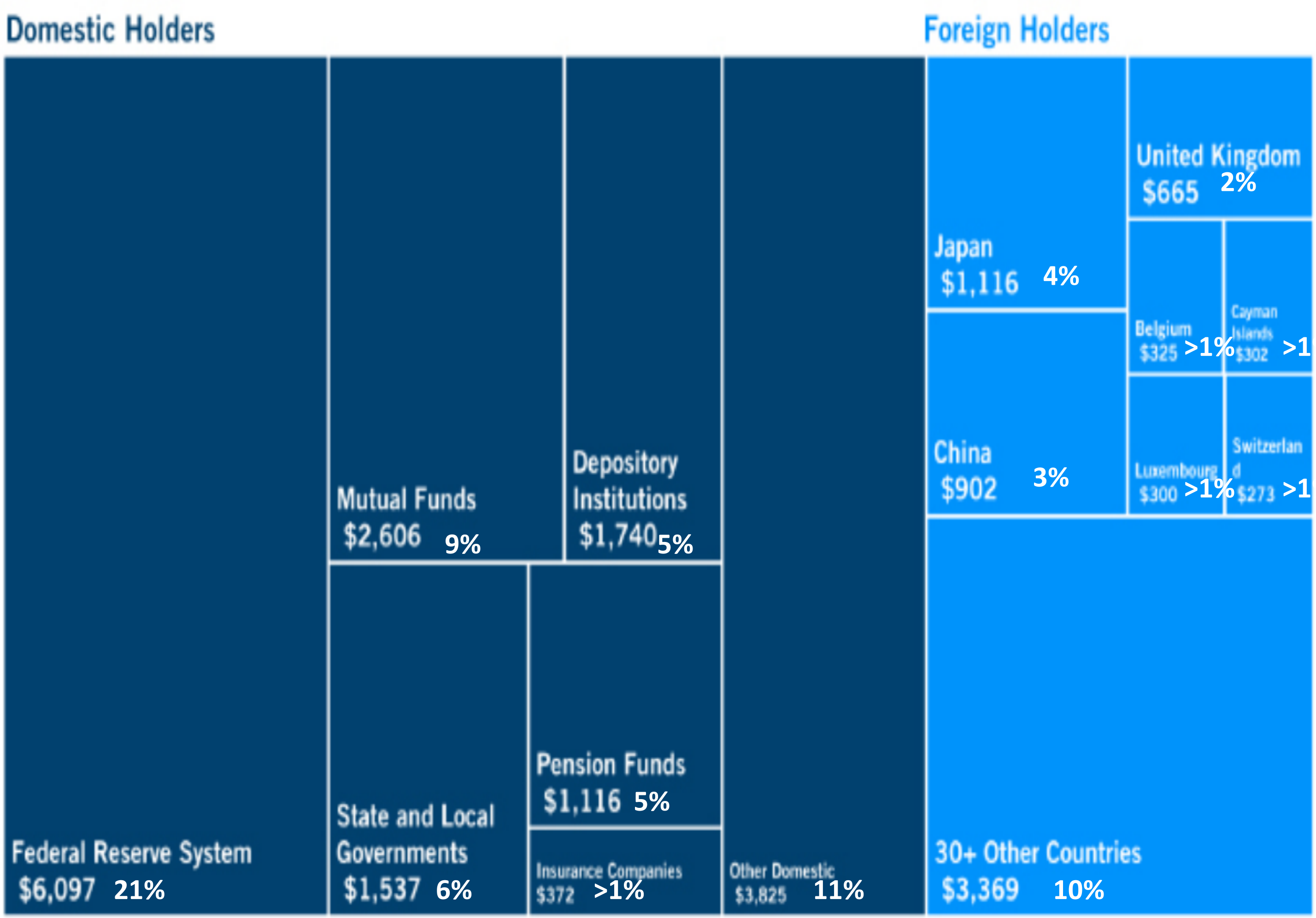
Japan	255.24%
Greece	167.97%
Singapore	167.89%
Italy	143.73%
Bhutan	123.45%
United States	123.28%
Laos	121.75%
Bahrain	121.17%
Barbados	115%
Cape Verde	113.09%
Maldives	110.25%
France	110.03%
Portugal	108.35%
Spain	107.28%
Suriname	106.99%
Canada	106.38%
Belgium	105.98%
United Kingdom	104.14%
Morocco	69.68%
Hungary	68.71%
Slovenia	68.47%
Namibia	67.58%
Togo	67.19%
Malaysia	66.91%
Yemen	66.42%
Germany	65.86%

Montenegro	65.76%
Saudi Arabia	24.08%
Kazakhstan	23.38%
Solomon Islands	22.23%
Estonia	21.6%
Russia	21.22%
Bulgaria	20.99%
Haiti	19.63%
Botswana	18.7%
Azerbaijan	18.19%
Marshall Islands	18.05%
Saudi Arabia	24.08%
Kazakhstan	23.38%
Solomon Islands	22.23%
Estonia	21.6%
Russia	21.22%
Bulgaria	20.99%
Haiti	19.63%
Botswana	18.7%
Azerbaijan	18.19%

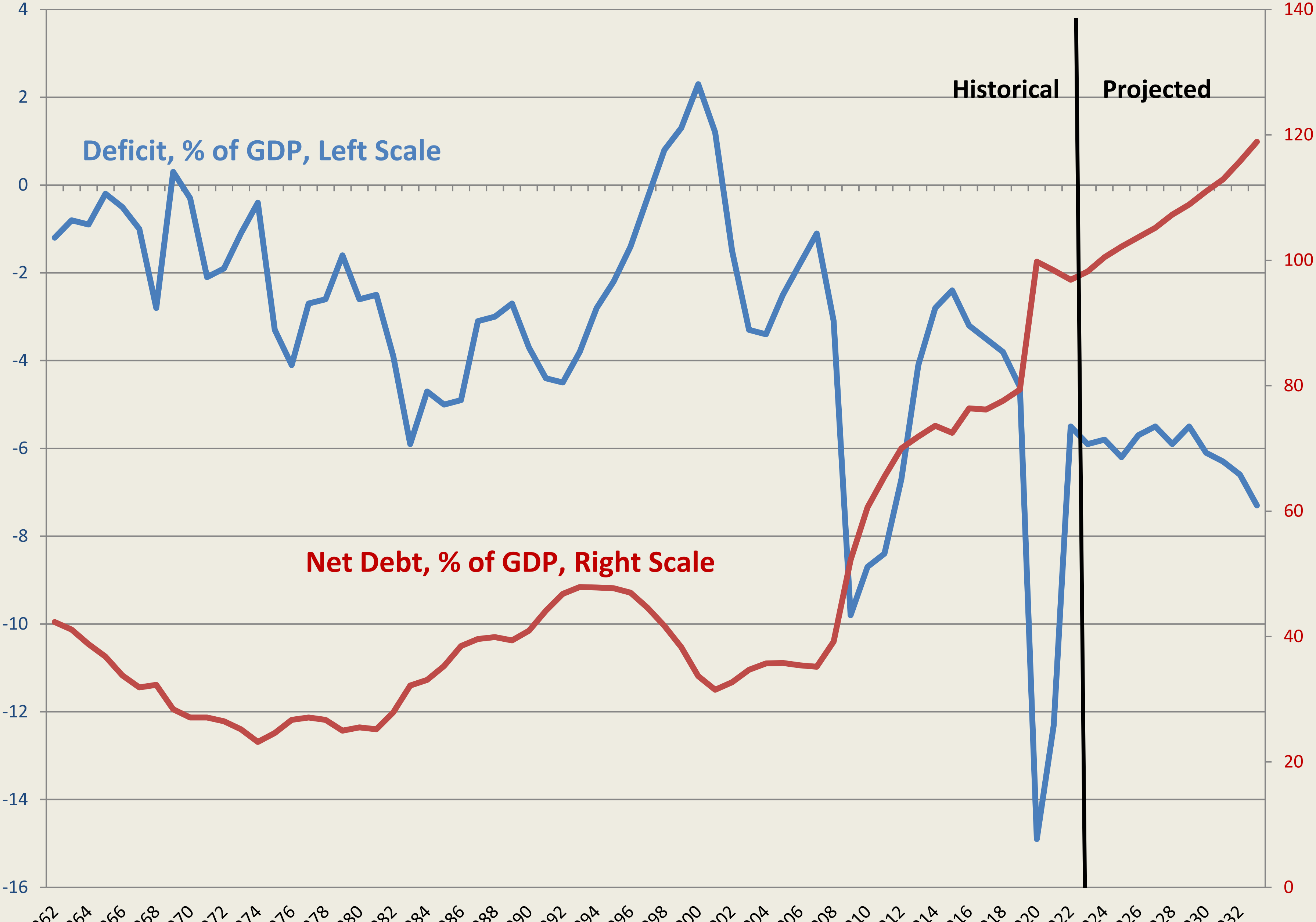
Data obtained from World Population Review website.

Composition of Debt Held by the Public (Billions of Dollars) (% of Total Debt)

Below amounts total to 78% of total debt, another 22% held by USG Agencies, like SSA, Fannie Mae, etc.



What Does Future Look Like (CBO)



What Does Future Look Like – More Detail (CBO)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Revenues												
Individual income taxes	10.5	9.6	9.1	8.8	9.2	9.7	9.6	9.6	9.6	9.6	9.6	9.7
Payroll taxes	5.9	6.0	6.0	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Corporate income taxes	1.7	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.4
Other	1.4	1.0	1.0	0.9	0.9	0.9	1.1	1.1	1.1	1.1	1.2	1.1
Total	19.6	18.4	17.8	17.4	17.8	18.1	18.2	18.2	18.1	18.1	18.1	18.1
On-budget	15.3	14.0	13.4	13.0	13.4	13.7	13.8	13.8	13.8	13.8	13.7	13.8
Off-budget	4.3	4.3	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.3
Outlays												
Mandatory	16.5	15.2	14.0	14.1	14.0	14.1	14.6	14.1	14.6	14.8	15.0	15.6
Discretionary	6.7	6.5	6.8	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1	6.0
Net Interest	1.9	2.5	2.7	2.7	2.8	2.9	3.1	3.2	3.3	3.4	3.6	3.7
Total	25.1	24.2	23.5	23.5	23.5	23.6	24.1	23.7	24.2	24.4	24.7	25.3
On-budget	20.8	19.6	18.7	18.6	18.5	18.5	19.0	18.4	18.8	18.9	19.1	19.7
Off-budget	4.3	4.6	4.9	5.0	5.0	5.1	5.2	5.2	5.4	5.5	5.6	5.7
Deficit	-5.5	-5.9	-5.8	-6.2	-5.7	-5.5	-5.9	-5.5	-6.1	-6.3	-6.6	-7.3
On-budget	-5.4	-5.6	-5.3	-5.6	-5.1	-4.7	-5.1	-4.6	-5.0	-5.2	-5.3	-5.9
Off-budget	-0.1	-0.3	-0.5	-0.6	-0.7	-0.7	-0.8	-0.9	-1.0	-1.1	-1.2	-1.3
Primary Deficit (excludes Interest)	-3.6	-3.3	-3.0	-3.5	-3.0	-2.6	-2.9	-2.3	-2.7	-2.8	-3.0	-3.6
Debt Held by the Public	96.9	98.2	100.4	102.2	103.7	105.2	107.3	108.9	111.0	113.3	115.8	118.9

So Why Worsening Outlook and What To Do

- As shown on previous 2 slides, outlook for deficits and debt is negative, i.e, both worsen from recent outcomes with slightly deficits, and rise in debt to GDP ratio.

- Causes of these trends is a combination of: expected higher interest rates than have been norm for the past decade plus, adding nearly 2% to deficit; shift from balance to a 1 ¼ % of GDP deficit in off-budget items (mainly SS); and the cumulative effects on debt to GDP ratio of deficits that are larger than levels – around 3% -- that would stabilize that ratio.

- The first question is will these trends be a problem. On one hand, one could argue no: rise in debt is not that much; USG has a long history of effectively managing its debt; and global appetite for USG securities will more than match rise in debt.

- So far, there is no evidence of financial market concern. Bi-weekly Treasury auctions of USG securities are being 4-5 times oversubscribed at very favorable interest rates and USG continues to maintain its longstanding AAA credit rating.

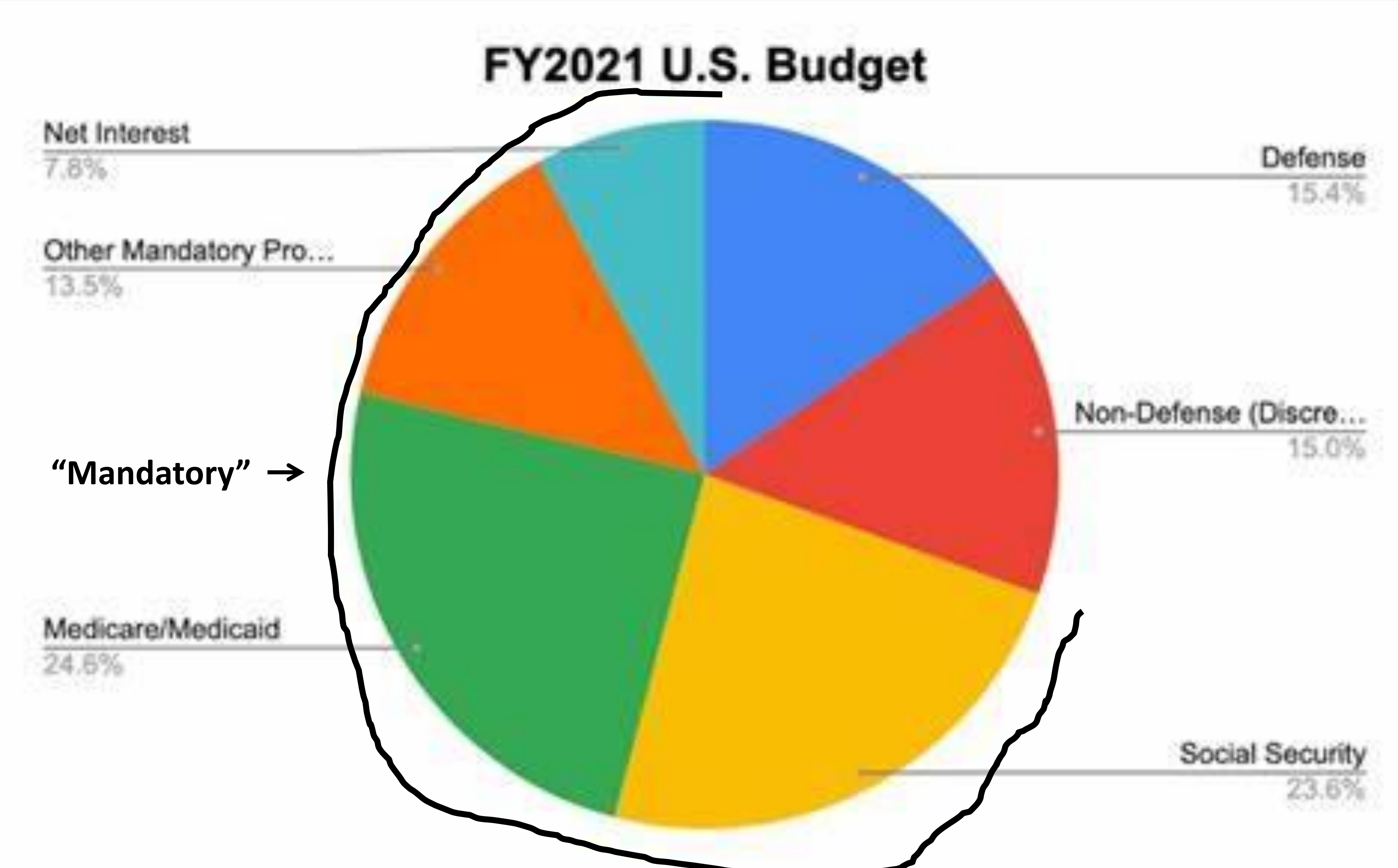
So Why Worsening Outlook and What To Do

- But, one could argue, and some do, that at some point, perhaps in combination with other events, the higher debt levels, which are unprecedented, will cause some type of major debt crisis, which would be manifested at new debt being financed only at higher interest rates, fall in oversubscription ratio of new debt, and in extreme actual undersubscription of new debt. At those points, a real crisis.

- If something did need to be done to address US deficits and debt before such a crisis occurred, changes needed are mathematically simple: increase tax collections and/or reduce expenditures, or more precisely, growth in expenditures.

- The problem is reaching a political consensus on what combination of taxes should be raised, if any, or expenditures cut, and which ones, if any.

- Expenditure choice is further complicated by fact that nearly three-quarters of expenditures are mandated / non-discretionary spending in form of interest payments and legislatively-mandated transfer payments, as shown in next slide.


FY2021 U.S. Budget
Net Interest
7.8%
Other Mandatory Pro...
13.5%
"Mandatory" →
Medicare/Medicaid
24.6%
Defense
15.4%
Non-Defense (Discre...
15.0%
Social Security
23.6%

Readings

- https://apnews.com/article/national-debt-deficits-biden-economy-inflation-record-b4258704f830c7f6e9c5e693748216cb