

US Economics Analyst

Interest Expense: A Bigger Impact on Deficits than Debt (Krupa/Phillips)

- A sharp rise in long-term interest rates combined with widening deficits and heightened fiscal discord in Congress have renewed questions about the sustainability of rising government interest costs.
- We project federal interest expense will rise from 2% of GDP in 2022 to 3% in 2024 and 4% by 2030, surpassing the early 1990s peak by 2025. On average over the next decade, higher interest expense is likely to add an additional 0.3% of GDP to the annual deficit compared to our July projections. In the near term, we have raised our deficit estimates for FY2024 by \$50bn to \$1.7tn (6.0% of GDP) and FY2025 by \$100bn to \$1.9tn (6.5% of GDP).
- When interest expense rose sharply in the 1980s, fiscal policymakers reacted by shrinking the primary (ex-interest) deficit. The largest fiscal adjustment from that period, enacted in 1993, would be sufficient if enacted now to offset the additional interest expense we project (relative to 2021) after 5 years. However, this looks unlikely anytime soon given congressional gridlock, a lack of political attention to deficit reduction, and the upcoming 2024 election.
- While higher interest expense will add to the deficit, the impact on the debt-to-GDP ratio should be much smaller. The average interest rate on federal debt is likely to remain at or below the rate of nominal GDP growth for the next decade, and this relationship is likely to be more benign than the historical average over the next five years. A larger debt stock but a lower interest rate-growth differential implies that real interest expense as a percent of GDPthe cost of stabilizing the debt-to-GDP ratio—will be comparable to the level in the late 1980s and 1990s.
- Ultimately, the main challenge facing fiscal policy remains the large structural primary deficit, not interest expense. We estimate that debt as a share of GDP will rise from 96% to 123% over the next decade, driven primarily by a chronic primary deficit of around 3%. Although nominal GDP growth is likely to mostly offset the effect of higher interest costs on the debt-to-GDP ratio, the structural deficit will continue to add to public debt for the foreseeable future.

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Interest Expense: A Bigger Impact on Deficits than Debt

Congress avoided a government <u>shutdown</u> last weekend, but another episode of heightened fiscal discord combined with <u>the large recent moves in yields</u> and <u>widening deficits</u> have renewed questions about the sustainability of growing interest costs. In this edition of the *Analyst*, we analyze and forecast the impact of higher interest expense on the fiscal outlook.

Rising Interest Costs

We project net interest expense will rise from 2% of GDP in 2022 to 3% by 2024 and 4% by 2030, and that it will surpass the early 1990s peak by 2025. On average over the next decade, higher interest expense is likely to add 0.3% of GDP to the deficit compared to our July projections, lifting our deficit estimates for FY2024 by \$50bn to \$1.7 tn (6.0% of GDP) and FY2025 by \$100bn to \$1.9 tn (6.5% of GDP).

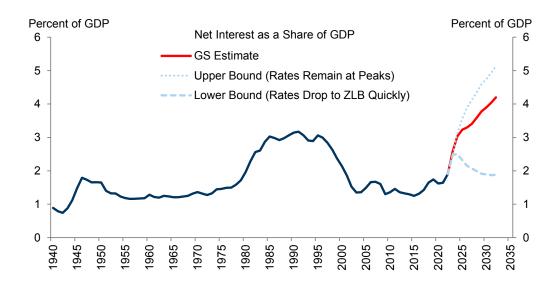
Percent of GDP Percent of GDP Estimated US Federal Government Net Interest Payments 5 5 Coupons (Notes/Bonds/TIPS/FRNs) Bills 4 4 Total, GS Estimate Prior GS Estimate (July 2023) CBO Estimate (May 2023) 3 3 Actual 2 2

Exhibit 1: We Are Raising Our Interest Cost Projections on The Back of Higher Rates

Source: Treasury, Federal Reserve Board, Congressional Budget Office, Goldman Sachs Global Investment Research

The outlook for interest expense depends on the path of interest rates, which is uncertain. Exhibit 2 shows two low-probability alternative scenarios that likely cover the range of plausible outcomes. The higher cost scenario holds rates across the curve constant at recent peaks and includes feedback from additional issuance required to finance higher interest costs. The lower cost scenario drops front-end rates to the zero lower bound (ZLB) in early 2024 and assumes rates beyond a five-year maturity drop to and remain within a 2-2.5% range long-term. While neither of these scenarios is likely, they suggest there is limited upside risk to current interest projections.

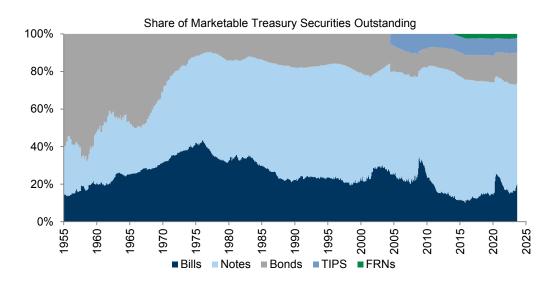
Exhibit 2: We Estimate Interest Costs as a Share of GDP Will Reach a New Peak by 2025



Source: Office of Management and Budget, Goldman Sachs Global Investment Research

Higher interest rates flow through to higher interest costs gradually as debt rolls over and grows. The average length to maturity of federal debt is around 67 months and is likely to gradually increase. While bill issuance as a share of outstanding debt has climbed to around 20% from 15% in December 2022, 1 growth in the share of bill issuance is likely to now slow given Treasury's "recommended range" of 15-20%, which would result in greater issuance from notes and bonds.

Exhibit 3: The Share of Bills Outstanding Has Risen 5pp This Year to Around 20%, Approaching the Upper Bound of Treasury's "Recommended Range" of 15-20%



Source: Treasury, Goldman Sachs Global Investment Research

¹ For more details, see "Select Portfolio Metrics" of the Treasury Presentation to TBAC here.

Higher Interest Costs Could Eventually Lead to Fiscal Tightening

Higher interest costs could lead to a tightening of fiscal policy to reduce the primary (ex-interest) deficit. Elevated nominal interest expense and the accompanying rise in debt intensified the focus on fiscal restraint from the mid-1980s to the mid-1990s, leading to several rounds of deficit reduction legislation over that period. One of the motivations for deficit reduction during that period was that interest expense was crowding out other more productive—or at least more popular—areas of spending. As a share of budget outlays, interest expense is likely to surpass the early 1990s peak in the next few years (Exhibit 4).

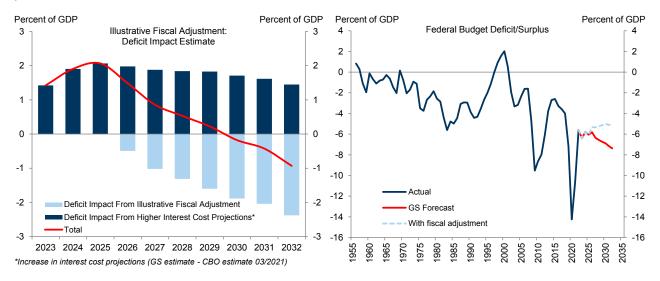
Percent Percent Net Interest as a Share of Total Budget Outlays 20 20 --- CBO Estimate (May 2023) ---GS Estimate 15 15 10 10 5 5 0 0 990

Exhibit 4: We Estimate Interest Costs as a Share of Total Spending Will Reach a New Peak by 2029

Source: Congressional Budget Office, Goldman Sachs Global Investment Research

The largest of those fiscal adjustments, enacted in 1993, was projected to reduce the deficit as a share of GDP by around 0.5pp the year after passage and 2pp six years after. After 5 years, this degree of deficit reduction would offset the rise in projected interest costs since early 2021 (Exhibit 5, left panel). In theory, sustained fiscal tightening of this size could weigh on growth, counteracting some of the intended deficit reduction, though much of this might be offset by monetary policy and a potentially lower term premium over time.

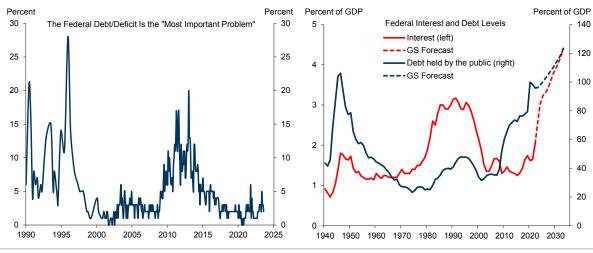
Exhibit 5: A Repeat of the Largest Fiscal Adjustment in US History Would Take Around Five Years to Make Up for Changes in Interest Projections Relative to 2021



Source: Congressional Budget Office, Goldman Sachs Global Investment Research

However, the odds of a near-term fiscal adjustment appear low. Recent political dysfunction, as demonstrated by close calls over the debt limit and shutdown, highlights the challenge facing routine fiscal decisions, let alone proactive policy changes. And with little public concern regarding the fiscal outlook, lawmakers have few incentives to press for deficit reduction (Exhibit 6, left panel). Last month, just 2% of Americans said they consider the federal budget deficit or debt to be the most important problem facing the country. There is little chance of a deficit reduction agreement ahead of the 2024 election, and with neither of the likely presidential nominees focused on fiscal prudence, it is unclear how much will change following the next election.

Exhibit 6: The Public Does Not See the Deficit as a Major Concern Right Now, but Interest Costs and Debt Levels Should Soon Peak Together for the First Time

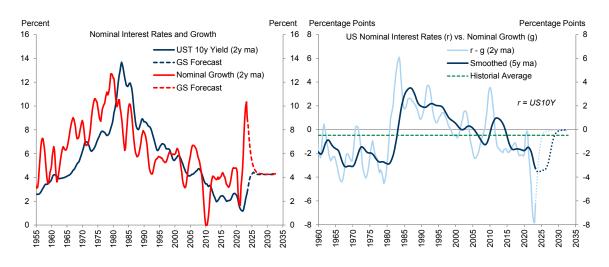


Source: Gallup, Congressional Budget Office, Goldman Sachs Global Investment Research

A Strong Nominal Growth Cushion

While rising interest expense will expand the deficit, the impact on the debt-to-GDP ratio should be considerably smaller, as nominal growth has increased along with nominal interest rates. Our forecasts suggest that the differential between rates and growth (r - g) will remain below the historical average for the next five years and below zero for the next decade.

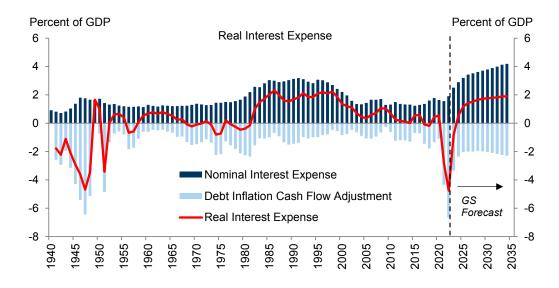
Exhibit 7: The Interest Rate-Growth Differential Remains Relatively Benign



Source: Federal Reserve Board, Bureau of Economic Analysis, Goldman Sachs Global Investment Research

A closely related <u>measure</u> of fiscal sustainability—"real interest expense"—also supports a slightly more benign outlook. This approach subtracts the debt stock that is inflated away each year as a share of GDP from the nominal interest expense each year as a share of GDP. Real interest expense—which can be thought of as the cost of keeping the debt-to-GDP ratio stable—declined sharply over the last year as the existing debt stock was inflated away, even while interest expense on that debt rose (Exhibit 8).

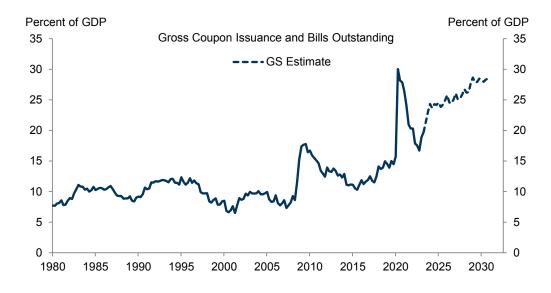
Exhibit 8: A Larger Debt Stock but a Lower r-g Implies That Real Interest Expense as a Percent of GDP—the Cost of Stabilizing the Debt-to-GDP Ratio—Will Be Comparable to the Level in the Late 1980s and 1990s



Source: Office of Management and Budget, Federal Reserve Board, US Bureau of Labor Statistics, Goldman Sachs Global Investment Research

Even if it does not add substantially to the debt-to-GDP ratio, higher nominal interest expense still poses challenges for public finances. A larger deficit requires the Treasury to continually issue a greater amount of debt as a share of GDP, increasing rollover risk and sensitivity to future interest rate changes (Exhibit 9). So while higher nominal interest expense may not add to the debt level, it reduces stability in financing the debt.

Exhibit 9: Treasury Will Have an Unusually High Amount of Gross Issuance, Which Increases Rollover Risk and Sensitivity to Future Interest Rate Changes



Source: Bureau of Public Debt, Treasury, Bureau of Economic Analysis, Goldman Sachs Global Investment Research

On its face, higher nominal interest expense is relevant in that it increases the budget deficit, which increases the burden on Treasury financing, and could lead to an eventual tightening in fiscal policy. However, higher nominal interest expense poses less of a risk to the trajectory of federal debt as long as it is matched by higher nominal growth that stabilizes the debt-to-GDP ratio.

Percent (Inverted) Percent of GDP 0 10 Primary Budget Deficit vs. Unemployment Rate 5 3 0 6 -5 9 -10 Unemployment Rate (left) 12 -15 Primary Deficit (12-month average, right) 15 -20 1993 1998 2003 2008 2013 2018 2023

Exhibit 10: The Federal Government Is Running a Large Primary Deficit Despite Very Low Unemployment

Source: Treasury, US Bureau of Labor Statistics, Data compiled by Goldman Sachs Global Investment Research

The greater challenge facing US fiscal policy is not new: the US is running a primary (ex-interest) deficit much larger than has been the case historically, and it is happening at a point in the business cycle when the deficit would normally be smaller than usual. Over the next ten years, we project debt to rise from 96% to 123% of GDP. Nearly all of this increase relates to the primary deficit, with interest expense adjusted for GDP growth contributing little to the rise despite its contribution to the annual budget deficit.

Tim Krupa

Alec Phillips

The US Economic and Financial Outlook

THE US ECONOMIC AND FINANCIAL OUTLOOK

(% change on previous period, annualized, except where noted)

	2021	2022	2023	2024	2025	2026	2023				2024			
			(f)	(f)	(f)	(f)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
OUTPUT AND SPENDING							1				1			
Real GDP	5.8	1.9	2.2	1.9	1.9	1.9	2.2	2.1	3.4	0.7	1.9	1.9	1.9	1.9
Real GDP (annual=Q4/Q4, quarterly=yoy)	5.4	0.7	2.1	1.9	1.9	1.9	1.7	2.4	2.6	2.1	2.0	2.0	1.6	1.9
Consumer Expenditures	8.4	2.5	2.1	1.7	1.9	1.9	3.8	0.8	3.1	0.8	1.6	1.9	1.9	1.9
Residential Fixed Investment	10.7	-9.0	-11.1	2.8	3.2	3.0	-5.3	-2.2	2.1	2.5	3.5	3.5	3.5	3.5
Business Fixed Investment	5.9	5.2	4.4	3.6	3.7	3.6	5.7	7.4	0.9	3.5	3.5	4.1	3.8	3.8
Structures	-3.2	-2.1	10.9	2.4	2.8	3.0	30.3	16.1	-1.8	2.0	2.0	2.0	2.5	2.5
Equipment	6.4	5.2	0.9	4.7	3.4	3.0	-4.1	7.7	1.4	6.0	5.0	5.0	4.0	4.0
Intellectual Property Products	10.4	9.1	4.3	3.2	4.5	4.5	3.8	2.7	2.0	2.0	3.0	4.5	4.5	4.5
Federal Government	1.4	-2.8	3.2	0.2	0.0	0.0	5.2	1.1	0.5	-0.6	0.6	0.0	0.0	0.0
State & Local Government	-1.3	0.2	3.1	0.6	0.9	1.0	4.6	4.7	0.8	0.0	0.0	0.1	0.9	0.9
Net Exports (\$bn, '12)	-934	-1,051	-914	-933	-955	-962	-935	-928	-891	-903	-916	-927	-938	-950
Inventory Investment (\$bn, '12)	13	128	22	45	60	60	27	15	31	15	30	40	50	60
Industrial Production, Mfg.	4.9	2.7	0.1	2.8	3.3	3.3	-0.3	0.4	3.6	2.1	2.9	3.3	3.3	3.4
HOUSING MARKET							1							
Housing Starts (units, thous)	1,606	1.551	1.424	1,539	1,539	1,539	1,385	1.450	1,425	1,437	1.539	1,539	1,539	1,539
New Home Sales (units, thous)	769	637	694	713	716	716	638	691	726	721	713	710	714	716
Existing Home Sales (units, thous)	6,128	5.081	4.360	4,750	4.995	5,026	4,327	4,250	4.371	4,492	4,614	4,709	4.804	4,872
Case-Shiller Home Prices (%yoy)*	19.0	7.4	1.3	1.7	2.4	3.8	2.2	-1.1	-0.3	1.3	1.9	1.4	1.6	1.7
INFLATION (% ch, yr/yr)							1				1			
Consumer Price Index (CPI)**	7.2	6.4	3.3	2.5	2.4	2.4	5.8	4.1	3.5	3.2	3.0	3.0	2.7	2.6
Core CPI **	5.5	5.7	3.8	2.9	2.5	2.5	5.6	5.2	4.4	3.9	3.6	3.2	3.2	3.0
Core PCE** †	5.2	4.9	3.3	2.4	2.2	2.1	4.8	4.6	3.9	3.4	2.9	2.6	2.6	2.5
LABOR MARKET							l				İ			
Unemployment Rate (%)^	3.9	3.5	3.6	3.6	3.6	3.6	3.5	3.6	3.7	3.6	3.6	3.6	3.6	3.6
U6 Underemployment Rate (%) ^A	7.3	6.5	6.9	6.9	6.9	6.8	6.7	6.9	7.1	6.9	6.9	6.9	6.9	6.9
Payrolls (thous, monthly rate)	606	399	205	103	80	78	312	201	165	142	112	100	100	100
Employment-Population Ratio (%)^	59.5	60.1	60.5	60.4	60.2	60.0	60.4	60.3	60.4	60.5	60.5	60.4	60.4	60.4
Labor Force Participation Rate (%)^	62.0	62.3	62.8	62.7	62.5	62.5	62.6	62.6	62.8	62.8	62.7	62.7	62.7	62.7
Average Hourly Earnings (%yoy)	4.2	5.3	4.3	3.9	3.6	3.6	4.5	4.4	4.2	4.1	4.1	3.9	3.8	3.7
GOVERNMENT FINANCE							l				Ī			
Federal Budget (FY, \$bn)	-2,775	-1,375	-1,700	-1,700	-1,900	-1,800								
FINANCIAL INDICATORS							I				i			
	0.005	4.25-4.5	5.25-5.5	5-5.25	4-4.25	3-3.25	4.75-5	5-5.25	5.25-5.5	5.25-5.5	5.25-5.5	5.25-5.5	E 25 5 5	5-5.25
FF Target Range (Bottom-Top, %)^ 10-Year Treasury Note^	1.52	4.25-4.5 3.88	5.25-5.5 4.30	5-5.25 4.30	4-4.25 4.25	3-3.25 4.25	4.75-5 3.48	5-5.25 3.81	5.25-5.5 4.65	5.25-5.5 4.30	5.25-5.5 4.60	4.60	5.25-5.5 4.50	5-5.25 4.30
10-Year Treasury Note ⁴ Euro (€/\$) ⁴	1.52	1.07	4.30 1.07	4.30 1.15		4.25 1.15	3.48 1.09	1.09	4.65 1.07		1.08	4.60 1.08	4.50 1.08	
Euro (€/\$)^ Yen (\$/¥)^	1.13	1.07	1.07	1.15	1.15 135	1.15	1.09	1.09	1.07	1.07 145	1.08	1.08	1.08	1.15 135

^{*} Weighted average of metro-level HPIs for 381 metro cities where the weights are dollar values of housing stock reported in the American Community Survey. Annual numbers are Q4/Q4.

** Annual inflation numbers are December year-on-year values. Quarterly values are Q4/Q4.

† PCE = Personal consumption expenditures. ^ Denotes end of period.

Note: Published figures in bold.

Source: Goldman Sachs Global Investment Research

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Disclosure Appendix

Reg AC

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