The US National Debt

Debt or Alive?



Executive Summary

- The national debt has reemerged as a major market concern. While the trajectory has
 appeared unsustainable for quite some time, higher interest rates and a rising interest
 burden have brought it to the fore, prompting questions of whether it will precipitate a
 crisis in the medium term.
- We recognize the risks to the economy and the market but are not alarmists. We believe
 there are still solutions and time to address the underlying issues surrounding the
 national debt.
- We foresee a combination of factors putting the debt on a sustainable path—a mix of
 productivity growth, moderate inflation, spending cuts, and tax hikes should be enough
 to avoid a major crisis.
- Yet it may still require a mini-crisis in the bond markets—similar to the early 1990s in the US or 2022 in the UK—to spur Congress into action.
- Because the US issues its own currency, it does not face the same budgetary
 constraints as a household or firm would. However, it is still hemmed in by inflation and
 potential political repercussions.
- The US enjoys an "exorbitant privilege" as the global reserve currency and preferred
 destination for international savings. This gives its policymakers more flexibility than
 other countries would have when it comes to managing debt.



The federal government is on an unsustainable long-term fiscal path that poses serious economic, national security, and social challenges if not addressed. And the longer we wait to act, the more dire the consequences will be on the economy and the public."

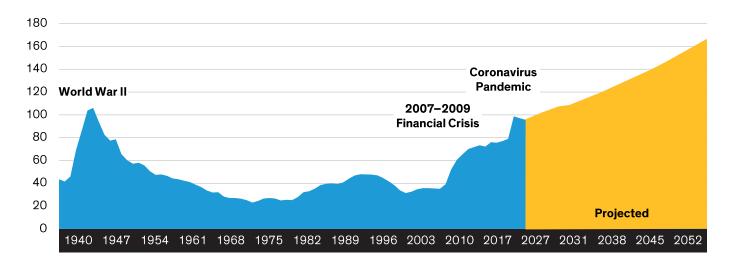
—Government Accountability Office (GAO), a nonpartisan federal agency that serves as the country's chief auditor, February 2024

We agree with the GAO. But while yellow warning lights may be flashing, alarms are not sounding... yet. We have concerns and see the market risks but believe there are still solutions and time to address the underlying issues.

Why are people increasingly worried about the national debt?¹ To be fair, they've always been worried. When the National Debt Clock was installed in New York City in 1989, it had surged from 25% of GDP to 40% over the previous decade and totaled a mere \$2.7 trillion. Today, a US debt figure that low would barely register. What's more, at \$27 trillion, the national debt has spiked since the global financial crisis, rising from 35% of GDP to almost 100%. And according to estimates from the Congressional Budget Office (CBO), the debt-to-GDP ratio is set to continue growing from here, reaching 166% in 2054 (*Display 1*).²

DISPLAY 1: FEDERAL DEBT HELD BY THE PUBLIC

Percentage of GDP



Current analysis and forecasts do not guarantee future results.

As of February 29, 2024 | **Source:** Congressional Budget Office and Bernstein analysis

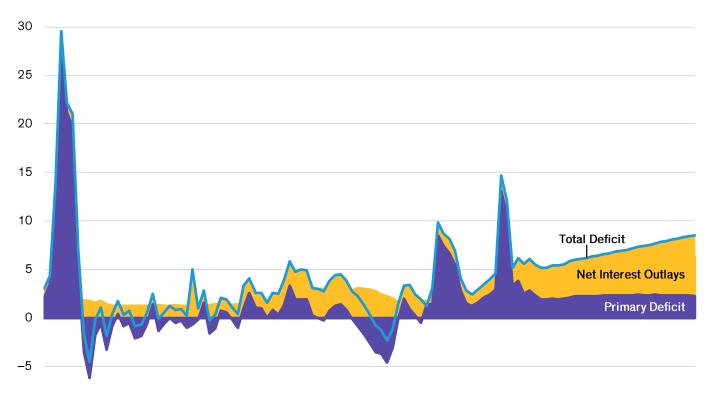
¹ Throughout this paper, when we talk about the national debt, we will generally be discussing the amount held by the public, as opposed to that held by government entities. Since interest payments from the government to itself effectively pass money from the right hand to the left, they're less important to debt sustainability.

² While we show specific paths the debt can take from here, the future remains highly uncertain when looking decades ahead. It would perhaps be more accurate to show simulations with many different trials, each taking a different path and fanning out, similar to what we show in our long-term capital markets projections and wealth forecasts. Bloomberg Economics did something along those lines earlier this year, showing the debt to be unsustainable in 88% of simulations (though we'd take some issue with its definition of sustainability). However, our goal in this paper is to talk about the workability of specific solutions, thus we take more of a scenario analysis approach in this paper rather than a simulation approach, while recognizing the inherent uncertainty in long-term forecasts.

What's driving the surge? The answer depends on how you break it down. For instance, you can look at whether it's coming from the primary deficit (tax revenues minus spending on government programs) or from growing interest payments. Framed that way, it's the latter: interest payments are fueling debt growth while the deficit from spending programs remains flat (*Display 2*).

DISPLAY 2: TOTAL DEFICITS, PRIMARY DEFICITS, AND NET INTEREST OUTLAYS

Percent of GDP



-10 1940 1946 1952 1958 1964 1970 1976 1982 1988 1994 2000 2006 2012 2018 2024 2030 2036 2042 2048 2054

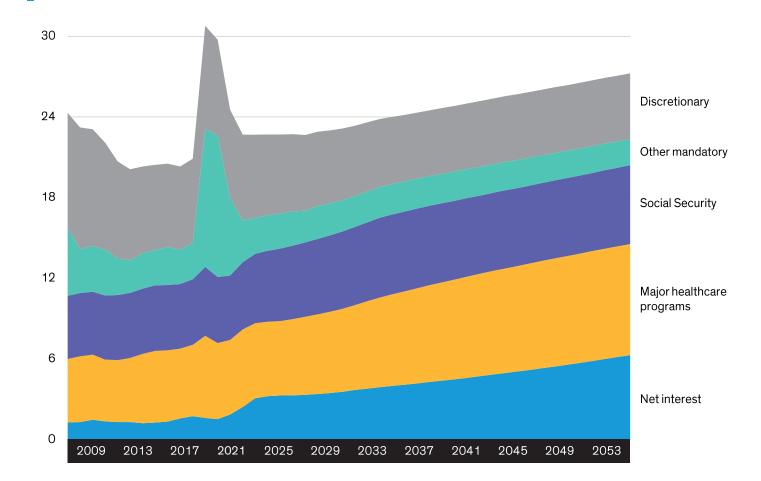
Current analysis and forecasts do not guarantee future results.

As of February 29, 2024 | **Source:** Congressional Budget Office and Bernstein analysis

What about total dollars being spent? Where is all the money projected to go over the next 30 years? Through that lens, major healthcare programs (i.e., Medicare, Medicaid, and the Children's Health Insurance Program) are the biggest contributors. Social Security, discretionary spending, and interest payments follow closely behind, with each contributing fairly equally. But even that doesn't provide the complete picture. While major healthcare program spending and interest payments both increase by around 3% per year in real terms, discretionary spending only grows by 1% per year and actually decreases as a share of GDP (*Display 3*).

DISPLAY 3: OUTLAYS, BY CATEGORY

Percent of GDP



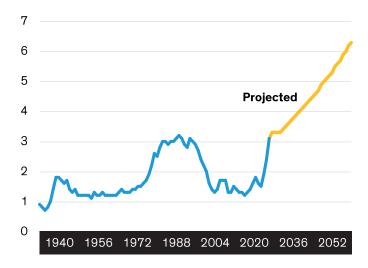
Current analysis and forecasts do not guarantee future results.

As of February 29, 2024 | **Source:** Congressional Budget Office and Bernstein analysis

A significant factor that has blunted debt debates over the past two decades is the low burden of interest payments relative to GDP, despite the increasing debt level (*Display 4*). Yet the argument may no longer hold true as interest rates have risen in the wake of the pandemic and may be set to drift higher from here over the longer term. In fact, this year, the interest burden is set to surpass its peak in the 1980s, and the CBO projects it to grow further. This milestone could prompt investors to reassess their positions, leading to a shift in both the markets and the debt debate.

DISPLAY 4: DEBT SERVICE COST/GDP

Percent of GDP



Current analysis and forecasts do not guarantee future results.

As of February 29, 2024 | **Source:** Congressional Budget Office and Bernstein analysis

As the economist Herbert Stein told Congress at a national debt hearing in 1986, "if something cannot go on forever, it will stop." While we don't know the exact tipping point that will finally elicit a reaction from the market or policymakers, it's safe to assume that somewhere along the inexorable upward march, the situation will come to a head. When will it become an issue? How will it be resolved? And how should investors prepare? We'll explore each of these questions in turn.

Projections: Which Model Works Best?

Unfortunately, most economic models shed little light on the specifics of the debt situation, as they're either too sensitive or not sensitive enough. For instance, models that fail to incorporate future policy interventions in their expectations basically "blow up." As the publishers of the Penn Wharton Budget Model put it:

"It is generally not well understood outside tight academic and DC modeling circles that these models effectively crash when trying to project future macroeconomic variables under current fiscal policy. The reason is that current fiscal policy is not sustainable and forward-looking financial markets know it, leading to the economy 'unraveling' through 'backward induction.'"

Essentially, if a model predicts the current situation based on future expectations—and those expectations include a crisis—the model will quickly incorporate it into its estimate, precipitating the crisis in the present day.

On the other hand, the CBO model is bound to be unrealistic in some ways. That's because the CBO can only model current policy; it can't include some unknown future intervention. Unless there is a policy change or a productivity boost from new technology that it hasn't modeled, the only way to prevent rising interest, deficit, and debt levels from negatively affecting interest rates, inflation, and GDP growth is by assuming that there are no interdependencies. While there's a chance that reality could align with the CBO's model, we think it's more likely that interdependencies emerge. Barring a fiscal policy change or a positive surprise in productivity, interest rates are likely to rise more sharply, inflation would exceed 2%, and potential GDP growth would be curtailed.

Once again, we'd also stress the high degree of uncertainty associated with economic estimates that stretch decades into the future. Any specific path shows a higher degree of confidence than we actually have, given real world uncertainties and the educated guesses at the relationships between variables inherent to economic models. We regularly remind clients of the old saying that all models are wrong, but some are useful. That certainly applies here.

The US Has Been Here Before ... Sort Of

With the national debt at such a high level—and projected to climb, given current policies—what can we learn from history?

Believe it or not, the US national debt has been higher in the past, topping out at 106% of GDP at the end of WWII. But in the subsequent 30 years, economic growth was turbocharged, with real GDP rising at a 3.6% annualized rate. During this period, government deficits averaged only 0.6% of GDP. How did the US accomplish that? The postwar boom was fueled by a number of factors, including:

- the need to revitalize the nation's capital base;
- a rapidly growing population;
- large strides in human capital development;
- a vast increase in the female labor force participation rate; and
- technological progress as an outgrowth of basic research conducted by the government for WWII and the Cold War.



What if instead of looking at US history, we look to other countries?"

Unfortunately, the US doesn't have anything approaching those tailwinds today. Instead, it has an aging workforce and a population expected to grow at only 0.4% per year, with immigration more than offsetting an otherwise shrinking native-born populace. When those dynamics are combined with expected productivity growth of only around 1.4%, that sets the stage for real GDP growth of around 1.8% per year—just half the rate of the post-WWII boom. What's more, today's aging society will lead to higher healthcare utilization and healthcare inflation (via Medicare and Medicaid) along with higher Social Security spending, making the low deficits of the post-WWII period impossible to match.

Lessons from Around the World

What if instead of looking at US history, we look to other countries?

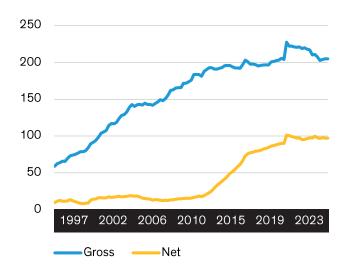
No conversation about the national debt would be complete without referencing Japan (*Display 5*). After all, many of today's arguments about the US national debt were made about Japan in the past

several decades. Notably, those dire outcomes failed to materialize. The gap between theory and reality was so wide for so long that betting against Japanese bonds with the expectation of rising interest rates became the ultimate "widowmaker" trade. Investors have repeatedly lost money on that trade since 1993, with 10-year yields falling from a high of 8% in 1990 to -0.2% in 2016 and 2019. That said, in the wake of the pandemic, it has finally started to work, as yields have risen from zero to around 1%.

What accounted for Japan's experience, and how can it inform the US today? The root of the Japanese problem was an enormous bubble

DISPLAY 5: JAPAN'S GOVERNMENT DEBT

Percent of GDP



For illustrative purposes only.

As of June 30, 2024 | **Source:** Bank of Japan, Bloomberg, and Bernstein analysis

that inflated during its 1980s boom. As real estate and other asset prices exploded in value, backed by an indiscriminate supply of credit, the Bank of Japan was forced to hike rates to deflate the bubble. This caused a wide array of firms to struggle with their debt burdens on the liability side of their balance sheets while banks struggled with those same debts on the asset side on theirs. The combination reduced the supply and demand for credit after the bubble burst.

Aggressive fiscal stimulus arguably prevented a Great Depression-like downturn but added to the debt. As the situation progressed, even monetary stimulus (via ultralow rates and yield curve control keeping

³ A "widowmaker" trade is one that repeatedly costs significant sums on a widespread basis, to the point that so many have bet on it and lost so much that it attains legendary status.

the long-term interest rate at zero) couldn't boost the economy. Despite the deficit averaging over 5% of GDP for three decades, the growing debt load continued to be bought by the BOJ and the banks forced to hold government debt, with the total debt steadily increasing to over 200% of GDP today (gross). However, because the central bank has accumulated almost half of that total, the debt in public hands (the net amount)—which is what matters—is "only" around 100% of GDP.

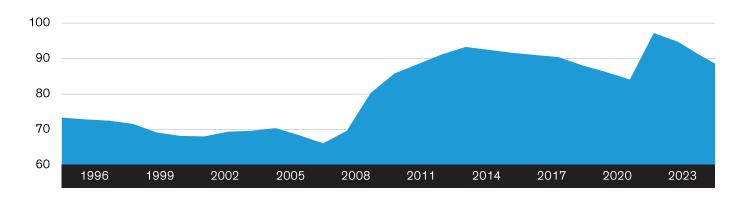
Outside Japan and the US, the eurozone has also dealt with elevated debt loads recently (*Display 6*). In the wake of the financial crisis, the region's government debt load reached 93% of GDP. Those countries (with Germany leading the way) charted a path forward through austerity. Their actions reduced the debt to 84% of GDP by the end of

2019. Like other countries, they then stimulated their way through the pandemic, but they've already sharply reduced the debt load again. A case could be made defending their austerity as the responsible way forward, yet it has had notable consequences. Namely, it came at a steep cost to growth and employment (*Display 7*).

Looking at the world more broadly, we find that there's no red line when it comes to national debt levels. There's an intuitive sense, which has informed a certain degree of austerity in different countries over the years, though the data does not spell that out, as can be seen in Figure 3 of this paper from the Political Economy Research Institute at the University of Massachusetts—Amherst (*Display 8*).

DISPLAY 6: EUROZONE GOVERNMENT DEBT

Percent of GDP

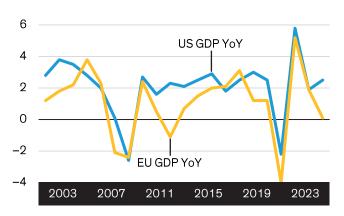


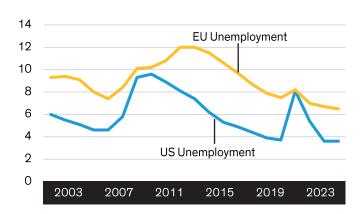
For illustrative purposes only.

As of June 30, 2024 | **Source:** Eurostat, Bloomberg, and Bernstein analysis

DISPLAY 7: US/EU GDP AND UNEMPLOYMENT

Percent





For illustrative purposes only.

As of December 31, 2023 | **Source:** Eurostat, Bloomberg, and Bernstein analysis

The US national debt is fundamentally different from most other debt, whether household debt, corporate debt, national debt that existed up until the mid-20th century, or even national debt held by many countries today. A household or a company has an earnings stream. If that isn't sufficient to cover its expenses (including interest payments), or if it has to roll its debt maturities into the future and can't do so at suitable terms, it defaults.

Likewise, a country with a gold standard or a currency peg must have enough gold on hand or purchasable with its tax revenues to meet any demands to convert its currency into gold or that foreign currency. And a country with large debts denominated in foreign currencies—as in many emerging markets that borrow in dollars—must have enough of the foreign currency in reserve or purchasable via incoming tax revenues to make its debt payments. Because the US debts are in dollars and the government can create those with the click of a button, it never has to default. Still, it faces a constraint—print too many dollars and we risk inflation.

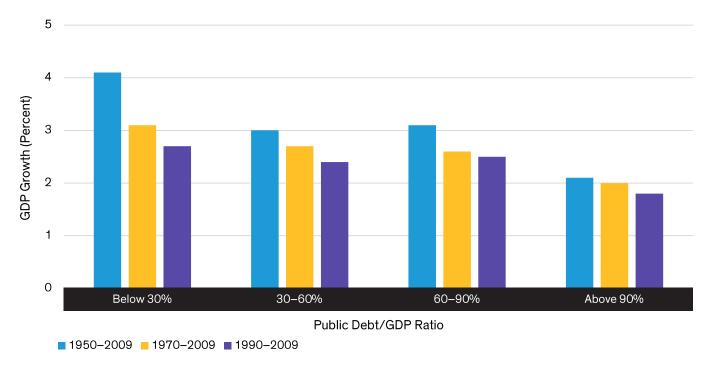
Reserve Currency: Exorbitant Privilege and Exorbitant Burden

Dollars remain in high demand outside the US economy. For instance, if you ever host a large event in a Latin American country, you'll likely make most of your vendor payments in dollars instead of local currency. That's because the US exports its currency the way other countries export goods and services. In economics, you can only export one or the other; the global aggregates must balance out to zero. Put simply, when you buy a T-shirt made in Asia, that country is exporting the T-shirt and it is importing the dollars you spent on it in exchange.

The import and export of capital is the other side of the equation. When countries export goods and purchase foreign capital, it's because they have more savings than they can invest in their own economy. This spurs them to buy foreign currencies and assets to invest their excess savings. For most countries, the trade balance, which is the difference between exports and imports, is the largest

DISPLAY 8: NO "CLIFF DROP" IN GDP GROWTH AT HIGHER DEBT LEVELS

Debt Ratios and GDP Growth of 20 Advanced Economies Since World War II



For illustrative purposes only.

These bars show the averages during the periods. Including all data points shows little to no statistical relationship, as can be seen in the paper by Herndon et al. **Source:** Herndon, Ash & Pollin 2013; Reinhart & Rogoff 2010; and Bernstein analysis

component of what's called the "current account balance." Using national accounting and some algebra, you can also express the current account balance as the difference between national saving and investment. Both lenses offer valuable ways to look at the global economy as current account balances simultaneously reflect a nation's savings and trade decisions.

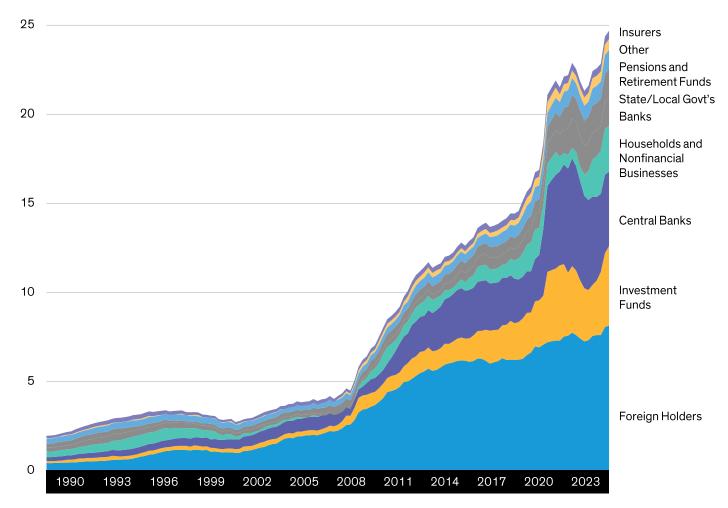
The US enjoys an exorbitant privilege. Home of the world's reserve currency, it has a flock of ready buyers of dollar-denominated assets—most importantly, Treasury bonds, which are treated as the global risk-free asset and the world's highest-quality collateral. The world's net-exporting countries generally find the US an attractive

place to invest their excess savings. As a result of that demand, US assets trade at a premium and US interest rates are lower than they would be otherwise.⁴

Yet what happens if foreigners stop buying US bonds? Foreigners are the largest owners of US Treasuries, followed by the Federal Reserve, mutual funds and private pensions, and domestic banks (Display 9). China has made headlines due to its reduced appetite for US Treasuries and concerns that the shift is due to ongoing tensions between the countries. What if those tensions worsen? We recognize the potential risks but are less worried in the near term. We believe much of the decline in Chinese purchases of Treasury bonds

DISPLAY 9: HOLDERS OF US TREASURY DEBT

USD Trillions



For illustrative purposes only.

As of December 31, 2023 | Source: Bloomberg, Federal Reserve Flow of Funds, and Bernstein analysis

⁴ That also then leads to the "exorbitant burden" of figuring out what to do with that additional capital. The excesses that led to the global financial crisis were a particularly negative consequence of that. However, the exorbitant privilege is much more important to our discussion of the debt, so we focus on it here. For more on its flipside, we'd recommend *Trade Wars Are Class Wars*, by Matthew Klein and Michael Pettis, and *The Shifts and the Shocks*, by Martin Wolf.

has been due to it channeling its funds into other US government assets—namely, agency mortgages that we (and they, apparently) recently viewed as offering a more compelling risk/reward ratio.

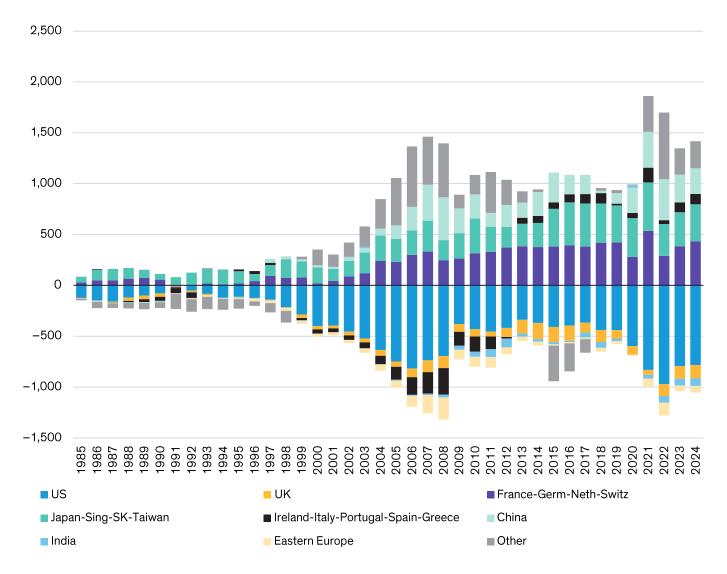
More generally, look at the countries running current account surpluses (and sending their capital overseas) (*Display 10*). Do you think the Chinese, European manufacturing powerhouses, oil exporters, and other major Asian exporters will continue to grow over time? Where do you think their excess savings will go? The United States will likely continue topping the list for many years to come. Where else could that capital flow? The UK has been the other

main recipient for many years. The Chinese don't want the currency inflows inflating their currency. Will the glut go to India as its economy flourishes? Will it go to Africa—and can those countries successfully invest such an influx?

Looking at the relative attractiveness of the US versus those other global savings destinations, we conclude that the US is likely to maintain its reserve currency status for the foreseeable future. And as a result, meaningful capital inflows are likely to continue. That should support the US's borrowing capacity more than other economic fundamentals might suggest, for many years to come.

DISPLAY 10: CURRENT ACCOUNT SURPLUS/(DEFICIT)

USD Billions



For illustrative purposes only.

The Path Forward

With all this in mind, where does the US go from here? At the extreme, there are six ways⁵ the country could address the situation with the deficit and national debt in the coming decades:

- Do nothing for as long as possible, before being forced into a crisis
- · Grow its way out of the debt, as it did after WWII
- Steadily inflate its way out of it over time
- Raise taxes
- · Cut spending
- "Japan its way out of it" via secular stagnation

In reality, any resolution will likely require a combination of several of these approaches.

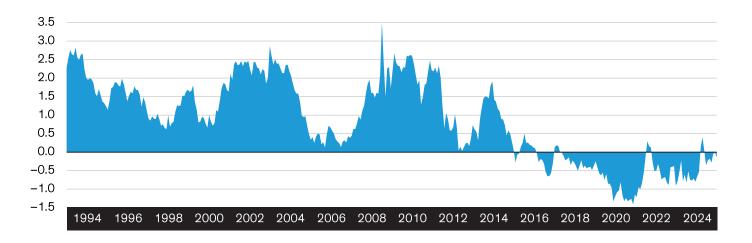
Envisioning a Crisis

Let's start with the scenario everyone dreads and the reason we field so many questions on the topic: What happens if the US kicks the can down the road until it ends up in crisis? Even if this were to happen, there's no telling when. It could happen in the next year, the next decade, or even later. The likelihood of a crisis occurring increases as interest rates surge, potential GDP growth falls, or the debt/GDP ratio climbs. Three decades ago, when the national debt was only 48% of GDP, forecasters would have probably foretold a debt crisis if the debt were to reach its current level. And yet the US hasn't had one. Herbert Stein, purveyor of that seemingly sagacious—if somewhat alarming—congressional testimony we quoted earlier, died in 1999. What if he'd lived to see the debt explosion of the past two decades? Similarly, the estimates for the debt level 30 years from now, which look ludicrously high today, could also be reached without a disaster.

Or perhaps not. While the catalyst is hard to pin down, it likely involves some collective realization that forces a rapid reassessment of the riskiness of US debt. To some degree, we saw a brief taste of that in late 2023 as Congress struggled with the debt ceiling and the House of Representatives ground to a halt while repeatedly trying to elect a new speaker. Bond yields rose sharply, and the term premium (an additional amount of compensation that investors require for locking up their money for longer time spans in the face of macroeconomic uncertainty)⁶ turned positive for only the third time since 2015 (*Display 11*).

DISPLAY 11: 10-YEAR TREASURY TERM PREMIUM

Percent



For illustrative purposes only.

As of June 30, 2024 | Source: Bloomberg, Federal Reserve Bank of New York, and Bernstein analysis

- 5 There are really five, as tax hikes and spending cuts would likely be combined in policy changes. However, since they affect investors differently, we've split them out for discussion purposes.
- 6 If you consider investing in Treasury bonds over the next 10 years, you face two general choices: locking up the money the whole time, or locking it up for shorter periods and reinvesting it. For instance, you could invest in a 10-year Treasury today, or you could invest in a 1-year Treasury and, when it matures, reinvest the proceeds in another one-year Treasury, and so on, until 10 years have passed. The key difference between the two is that interest rates can move for a whole host of reasons over the next 10 years. If you invest in the 10-year bond today, you're locked in regardless of what happens, with potentially positive and negative results depending on how the future unfolds. If you invest in the series of one-year bonds, you have more flexibility but also more reinvestment risk if rates fall (or inflation rises). The difference between the implied rate path over that 10-year period and the 10-year yield is the term premium. It can be positive if investors demand more compensation for the macroeconomic uncertainty, or can be negative if investors prefer to lock in their capital and avoid reinvestment risk.

Likewise, we saw "bond vigilantes" emerge in late 2022 when the UK prime minister proposed tax cuts in a mini-budget. The proposal was met with a significant drop in the value of the pound and a simultaneous increase in government bond yields. As a result, the Bank of England intervened, and the prime minister made an abrupt about-face and ultimately lost her job.

One of the more prominent situations occurred in 1994. After the savings & loan crisis and the Gulf War, US monetary policy was relaxed for several years. Despite this, inflation remained mostly under control, decreasing from approximately 4–6% in the late 1980s to around 3% from 1991 onward. In an effort to normalize policy, the Fed hiked rates early in the year. This sent the bond market reeling as concerns about inflation intersected with the Republican "Contract with America," sparking fears over the deficit and debt. Investors' response was so pronounced that James Carville, an advisor to President Bill Clinton, famously remarked, "I used to think that if there was reincarnation, I wanted to come back as the president or the pope or as a .400 baseball hitter. But now I would like to come back as the bond market. You can intimidate everybody."

Despite sharp moves in bond prices, none of the above situations ended in calamity. The most significant outcome was an agreement between the Clinton administration and the Republican Congress on a budget overhaul. That resulted in several years of budget surpluses, which lasted until the Bush tax cuts of the early 2000s.⁷

"

The best way for the US to address the debt burden would be to grow its way out of it. But how possible is that?"

What can we say about how such a crisis might unfold? We think it's fair to assume that it starts in the bond market. Unlike fiscal policy, which is set by the political climate—or GDP and inflation, which are shaped by the current economic environment—the market is forward-looking and fast-moving (whether justified or not). As a result, we'd envision the initial impact showing up in yields. That could come in two forms. The term premium could spike as investors demand compensation for future inflation uncertainty, similar to late 2023, or the Fed could be forced to hike more steeply, as it did in 1994.

Where the crisis would manifest next and how far it would spread is harder to say. As in past episodes, we think it would most likely create political pressure for a course correction in fiscal policy. Assuming the fiscal response was credible, the immediate crisis should dissipate. But if left unaddressed—or if the market deemed policy moves insufficient—the impact could filter through to inflation, relative dollar weakness, or GDP as people become less willing to hold dollars or as higher interest rates take a bite out of economic growth.

We think one or more scares of this sort are likely to occur at some point in the next several decades. The question becomes when they'll occur, how acute they'll be, and what policymakers choose to do about them.

When a situation like this does emerge, the US will have two advantages relative to other countries. First, as the world's reserve currency, a pool of global capital continues flowing into dollar-denominated assets. And second, with no gold standard or foreign-denominated debt, the US never needs to default—at worst, it can just print more money, stoking inflation.

Grow Out of It

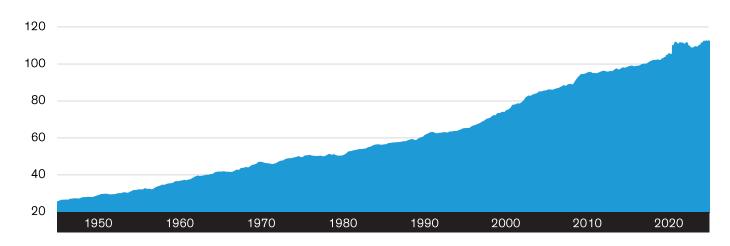
The best way for the US to address the debt burden would be to follow the post-WWII playbook: grow its way out of it. But how possible is that?

As noted, that approach worked at the time, due to a convergence of factors that spurred significant growth in both the working-age population and labor productivity. These days, the math is more difficult. The conventional baseline calls for roughly 0.4% population growth and 1.4% productivity growth in the coming decades, setting the stage for 1.8% growth in real GDP.

⁷ The fiscal situation was so different during the surplus years of the Clinton administration that when the CBO ran its first Long-Term Budget Outlook in 2000, one potential path involved the government debt held by the public reaching -50% of GDP in 2030, with the government saving and investing surpluses so that it would ultimately hold more nonfederal assets than it had debt.

DISPLAY 12: US NONFARM BUSINESS SECTOR OUTPUT PER HOUR OF LABOR

Index (2017=100)



For illustrative purposes only.

As of June 30, 2024 | Source: Bloomberg, Bureau of Labor Statistics, and Bernstein analysis

What would it take for GDP to surprise to the upside? Population growth is an unlikely lever, as the birth rate is expected to remain below the replacement rate. That means immigration must account for more than 100% of the forecasted population growth—a stretch, given the political landscape. Productivity growth, on the other hand, could provide a modest boost in the coming decades. The current conventional estimates of productivity growth predate the launch of ChatGPT and the Al hype cycle that has followed. While those estimates implicitly incorporate some Al advances, now that generative Al is fully operational, expectations for its potential are being rapidly adjusted higher. For instance, McKinsey has forecasted the bump from Al and work automation at anywhere from 0.6% to 3.6% of growth per year between 2022–2040.

For reference, from March 1991 until mid-2008 (just before the global financial crisis), US productivity grew at a rate of 2.4% per year (*Display 12*). Since that time, it has slowed to 1.5% annually, just above the 1.4% baseline in the CBO's estimates and conventional forecasts for the next few decades. If AI really does lift productivity akin to the rollout of the internet and PC, that 1.4% baseline is likely too conservative. Depending on how enduring the effect is, what additional technologies spring from AI, and how workers' time is redeployed, it could drive a boost similar to that

of the digital revolution. While we hesitate to be overly precise or succumb to the hype, we consider it reasonable for AI to raise real GDP growth from the 1.8% baseline to the low-to-mid-2% range in the coming decades.

How much could that affect the national debt? If GDP can grow at a 2.2% annualized rate over the next three decades—without stoking inflation or interest rates in a material way—the debt would hover around 120% instead of 170% by 2054. That's a dramatic shift. When compounded over 30 years, 0.4 percentage points of GDP growth takes almost one-third off the ending debt-to-GDP ratio.8

This also makes intuitive sense due to a core economic relationship between interest rates and growth. In the simplest form in an economy, as long as interest rates remain below the growth rate (you may have heard of it as r < g), debt is arguably sustainable. That axiom reverses if the relationship between r and g flips. Put another way, the fact that r has trended lower than g in recent decades helps explain why economists and investors have been rather sanguine about debt sustainability. While other variables matter, that relationship overwhelms them, which is why even a subtle change in productivity and GDP growth has such an outsize effect.

⁸ This may also somewhat overstate the net benefit of faster growth. A portion of that benefit would likely be offset by a higher equilibrium interest rate in a higher growth environment. There is a theoretical linkage between growth and interest rates, though much of that assumes an economy with perfect competition and clearly defined capital. In the real world, that linkage may be weaker. At the extreme, if growth and interest rates were perfectly linked, it would imply that r-g has an equilibrium level over time, in which case debt is either totally sustainable or totally unsustainable, depending on whether that difference is negative or positive. We don't believe that to be the case and thus don't believe the linkage is that strong. After all, if it were, then how could the US economy have successfully grown out of its debt after WWII, just to pick the clearest dispositive example?

Inflate Your Problems Away

The national debt sits at the heart of countless narratives of economic doom. The common refrain is that the government has undermined the economy by steadily eroding the value of the dollar over time. Inflation helps debtors at the expense of creditors. And since the US government is the world's largest debtor, why wouldn't it use inflation to partially erase the debt?

At first blush, "inflating away the debt" may sound appealing. Running inflation slightly higher than the levels we are used to—say, 3% instead of 2%—can materially reduce the debt burden over time. That's because government revenues are linked to nominal growth and thus rise with inflation, while the coupon the Treasury pays on bonds is fixed. Running slightly higher inflation is also more politically palatable than raising taxes. Some even call inflation a "hidden tax."

While we think that running higher inflation could make a meaningful dent in the debt load, it isn't a magic wand. It would be a neat trick for any policymaker to keep inflation just high enough to erode the value of the debt but not so high as to affect public opinion or the real economy. What's more, some of the beneficial impact of higher inflation would likely be offset by higher interest rates. After all, most bond investors focus on their real return—the inflation-adjusted number—rather than the nominal one. If inflation runs slightly higher, so, too, might bond yields, as investors shift their expectations and required returns. That would eat away at the positive effect of higher inflation on the future debt burden by increasing the government's cost of issuing new debt.

The bottom line? Given the difficulty in predicting inflation under long-term monetary policy paths, we cannot provide exact estimates. However, we can offer a purely mechanical calculation based on our

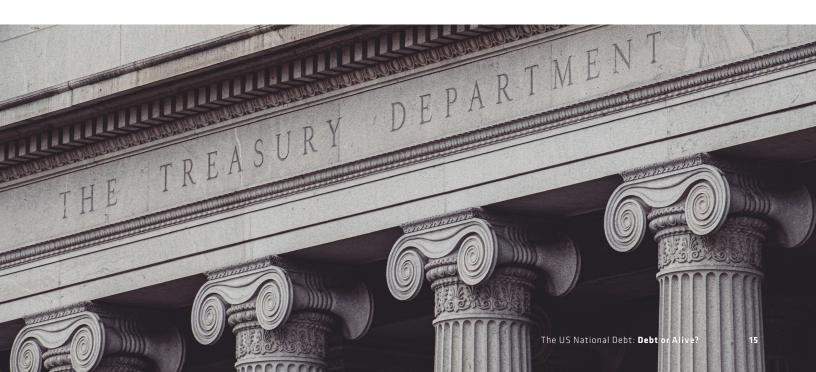
assumptions: if the government can maintain real interest rates at zero and achieve 3% inflation over the next few decades, the ending debt level could decrease to 135–140% of GDP.

Of course, fanning inflation to address the debt burden is not without risk. Throughout history, there have been numerous instances where monetary policy was subordinated to fiscal policy, resulting in central banks allowing inflation to spiral out of control. As mentioned earlier, generating "just a little bit" of extra inflation can be a dangerous game to play. There is a reason that independent central banks have a far better track record of generating strong economic outcomes. Fiscal dominance tends to escalate inflation beyond acceptable levels.

This may remind you of Modern Monetary Theory (MMT), which captured the public's imagination in the years before the pandemic and its ensuing inflation. MMT theorists contend that when it comes to debt sustainability, inflation matters much more than interest rates and growth. In *The Deficit Myth*, Stephanie Kelton writes:

"As Fullwiler observed, interest on the national debt is 'a matter of political economy,' meaning that policy makers can always overrule market sentiment. Or as James Galbraith humorously put it, 'It's the interest rate, stupid!' To prevent interest on the debt from rising above the economy's growth rate, Galbraith simply advised the central bank to 'keep the projected interest rate down.'"

The difficulty is that neither MMT nor conventional economics provides much certainty around the degree of inflation that would arise, making any cost-benefit analysis of higher deficits, lower rates, and higher inflation a challenge. Suppressing interest rates and allowing inflation to rise is a valid prescription for debt sustainability. Unfortunately, the severity of the side effects remains unclear.



The Post-COVID Money Supply and Fed Balance Sheet

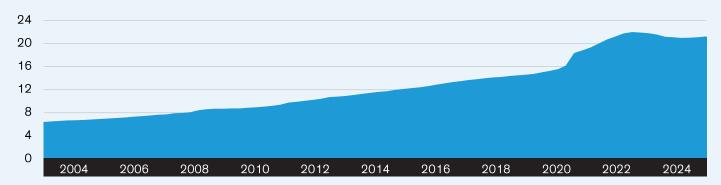
As an alternative to financing expenditures with debt, the government could also print money, with inflation being the obvious risk. If the money supply does not grow in tandem with the growth of GDP, it can lead to a deflationary environment and harmful consequences for the economy. As a result, it's not surprising that the money supply has grown fairly steadily over the past three decades. The major exception came during the pandemic, when the economy was flooded with money on an emergency basis to prevent a sharp downturn as many businesses shuttered.

That event was short-lived. In fact, the money supply has shrunk slightly over the past two years, even as the economy has grown. What's more, it's not the money supply that matters so much as creating credit in the banking system and allowing it to flow through the economy. In recent decades, Japan has printed a significant amount of money without causing inflation. That's because the money has been stuck in the banks and has not circulated.

Many readers may have a similar concern regarding the expansion of the Fed's balance sheet. By and large, that expansion took place in two major waves: the global financial crisis and the COVID-19 pandemic. Here, the implications differ from money printing. While the issuance of money creates an asset out of thin air, the expansion of the Fed's balance sheet merely exchanges one asset in the economy for another. Yet similar to the situation with the money supply, the Federal Reserve is now reversing its pandemic actions and allowing assets to roll off their balance sheet. Since reaching its peak of just under \$9 trillion in early 2022, the Fed has allowed the balance sheet to shrink by approximately \$1.7 trillion.

DISPLAY 13: US MONEY SUPPLY (M2)

USD Trillions



For illustrative purposes only.

As of June 30, 2024 | Source: Bloomberg, Federal Reserve, and Bernstein analysis

DISPLAY 14: US FEDERAL RESERVE TOTAL ASSETS

USD Trillions



For illustrative purposes only.

As of June 30, 2024 | Source: Bloomberg, Federal Reserve, and Bernstein analysis

Getting Down to Brass Tax

The next two options, raising taxes and cutting spending, go hand in hand and would likely emerge as a policy combo. But since they have different implications for investors, we'll discuss them separately. And for wealthy individuals who tend to be subject to the proposed tax hikes, this section has important planning ramifications.

When considering which tax increases are most likely to be implemented, we start with the Treasury Department's 2025 Greenbook. This road map lays out the 10-year financial impact of the Biden administration's latest revenue policy proposals. Clearly, these are a starting point, and we don't expect all of them to be implemented ... in any administration. But when wondering what policies await, it's a helpful reference.

Notable proposals include:

Proposal	Revenue Estimate
Raise corporate income tax to 28%	\$1,350.0
Other US and international business tax hikes	\$1,351.0
Apply investment income tax to pass-through income of high-income payers	\$393.0
Increase net investment tax rate and additional Medicare tax for high-income payers	\$404.0
Increase top marginal tax rate for high-income payers	\$246.0
Minimum income tax on those worth over \$100 mil., including unrealized gains	\$503.0
Estate and gift tax modifications	\$97.0
Extending IRS funding	\$341.0
Total	\$4.400.0 billion

Total includes all revenue proposals, not just the ones included here, some of which have negative revenue implications.

Among the tax outlays netted against the increases, the proposals include modifications to the child tax credit, earned income tax credit, and health insurance premium tax credits that total \$702 billion over 10 years.

Some of these proposals stand a much higher chance of being passed than others. However, for the sake of scaling, what if they were all implemented? That would raise tax revenues by \$4.4 trillion over a decade, which (when simplified for our analysis) means raising revenues/GDP from 17.5% in 2024 to 19.0% in 2025 and beyond (*Display 15*).

Assuming those tax hikes don't affect GDP growth, inflation, or yields, the 2054 debt-to-GDP ratio would decrease from our current baseline of 175% to 150%. It's meaningful, but not a complete solution. And that's assuming all tax receipt increases and outlays pass according to plan. It's worth noting that federal tax revenues have rarely exceeded 19% of GDP in the past, so such a significant increase could require a political and social overhaul.

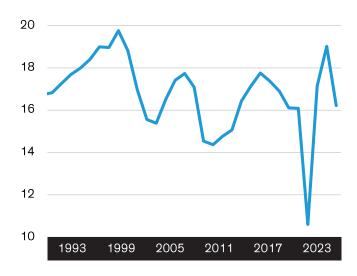
Other tax proposals could also make a large dent in the deficit, including a tax on consumption, a new payroll tax, and an increase in the maximum taxable earnings subject to Social Security payroll taxes. An amendment to itemized deduction allowances, a reduction in the tax subsidies for employment-based healthcare, or a tax on greenhouse gases would also move the needle. Each of these proposals has been scored at \$500 billion to \$3 trillion in savings over a 10-year horizon by the CBO.

Spend Less Money

Tax revenues are just one blade in the pair of fiscal scissors. The other is spending. As economist Paul Krugman has joked, the US federal government is basically an insurance company with an army. Breaking down federal spending, he's not wrong.

DISPLAY 15: GOVERNMENT REVENUES/GDP

Percent



For illustrative purposes only.

As of December 31, 2023 | **Source:** BEA, Bloomberg, US Treasury, and Bernstein analysis

Medicare, Medicaid, and other major healthcare programs total \$1.7 trillion. Social Security expenditures contribute around \$1.5 trillion. Those figures are anticipated to reach \$7.5 trillion and \$5.2 trillion, respectively, over the next three decades.

Other mandatory spending—including the earned income tax credit, supplemental nutrition food program (SNAP, or "food stamps"), unemployment insurance, retirement programs for civilian and military employees, veterans' benefits, and certain federal employees' salaries—add up to nearly \$900 billion.

Discretionary spending, which must be appropriated by Congress every year, amounts to \$1.8 trillion, with the military accounting for around \$800 billion. The remaining \$1 trillion funds everything else. Around \$250 billion goes toward health, \$150 billion for education and training, and \$120 billion for transportation. The rest consists of income security, international affairs, the Department of Justice, community and regional development, natural resources and the environment, science and technology, and other expenditures.

How much is currently spent on interest payments to service the national debt? Roughly \$1.1 trillion, a figure that is expected to rise to \$5.6 trillion in 2054 under baseline assumptions.

What spending could be cut? At a high level, voters like the idea of cutting but are less enthusiastic when their spending is on the proverbial chopping block. For that reason, politicians tend to couch their proposals as plans to "cut spending by such-and-such amount," without specifying which programs will actually be trimmed. Such strategic opacity can make it difficult to evaluate the options. Instead, we turn to the CBO's most recent Options for Reducing the Deficit for a menu of optional policy cuts.



Voters like the idea of cutting but are less enthusiastic when their spending is on the chopping block." According to the CBO, each of the spending cuts below could make a sizable impact over 10 years:

Policy	Potential Savings (US bil.)
Establish caps on federal spending for Medicaid	\$501-\$871
Reduce federal Medicaid matching rates	\$68-\$667
Increase the premiums paid for Medicare Part B	\$57-\$448
Reduce Medicare Advantage benchmarks	\$392
Reduce Social Security benefits for high earners	\$40-\$184
Set Social Security benefits to a flat amount	\$270-\$593
Reduce spending on other mandatory programs	\$580
Reduce the Dept. of Defense's annual budget	\$995

Some savings are certainly larger—and more politically palatable—than others. What's the net effect? Depending on the assumptions around their timing and persistence, cuts on this scale could keep the debt down to around 120–140% of GDP in 2054.

Consensus Is Contentious

Now let's return from the world of hypothetical policies to the world of political realities. In practice, many of the aforementioned tax and spending policy changes will never become law. In addition, in order for both parties to reach a consensus on tax hikes, they may need to consider each other's proposed spending cuts.

Finally, and arguably most importantly, there currently appears to be very little political appetite on either side for deficit reduction. The deficit widened under the Trump administration, even before the pandemic hit. The 2017 Tax Cuts and Jobs Act (2017 TCJA) was projected to increase the debt by \$1.9 trillion from 2018 to 2027, a fairly accurate forecast prior to the pandemic's impact. Currently, Trump is campaigning on the promise of extending the TCJA provisions that are set to expire after 2025, which the CBO estimates would increase the federal debt by almost \$3.5 trillion through 2033. At the same time, President Biden is currently running a sizable budget deficit—among the largest in history outside a major war or recession.



Ultimately, while both parties may pay lip service to addressing the deficit, a meaningful reduction does not appear imminent.

What might prompt policymakers in DC to seriously address the issue? We think it would require a crisis or mini-crisis similar to ones we've previously discussed. Alternatively, a bipartisan coalition organized around the nation's fiscal condition—similar to the environment in 1994 and 2010—could serve as a catalyst, if marked by a willingness to compromise. However, that willingness seems optimistic in today's polarized political climate.

Dream of Japanification?

The final scenario to consider is the debt situation following a similar path to Japan's. Despite the significant increase in debt levels, Japan avoided an interest rate or inflation crisis. Admittedly, it's a bit unusual to discuss Japanification in a somewhat positive light, as there were concerns before the pandemic that the US would follow Japan's path toward low growth and secular stagnation.

Effectively, this situation would arise from an initial liquidity trap and a lack of credit growth, requiring large-scale deflation. For the US to follow a similar path, we'd need to see deflationary pressures, and perhaps more importantly, weakened firms and financial institutions

that limit the demand and supply of credit. Given the current state of US banks, companies, and the cultural significance of credit for both consumers and businesses, we find that unlikely. Also, while this scenario may forestall a debt problem, it's not something to strive for because of its adverse impact on growth and the economy as a whole.

A Little Bit of This, a Little Bit of That

In reality, the nation's debt issues are unlikely to be resolved by a single answer. It could take some form of crisis (hopefully, a small one) of unknown timing or duration to prompt policymakers to act. Economic growth may come in higher than expected, thanks to Al and other technologies, but it may not be sufficient to make the debt sustainable by itself. Fiscal fixes will require trade-offs between tax hikes and spending cuts, which will likely weigh on growth. Finally, inflation may play a role, though its full impact would depend on its scale and the magnitude of undershooting the equilibrium policy rate by the Fed. Ultimately, we expect a little help from a combination of economic growth, fiscal policy, and potentially inflation to keep the debt manageable for decades to come.

At the margin, the debt issue makes us slightly favor stocks over bonds relative to how we'd position in a completely benign environment. We also recommend some degree of inflation protection. That said, we're not overly concerned about the performance of any individual asset class or making large shifts in our strategic allocations to position for this theme (*Display 16*).

Much Ado About Bonds

No asset class generates more concern when it comes to the debt debate than nominal bonds. Our research suggests that some, but not all, of these worries are justified. Nevertheless, in several of the scenarios we've discussed, nominal bonds should hold up for an extended period of time.

DISPLAY 16: DEBT RESOLUTION SCENARIOS AND PRESUMED IMPLICATIONS FOR ASSET-CLASS PERFORMANCE

	Kick the Can	Grow Out of It	Inflate Out of It	Raise Taxes	Cut Spending	Japanification
Nominal Bonds	Fineuntil they're not	Normal	Moderate repression most likely—unpriced inflation hurts. Significant repression less likely—can trade out with cap gain	Normal	Normal	Unexpected disinflation/ deflation could help nominal bonds
Inflation-Linked Bonds	Fine until they're not	Normal	More protective against unexpected inflation	Normal	Normal	Could underperform nominal bonds
Stocks	Normal	EPS growth tailwind for stocks	Reasonable inflation protection from pricing power	Corporate tax hikes could have a one-time negative impact on earnings and stocks	Could have sector-specific consequences (e.g., defense, healthcare, etc.)	Weak growth becomes headwind
Real Assets	Mild normal returns	Mild normal returns	Mild normal returns	Mild normal returns	Mild normal returns	Poor due to weak growth and weak inflation
US Dollar	Normal for a while. Reaction at time of mini-crisis would depend on other countries	Could strengthen due to growth and Al skew in US economy	Could weaken. Depends on other countries	Normal	Normal	

Current analysis does not guarantee future results.

As of September 1, 2024 | **Source:** Bernstein analysis

If we do have a debt crisis of some sort, we'd expect nominal bonds to perform well right up until the crisis erupts. At that point, whether term premiums rise—or the market forces the Fed into a sharper hiking cycle, as it did in the 1990s—these bonds will suffer in the short run.

"

In several of the scenarios we've discussed, nominal bonds should hold up for an extended period of time."

Should the US somehow experience Japanification (with rates and inflation both falling), nominal bonds should deliver decently up until that point. Subsequently, we'd expect them to perform very well for a brief period as interest rates, inflation expectations, and realized inflation fall. However, from that point forward, we'd expect reinvestment in nominal bonds to generate paltry returns, given ultralow interest rates.

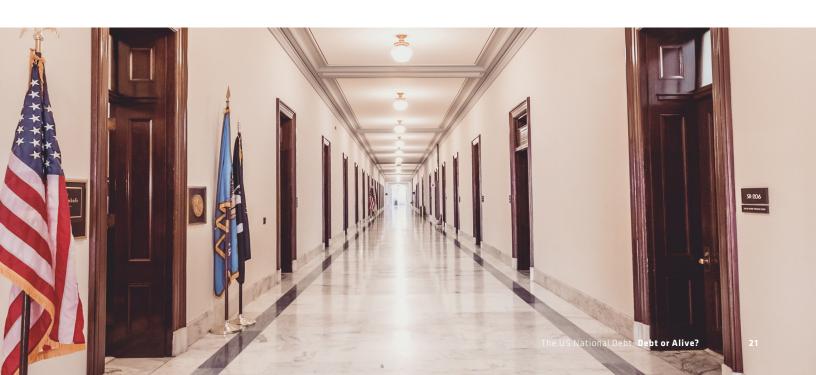
What if policymakers deliberately suppress interest rates to inflate away the debt? The impact on bonds would depend on the degree

of suppression. The worst case for bondholders comes in the most likely form: a moderate suppression of yields that leads to unpriced inflation. In this case, because yields do not fall that far, capital gains are limited and unpriced inflation erodes the real return.

Perhaps counterintuitively, more aggressive suppression could actually work in bondholders' favor for long enough to trade into other assets. However, this aggressive form of financial repression, along the lines of the Fed's WWII policy, is less likely than more moderate rate suppression. The twist that benefits bondholders in the aggressive case? By becoming price-insensitive bond buyers (or forcing banks to do so) to force yields down, the Fed gives current holders the opportunity to sell for a large capital gain that would likely outweigh any inflation to that point—and to reposition their portfolios for subsequent inflation.

How can investors protect portfolios against inflation more generally? Real bonds or inflation swaps could be defensive. Yet if a debt crisis takes the form of a spike in the term premium or real yields, real bonds will suffer along with nominal bonds. In a Japanification scenario, we'd actually expect nominal bonds to outperform real bonds due to the unexpected disinflation or deflation. And in a situation with inflation and financial repression, their relative performance could depend on the timing between the decline in interest rates and the onset of inflation and/or rising inflation expectations.

With moderate interest rate suppression, real bonds could outperform nominal bonds in the early stages. With more aggressive repression, we'd imagine that real bonds would hold up slightly better before implementation. Following that, with real yields artificially depressed, we'd expect poor returns. All that said, outside a debt crisis or financial suppression/repression, we'd expect real bonds to deliver reasonably well in all our other scenarios.



Sizing Up Stocks

Overall, we expect US stocks to offer satisfactory returns in the coming decades, but they could experience anything from a large one-time drop to a sustained and meaningful tailwind, depending on how the debt situation plays out. Following the corporate tax cuts in the 2017 TCJA, US stocks experienced a one-time boost of around 20% as their earnings surged due to the tax savings falling directly to the bottom line. The Biden administration had proposed a partial reversal that would take the statutory tax rate halfway back to its previous rate and likely lead to around a 10% drop in earnings the year following passage. In a future administration, that's a one-time risk to the market; yet if it were to occur, we'd expect stocks to normalize in the decades that followed.

"

What about the US dollar? That's hard to call. Most of the time, we'd expect it to remain fairly steady."

Japanification could bode poorly for stocks due to the secular stagnation that it requires and its implications for economic and earnings growth. But that could also be offset, to some degree, by lower interest rates. Notably, Japan's stock market lagged for decades, setting a low bar for our expectations.

Should a large or mini debt crisis occur, stocks could face a headwind over the medium term. Historically, stocks have been negatively correlated with the term premium. If that spikes due to market concerns about the debt, we'd expect it to weigh on equities—they could still appreciate in that environment, just by less than we'd expect otherwise.

Financial repression and a moderately inflationary environment could help stocks. Revenues and earnings are nominal, and multiples depend on interest rates, with low rates supporting higher multiples. So, in nominal terms, we'd expect stocks to perform well. In fact, our research has shown that while stocks aren't perfect inflation hedges, they are highly effective in those environments, with minimal portfolio

drag in noninflationary environments. For investors whose portfolios can handle the volatility that stocks bring, they can be an extremely attractive and low-cost defense against inflation. Both stocks and bonds could deliver in the early phase of this type of scenario, but while future bond returns would become unattractive, future stock returns could remain reasonable.

Finally, stocks perform best in everyone's favorite scenario. If we grow our way out of the debt, they'll benefit from a sustained tailwind for earnings growth from higher real GDP growth.

Generally speaking, foreign stocks could offer moderate diversification benefits. Yet how they'd help hedge the risk of the US debt situation remains to be seen. Much would depend on the geography and whether those countries or regions also face similar debt pressures, experience similar market treatment, and take similar corrective actions.

Real assets would likely offer mild returns, in most cases. But in a crisis or an inflationary environment, we'd expect them to hold up. They'd falter most in a secular stagnation with weak growth and weak inflation.

What about the US dollar? That's hard to call. Most of the time, we'd expect it to remain fairly steady. If Al and accelerated growth prove to be part of the solution, we'd expect the dollar to strengthen due to faster growth and the heightened US exposure to Al development relative to other countries. In a debt crisis, an environment of inflation and financial repression—or a secular stagnation scenario—we could see the dollar weaken. But since the US is not alone in its debt problems, the actual performance would likely depend on how bad the situation becomes in other developed economies and the path they pursue to course-correct.

Discussions of the national debt often turn to discussions of cryptoassets, and vice versa. For the most part, we still see cryptoassets as a technology investment akin to venture capital, rather than an investment for macroeconomic risk management. The possible exception to that is bitcoin, which resembles a venture capitalist's bet on people valuing it similarly to how they have valued gold throughout history. Gold is often perceived as an inflation hedge, yet we've found that it serves as more of a disaster hedge. Accordingly, if bitcoin can switch from being a risk-on asset to being one of the two ultimate risk-off assets, it could have some of the same portfolio benefits while avoiding the physical constraints of the metal itself. But just as we include gold in a basket as an inflation hedge because of its unreliability, we would also consider bitcoin in the same manner, rather than relying on it as a sole hedge or solution.



Conclusion

Fear sells better than hope, and pessimism sells better than optimism. So when it comes to the national debt, you're likely to hear more fear and pessimism than anything else.

To be sure, the US government debt is currently on an unsustainable path. As we said at the start, yellow warning lights are flashing, but the sirens aren't yet blaring. The country still has time—and options—to pursue a sustainable course, and we remain optimistic that the government will act before the situation materially worsens. Still, it could take a market shock to spark an epiphany. Currently, there is no appetite among the leaders of either party to reduce the deficit, and that will likely have to change. Perhaps Al will prevent society from having to make difficult decisions. Yet even if there's no appetite

to tackle it today and the clock keeps ticking, time is nowhere near running out.

From an investment perspective, the debt situation makes us marginally more positive on stocks than bonds, and we lean toward slightly more inflation protection. We remain wary of the risk of sudden interest rate shocks if or when the market rapidly reassesses the national debt's sustainability. Yet overall, we expect most asset classes to perform reasonably well in the future. With no obvious course of action to resolve the debt—or clear implications for long-term growth, interest rates, or inflation—we reiterate that investors should remain diversified. We don't recommend tilting portfolios too far in any direction to position for a specific market scenario that may not materialize for years or even decades to come.

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