US debt and yields: What Harris and Trump aren't telling you about their policies

By Jesper Rangvid

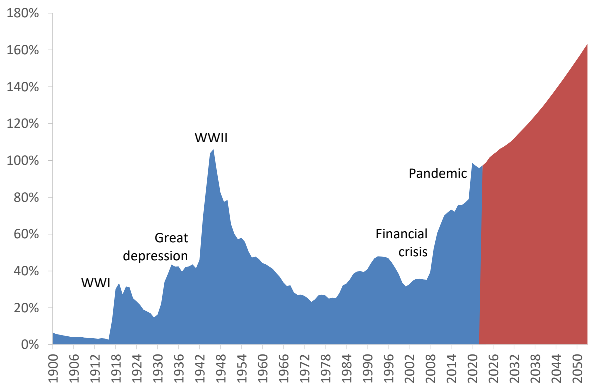
Given the otherwise robust US macroeconomy, the outlook for the national debt arguably is one of the most pressing challenges. Ordinarily, during an election campaign, one would expect candidates to outline how they intend to address critical issues like this. However, neither Harris nor Trump has put forward comprehensive plans to reduce the US debt. Instead, both candidates have introduced economic proposals that are likely to exacerbate the already unsustainable debt trajectory, potentially driving yields significantly higher.

Let me begin this analysis by reviewing the current state of US public debt, followed by an examination of how Kamala Harris's and Donald Trump's economic proposals could shape its outlook. Finally, I will discuss the likely implications for yields.

A good starting point is the Congressional Budget Office (CBO), which provides comprehensive long-term data on historical developments in US public debt and projections under "current law." "Current law" projections reflect anticipated developments in US federal revenues and expenditures based on existing policies, without incorporating assumptions about future, undecided policies, and given consensus macroeconomic forecasts for GDP growth, interest rates, etc.

Figure 1 presents an overview of past debt trends and future projections. Covering over 125 years of historical data on US public debt relative to GDP, the figure also includes the CBO's forecasts for debt over the next three decades, extending through to 2054.

Figure 1*. US federal debt held by the public in percentage of US GDP, historical (blue) and projected (red). 1900-2054.*
Source: Congressional Budget Office and J. Rangvid



Over the past 125 years, five major shocks have caused significant increases in debt levels: the First and Second World Wars, the Great Depression of the early 1930s, the global financial crisis of 2008, and the COVID-19 pandemic in 2020. Outside of these periods, debt was generally reduced—falling before the First World War, between the First World War and the Great Depression, after the Second World War, and so on. The historical peak in debt occurred at the end of the Second World War, when debt reached 106% of US GDP.

Looking ahead, debt is projected to increase steadily, even in the absence of shocks. Shocks are impossible to predict (that's why they are shocks) but shocks have historically lifted US indebtedness significantly, i.e., should such shocks occur, the debt trajectory will be even worse.

Anyhow, in the absence of shocks, debt is expected to climb to 163% of GDP by the end of the projection period, i.e., in 2054, from its current level of 97% of GDP in 2023, thus far surpassing the historical high of 106%. In fact, this milestone is anticipated to be exceeded already in 2029.

To understand the drivers behind this debt expansion, Figure 2 displays both historical and projected trends in the annual fiscal balance, separated into the primary balance and net interest outlays.

Figure 2*. US primary balance and net interest rate expenses, both in percentage of US GDP. Projection period (2024-2054) indicated by shading. 1940-2054.*
Source: Congressional Budget Office and J. Rangvid

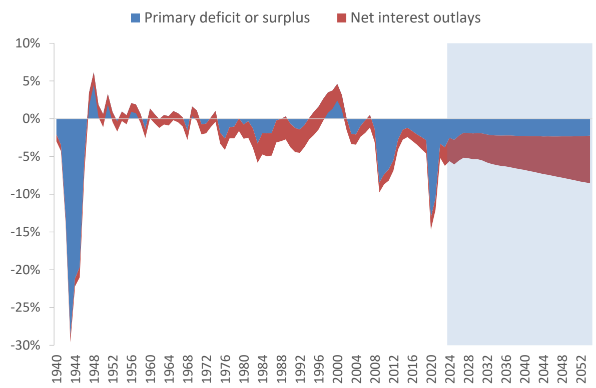
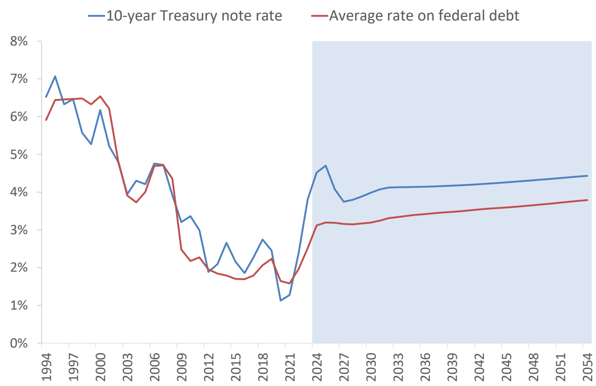


Figure 2 shows that under "current law", the primary deficit is projected to remain at slightly more than 2% of GDP for the next many decades.

With persistent deficits, debt levels will continue to accumulate, leading to higher interest expenses as the debt grows. This results in the increasing negative figures for net interest outlays displayed in Figure 2.

The projections for interest outlays even appear somewhat optimistic, I think, as the significantly higher debt levels projected by the CBO do not result in markedly higher interest rates. Figure 3 illustrates the historical trends in the yields on ten-year Treasury bonds and the average rate paid on federal debt, alongside projections for these figures.

Figure 3*. Yield on 10-year Treasuries and average interest rate paid on federal debt. Projection period (2024-2054) indicated by shading. 1994-2054.*
Source: Congressional Budget Office and J. Rangvid



Although US debt is expected to rise from around 100% of GDP today to more than 160% of GDP in 2054 (Figure 1), interest rates on this debt are projected to increase only slightly, from 4% to 4.4% in 2054. Given the existing literature on the effects of public-debt expansions on yields, this may seem an optimistic assumption, as I will return to below. If the CBO's interest rate projection proves too conservative, debt levels could worsen even further than shown in Figure 1.

Economic plans of Harris and Trump

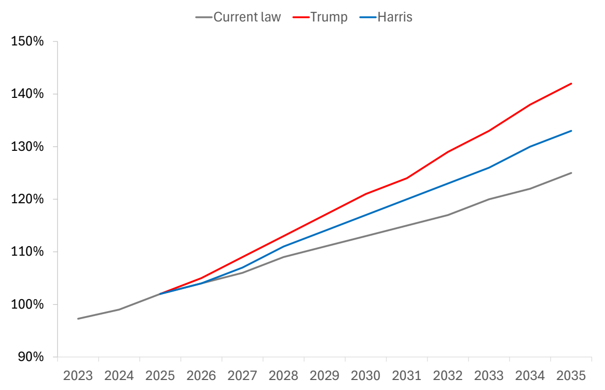
The CBO currently publishes projections for the next three quarters; were it to extend these further, the trajectory would show debt continuing to rise—obviously, an unsustainable trend.

With an election approaching, one might expect—perhaps naively—that the candidates would outline plans to address this issue. Yet, this has not been the case.

The Committee for a Responsible Federal Budget (a nonpartisan, non-profit organisation committed to educating the public on fiscal policy) has analysed each candidate's economic proposals. Their conclusion is that, rather than reducing the deficit, both candidates' plans would increase it significantly (link).

Figure 4 presents the main findings from the Committee's analysis, showing the projected debt trajectory under "current law" (from Figure 1) alongside the Committee's estimates of how debt would evolve, relative to GDP, over the next decade under each candidate's economic proposals. Here, the choice of blue and red colours is intentional, unlike the colour schemes in Figures 1 and 2.

Figure 4*. Projected developments in US federal debt to GDP over the next decade under current law, Harris's economic proposals, and Trump's economic proposals.*
Source: Committee for a Responsible Federal Budget and J. Rangvid.



The CBO estimates that under current law, debt will reach 125% of GDP by 2035. According to the Committee for a Responsible Federal Budget, debt would increase by a further eight percentage points under Kamala Harris's economic proposals, resulting in a total of 133% of GDP in 2035. Debt would rise even more under Trump's economic proposals; the Committee estimates a debt increase of nearly twenty percentage points, reaching 142% of GDP in 2035.

We are discussing substantial figures here. The US federal debt is expected to exceed USD 50 trillion by 2035 under "current law". Kamala Harris's plan would add approximately USD 4 trillion to this total, while Trump's plan would contribute around USD 8 trillion.

Uncertainty

The Committee for a Responsible Federal Budget emphasises that there is a significant degree of uncertainty surrounding these projections. The figures presented above represent what the Committee refers to as their "central" estimates. They also provide "low" and "high" estimates, which I illustrate in Figure 5 for Harris's plan and in Figure 6 for Trump's plan.

Figure 5*. Projected developments in US federal debt to GDP over the next decade under current law and Harris's economic proposals, including central, low, and high estimates.*
Source: Committee for a Responsible Federal Budget and J. Rangvid.

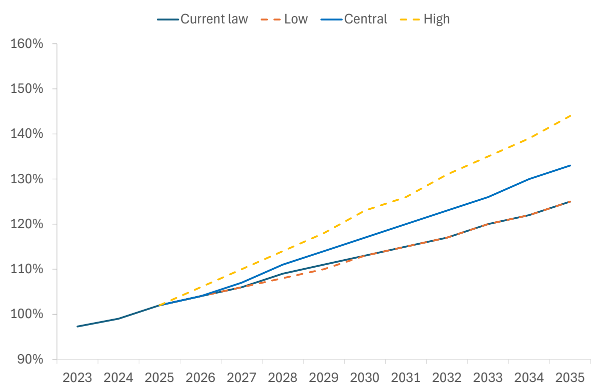
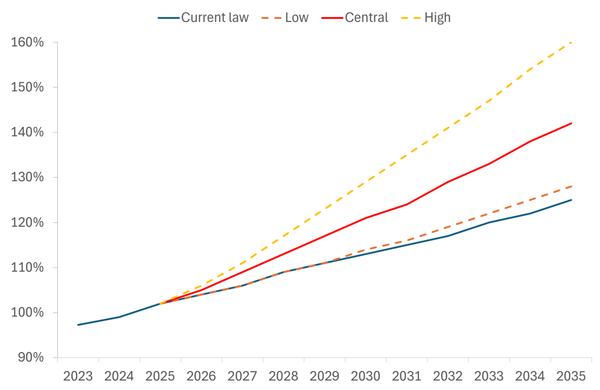


Figure 6. Projected developments in US federal debt to GDP over the next decade under current law and Trump's economic proposals, including central, low, and high estimates.
Source: Committee for a Responsible Federal Budget and J. Rangvid.



Under the best-case (low) scenarios, debt is projected to increase by USD 0.3 trillion under Harris's plan in 2035 and by USD 1.7 trillion under Trump's plan, relative to current law. This means that even in the most optimistic scenarios, neither plan will reduce debt compared to existing plans.

In the worst-case (high) scenarios, Harris's proposal is expected to add an additional USD 8.3 trillion to the federal debt by 2035, relative to current law, while Trump's plan could increase debt by USD 15.6 trillion, bring debt levels to 144% of GDP under Harris and 161% under Trump.

Other estimates

Numerous assumptions underpin these calculations. For a comprehensive discussion of these assumptions and detailed analyses of each candidate's individual proposals, please consult the Committee's website (link).

The Committee for a Responsible Federal Budget is not the only non-partisan organisation to evaluate Harris' and Trump's plans, although they seem to provide the most up-to-date and detailed calculations.

The Penn Wharton Budget Model (PWBM) has also assessed the candidates' economic proposals and presents somewhat smaller estimates. For example, PWBM expects Harris's plan to add USD 2 trillion to the primary deficit over the next ten years, relative to current law, which would raise the debt-to-GDP ratio by 4.4 percentage points by 2034 (link). PWBM expects Trump's plan to raise debt by USD 4.1 trillion and debt-to-GDP by 9.3% in 2034 (link).

The PWBM estimates are from 26 August and do not incorporate the latest proposals, whereas the calculations from the Committee for a Responsible Federal Budget are based on data from 28 October. Additionally, the Committee provides insights into the uncertainties surrounding their estimates and offers a detailed description of the individual components of both candidates' plans, which is why I place greater emphasis on the Committee's calculations here.

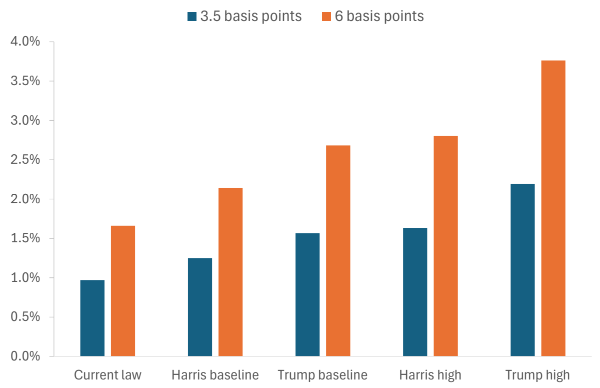
Consequences for yields

These debt expansions are likely to have significant implications for yields. A substantial body of academic research has examined how yields on US Treasuries respond to rising public debt. Gust and Skaperdas (link) summarise nine academic studies, which report varying estimates: some suggest that yields on ten-year Treasuries increase by as little as one basis point for each one-percentage-point rise in the debt-to-GDP ratio, while others indicate an increase of up to six basis points.

Rachel and Summers (link) also review the literature, concluding that consensus estimates suggest long-run yields increase by 3.5 basis points for each one-percentage-point rise in the government debt-to-GDP ratio.

For my analysis, I adopt the consensus estimate of a 3.5 basis-point increase in yields as a base case and a 6 basis-point increase as a pessimistic scenario, noting that even the latter may be conservative. I then apply these estimates to the debt changes implied by current law and the candidates' policies, as illustrated in Figures 5 and 6. The projected effects on yields in 2035 are shown in Figure 7.

Figure 7. *Projected percentage point changes in yields on long-term Treasuries resulting from projected increases public debt under current law and central and high estimates for Harris' and Trump's proposals. Calculations are shown for a 3.5 basis point increase in yields for each percentage point increase in the debt-to-GDP ratio, and for a 6 basis point effect.*
Source: J. Rangvid.



Under current law, the debt-to-GDP ratio is projected to rise from 98% today to 125% by 2035. This increase alone would drive yields up by 1 percentage point (relative to a scenario with no change in debt) under the 3.5 basis-point scenario, and by 1.7 percentage points under the 6 basis-point scenario. This is why I suggested that the CBO yield projections in Figure 3 may be conservative.

The candidates' proposals would raise yields even further. Based on Harris's proposals, yields are projected to increase by 1.25 percentage points relative to the current baseline by 2035 if applying the 3.5 basis-point effect, and by over 2 percentage points with the 6 basis-point effect. For Trump's proposals, these figures are 1.6 and 2.7 percentage points, respectively.

Under a more severe scenario, these effects become dramatic. For instance, if we apply the "high" estimate for Harris's proposals (from Figure 5), combined with the 6 basis-point effect, yields would rise by 3 percentage points relative to today. In the worst-case scenario for Trump's proposals, yields could increase by 4 percentage points.

These are substantial—yet realistic—effects, which would further strain an already unsustainable US debt trajectory.

Conclusion

In my previous blog, I noted that France has experienced rising yields recently due to an uncertain debt situation (link). The US debt is currently on a similar trajectory, yet each presidential candidate has proposed measures that would significantly increase these already high debt levels, with Trump's proposals likely leading to an even greater rise than Harris's.

The US differs from France and many other countries in several ways. It benefits from the dollar as its reserve currency, a dynamic economy, and its own central bank.

However, debt cannot continue to accumulate indefinitely. If this issue is not addressed in a timely manner, bond markets will eventually compel politicians to act by demanding higher yields when purchasing US bonds. The likely consequences for yields are dramatic. In fact, it seems plausible that their plans could increase Treasury yields by several percentage points.

The US Treasury market is the most important in the world, and its interest rates influence rates globally. Consequently, higher interest rates in the US—stemming from an unsustainable debt trajectory—will not only impact the US economy but also reverberate throughout the global economy. This illustrates another way in which the upcoming US election will affect the rest of the world.