Chairman Schweikert, Ranking Member Pascrell, and Members of the Subcommittee,
Thank you for the opportunity to testify today on the costs to the American people arising from the significantly increasing burden of federal debt service. I have been a finance professor for more than twenty years and had the privilege of serving as the Assistant Secretary for Economic Policy at the Department of Treasury from 2019 to 2021. In that role, I worked on the economic projections included with the administration's budget submission and oversaw the Trustees processes on behalf of Secretary Mnuchin. During the pandemic, I was part of the Secretary's team who negotiated the CARES Act and was the senior Treasury official responsible for implementing the Paycheck Protection Program.

During my first week at Treasury, the Secretary asked me to oversee finalizing the Financial Report of the U.S. Government for 2018. According to the projections in that report, by the end of the 75-year forecast period, U.S. government debt would represent 530 percent of Gross Domestic Product, compared with just 78 percent in 2018. Even prior to the spending that was necessary at the depths of the pandemic, the U.S. fiscal situation was not sustainable. Despite historically low interest rates, rising deficits were projected to cause outstanding debt to escalate. For that reason, we modified the Executive Summary of the 2018 report to no longer have the second section called "Where We Are Headed" (as it was called in the 2017 report) and we instead renamed the second section "An Unsustainable Fiscal Path". We also added language in that section to read, "The projections in this Financial Report show that current policy is not sustainable. These projections assume that current policy will continue indefinitely, and are, therefore, neither forecasts nor predictions. Nevertheless, policy changes must be enacted so that financial outcomes will be different than those projected."

In 2020, the COVID-19 pandemic hit and Congress on a bipartisan basis worked closely with the Trump Administration to fund the CARES Act and mitigate the economic harm that might have otherwise resulted. However, all of that spending was deficit financed, making the unsustainable nature of the fiscal situation that we outlined in the 2018 report even more acute. Since CARES, trillions more in deficit spending has been enacted. Debt held by the public has risen from $\$ 15.75$ trillion at the end of fiscal year 2018 to $\$ 26.24$ trillion at the end of fiscal year 2023. The most recent version of the report (issued in February of this year) has retained our title for the second section of the Executive Summary - "An Unsustainable Fiscal Path" - and now forecasts a debt to GDP ratio at the end of the 75 -year forecast period of 566 percent. As a result, the rating agency Fitch downgraded the US government's bond rating from AAA to AA+ earlier this year and last month, Moody's outlook for the US government's credit rating changed from stable to negative.

Debt services costs are not just a function of the amount of debt outstanding; they are also determined by the interest rate environment when Treasury is borrowing money and the decision of the mix of debt securities that are issued. The overall interest rate Treasury will pay this fiscal year is partially based on the currently high interest rates for the new and rolling over of debt that will be issued this year. It is also impacted by the interest rates at which outstanding long-term bonds were issued in the past. As Treasury issues debt with maturities as short as one month to
as long as 30 years, debt service costs this fiscal year are a weighted average of the interest rates of the last 30 years.

In fiscal year 2018, debt service costs on outstanding public debt totaled $\$ 351$ billion. By fiscal year 2023, that number had risen to $\$ 666$ billion. In other words, debt outstanding has risen 67 percent since 2018 but the cost of servicing the debt has risen 90 percent. Debt service costs have increased faster than outstanding debt because the recent level of interest rates has been the highest we have seen in a couple of decades.

The Treasury Department is tasked with minimizing expected interest costs on servicing the federal debt. That is primarily done through the selection of the maturity of the debt securities that they issue. One might think that such an objective is accomplished by simply issuing the maturity that currently has the lowest yield. However, that depends on the time horizon over which one is looking to minimize debt service costs. For instance, in 2020, interest rates on 1year bonds were at about 0.1 percent while coupon rates on the ten-year bond got as low as 0.625 percent. If one were merely looking to minimize debt service costs in 2020, one might think Treasury should have only issued short-term debt. Instead, the Secretary increased the quantity of long-term debt that was issued. ${ }^{1}$ While that marginally raised debt service costs in fiscal year 2020, the American people are benefiting today from having issued 'higher cost' debt in 2020 because that outstanding principal has an annual interest cost of just 0.625 percent instead of the current four to five percent rates prevalent today.

There is significant academic work on the interest rates that we observe on debt issuances of different maturities, a topic called the term structure. This literature generally models the longterm interest rate as a function of expectations on where short-term interest rates are likely going to be in the future plus a risk premium, called the term premium. ${ }^{2}$ The term premium is extra yield investors require to compensate them for potential losses on Treasury bonds, and is higher with increased risk of such losses. For investors, long-term debt is risky because it is not known what the future path of interest rates will be, which creates the potential for bondholders to actually lose money if they buy Treasury bonds and have to sell them before they mature. For example, 10-year Treasury bonds issued in 2020 are currently trading at twenty percent below their issue price, meaning that if holders of those bonds sold them now, they would take losses of twenty percent. Some of the thirty-year bonds issued during 2020 are trading at 50 cents on the dollar.

The result is that historically, the term premium is positive, and the term structure is upward sloping. Investor-required compensation for those potential losses is why long-term bonds generally have higher yields than short-term bonds. That may lead one to conclude that interest costs would be minimized by issuing short-term bonds. However, the bonds issued in 2020 demonstrate that there are market conditions where Treasury will reduce long-term borrowing

[^0]costs by issuing long-term bonds. Ultimately, this means the Treasury Secretary is speculating on the future path of interest rates.

To facilitate their work identifying the mix of maturities to issue, Treasury meets quarterly with the Treasury Borrowing Advisory Committee (TBAC). Members of the committee provide the Secretary and the Treasury team with their assessment of current market conditions and advise on the demand for bond issuances of various lengths.

The reason that demand for varying maturities exists is because different investors have a range of time horizon objectives. For example, pension funds are investing money received from employers today to fund retirement payments decades in the future. Similarly, most whole life insurance contracts will not be exercised for decades, and those companies likewise benefit from investing in long-term securities in the interim. Other investors desire short or intermediate term investments because of the timeframe on when they anticipate using the funds. Some of the largest buyers of Treasury bonds are foreign reserve banks who likewise have varying time horizons on their holdings. The input from TBAC helps the debt management team update the mix of maturities at which they estimate that they can most efficiently fund the maturing debt that will be rolled over and issue new debt to finance persistent budget deficits.

One challenge the bond market has recently faced is that long-term bond auctions have shown less demand than normal, particularly from international buyers. The result is that the interest rates at which Treasury was able to borrow at the auctions were significantly higher than secondary market yields would have suggested, raising debt service costs for the American people. The central banks of both Japan and China have been reducing their ownership of US Treasuries. While part of this may be the recent strength of the dollar making dollar denominated securities less attractive, it is also a reflection that investors are growing more concerned about our nation's long-term fiscal stewardship. Additionally, the Chinese Communist Party (CCP) has been making efforts to reduce the portion of Chinese trade conducted in dollars, which would also decrease the transactional motivation for holding dollar-based assets. A sustained decrease in foreign holdings of U.S. Treasuries would be concerning if it is resulting from a view that the future of our economy is not as strong as it once was.

Given the significant reduction in demand for extended maturity government bonds and despite the fact that yields on long-term bonds are currently lower than the yields on short-term bills, Treasury announced last month that their issuance of long-term bonds would be lower than the market anticipated. Whether we should pull back on issuing more long-term Treasury bonds depends upon whether government policy succeeds in reigning in the 40-year inflation that we have incurred recently. Reductions in budget deficits and the unleashing of the American economy through deregulation would bring down inflation more effectively than Federal Reserve interest rate policy. If that were to occur, issuing short-term debt that can be rolled over at the lower bond yields will result in reducing long-term debt service costs. If on the other hand, we continue running unsustainable budget deficits while reducing potential output through excessive government intervention, locking in today's interest rates for years to come would best curtail ongoing interest costs and mitigate potential risks of having to rollover our debt at even higher interest rates.

Some have expressed concern that foreign holdings of US securities are problematic for Americans. In my view, the desire of foreign individuals and governments to hold Treasury debt reveals that investment in the United States offers financial safety at a competitive rate of return. This is a beneficial outcome and reflects ongoing economic strength. I would differentiate CCP holdings in technology firms who provide inputs into sensitive national security tools or farmland near military facilities from holdings in government debt. We should welcome lower borrowing costs on US Treasury borrowings arising from foreign countries wanting to invest in our nation's future, provided that those investments do not sacrifice our defensive capabilities. We net benefit from being the dominant reserve currency for the world. In addition to lowering borrowing costs of the both the US government and American households, being the world's reserve currency facilitates implementation of our national security strategy as we are in a superior position to monitor money flows around the world that may be funding arms dealing, drug trafficking, and other elicit activities. Further, it facilitates using sanctions as an economic tool to punish bad actors, enhancing potential military and diplomatic actions.

The impact on the American people of higher debt service costs is not limited to merely the potential for higher future taxes to cover these growing expenditures. Growing interest costs have the potential to crowd out funding for other government services. Additionally, mortgage rates paid by American home buyers directly result from long-term borrowing rates for the U.S. government. Since January 2021, 30 -year fixed mortgage rates have risen from an average of $2.77 \%$ to $7.22 \%$. This translates to a monthly principal and interest payment on a $\$ 250,000$ mortgage rising from just over $\$ 1000$ per month to $\$ 1700$. The best way for us to improve access to home ownership for young people is to get interest rates back down, which means deploying fiscal and regulatory policies in ways that result in lower inflation and therefore lower interest rates. We should stop relying entirely on the Federal Reserve to curb the inflation that has crushed household budgets over the last three years.

Thank you for including me in today's important discussion and I look forward to answering your questions.


[^0]:    ${ }^{1}$ Note that the percentage of debt that was long-term fell because the quantity of debt being raised was extraordinary.
    ${ }^{2}$ Risk-free bonds may also carry a convenience yield that as van Binsbergen, Diamond, and Grotteria (2022) explain "reflects the ease with which they can be traded by uninformed agents, posted as collateral, satisfy regulatory capital requirements, or perform other roles similar to that of money."

