# **Hearing on US Treasury Debt in the Monetary System**

Testimony before the House Financial Services Committee

Task Force on Monetary Policy, Treasury Market Resilience, and Economic Prosperity

Kristin Forbes

Jerome and Dorothy Lemelson Professor of Global Economics and Management

MIT-Sloan School of Management

April 8, 2025

Thank you for inviting me to testify on the role of the US Treasury market for monetary policy, the financial system, and US economy. This Task Force is an important addition to the oversight provided by Congress. A well-functioning Treasury market and the effective implementation of monetary policy are both critical foundations of US economic prosperity. Both of these foundations, however, are currently facing challenges. This is a critically important time to reinforce what has been working well, as well as consider how to strengthen areas where fragilities are emerging.

For my testimony today, I will address four related points: (1) the importance of the US Treasury market and monetary policy to the US economy; (2) the importance of the US Treasury market to monetary policy; (3) growing risks to the US Treasury market; and (4) growing challenges for US monetary policy. I conclude with a short summary of my current concerns about the fragility of the US Treasury market.

Before addressing these points, let me briefly summarize my background and the experience on which I will draw for my comments today. I am an economist and my primary job since receiving my PhD in 1998 has been as a professor at the Sloan School of Management at MIT. My academic research focuses on monetary policy, macroprudential regulation, capital flows, financial crises and contagion—usually from a multi-country perspective. One of MIT's strengths is its support for faculty to work in "practice" in their area of academic expertise. In this capacity, I have taken several leaves from MIT to serve in public sector roles: as a Deputy Assistant Secretary in the US Treasury Department (2001-02), as a Member of President Bush's Council of Economic Advisers (2003-05), and as an External Member of the Bank of England's Monetary Policy Committee (2014-17). When not serving in these roles, I have also been involved in a number of advisory committees and consultant roles for other central banks, international institutions, financial institutions, and governments, including Governor Patrick's Council of Economic Advisers for Massachusetts (2009-14).

This background has exposed me to a range of perspectives. For today, however, I am speaking to you in my role as an economist and professor. These views are my own and should not be attributed to any group or institution with which I am (or have been) affiliated.

## Importance of the US Treasury Market and Monetary Policy to the US Economy

There are many complex networks we take for granted in our daily lives—from our health and the electricity grid to the US Treasury market and monetary policy. When one component of any of these systems malfunctions, the disruptions can be severe, and only then do we appreciate their role. Here are examples of the under-appreciated role of a well-functioning Treasury market and monetary policy:

- The US Treasury market is a critical source of financing for the US government; a breakdown of the market would make it more expensive to fund worthy programs and projects—from Social Security and Medicaid to securing the border and national defense. The CBO estimates that if interest rates on all Treasury securities increased by only 0.1 percentage points (pp) over the next 10 years, this would increase US budget deficits by \$351 bn over 2026-2035. To put this in context, this hypothetical 0.1pp increase is a fraction of what has occurred over the last decade, with the interest rate on 10-year Treasuries more than doubling over the last decade from just under 2% at the start of April 2015 to just over 4% at the start of April 2025.
- The US Treasury market serves as the benchmark for the pricing of borrowing and assets across the US financial system (as well as the rest of the world); a breakdown of this market would increase the cost of mortgages, auto loans and credit card balances for households, as well as the cost of bank loans and issuing debt for companies.
- US Treasuries are an important form of savings and liquidity for many households, companies and financial institutions; a fall in the value of Treasuries shrinks the value of retirement savings and causes losses for banks and companies that are not hedged. Sharp and unexpected price declines can trigger bank runs (as occurred for Silicon Valley Bank in 2023) and "doom loops," in which falling bond prices cause fire sales that exacerbate the price declines until liquidity dries up and markets stop functioning (as occurred in March 2020).
- Monetary policy is critically important to stabilize inflation and achieve maximum employment after a range of shocks (from oil price volatility to higher tariffs); the inability to pursue effective monetary policy leads to longer periods of high inflation, larger increases in the price level, and higher unemployment rates. If a central bank is not seen as independent and credible, inflation and interest rates can spike (e.g., Turkey's recent undermining of the central bank's independence contributed to inflation jumping to over 50% in 2022 and 2023).
- Credible monetary policy reduces term premia<sup>2</sup> and therefore reduces borrowing costs throughout the economy and boosts the prices of other assets (such as the stock market); if there is more uncertainty about monetary policy and the independence of the central bank, lenders will need to be compensated for this increased risk, leading to increases in term premia, higher interest rates (above and beyond any increase in expected inflation), and a fall in equities and other asset prices. Some of the largest effects occur for longer-term borrowing including mortgages.
- Credible monetary policy, and the corresponding reduction in borrowing costs and more stable
  macroeconomic environment, supports investment and growth; more uncertainty about inflation
  and borrowing costs will deter companies from investing and households from making major
  purchases, reducing demand and growth in the short term and reducing total productivity and
  potential growth in the longer term.

## Importance of the US Treasury Market to Monetary Policy

While the US Treasury market and monetary policy are each independently important for the functioning of the economy, they are also both tightly interconnected. For example, when less predictable monetary policy increases risk premia, this is directly transmitted into higher Treasury yields (thereby increasing in the cost of issuing debt for the US government and borrowing for

households and businesses). A less efficient US Treasury market complicates the transmission of monetary policy to the broader economy, making it harder for the Federal Reserve to calibrate how a given change in policy will spread throughout the economy. This could lead to more volatility in not only interest rates, but also unemployment and inflation. For brevity, I will focus on just one side of these interlinkages—how the US Treasury market is critical to the transmission of monetary policy and operations of the Federal Reserve.

Even as the tools for monetary policy have evolved over the past two decades, the US Treasury market has remained central for the transmission of monetary policy to the broader economy. More specifically, the Federal Reserve has transitioned from a scarce-reserves regime to an ample-reserves regime with two administered interest rates to keep the Federal Funds rate within a targeted band. Under both approaches, however, these adjustments filter through to the economy primarily by causing banks and other financial institutions to rebalance their holdings of US Treasuries and reserves, causing adjustments in Treasury yields that then act as a benchmark for the repricing of other assets and borrowing costs throughout the economy.

Even the newer tools for monetary policy, which were introduced which the administered interest rates were at the lower bound, work primarily through the US Treasury market. *Quantitative Easing*, when the Federal Reserve makes large-scale asset purchases, primarily occurs through purchases of US Treasury bonds (also including agency securities and other assets for certain programs). *Forward Guidance*, when the Federal Reserve attempts to change expectations for the future path of monetary policy, primarily works by reducing the yields on medium-term US Treasuries.

The US Treasury market is also central to other activities of the Federal Reserve. For example, when markets become dysfunctional and liquidity strained, key programs to restore market functioning often involve purchases of US Treasuries (such as during March 2020) or repurchase facilities to provide liquidity for institutions with US Treasury holdings.

Partly as a result of these programs, the Federal Reserve now holds a large share of outstanding US Treasuries, and US Treasuries constitute a dominant share of the Federal Reserve's asset holdings. In fact (and shown in Figure 1), US Treasuries constitute the majority of assets held on the Federal Reserve's balance sheet—at \$4.38tn (15% of GDP) at end-2024. <sup>3</sup> Although quantitative tightening has meaningfully reduced these holdings from a peak of \$5.77tn (22% of GDP) in June 2022, the Federal Reserve's profits remain sensitive to changes in Treasury yields. <sup>4</sup> This is an important reminder that this link between monetary policy and the US Treasury market persists for many years after any asset purchase programs are terminated.

Figure 1: Balance Sheet Assets, 2016-2024 Total assets, \$ billions 9,000 \$ billions Weekly 8,000 7,000 6,000 5,000 4,000 3,000 2,000 1,000 0 2016 2017 2018 2019 2020 2021 2022 2023 2024 Agency securities

Note: Other assets includes swaps, repo, loans, and liquidity and credit facility LLCs; Asset values are weekly Wednesday. Key identifies curves from bottom to top.

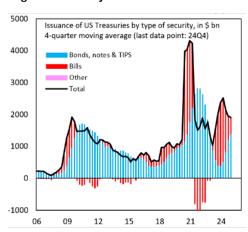
**Source:** Federal Reserve Board (2024). <u>Federal Balance Sheet Developments</u>, December.

## **Growing Risks in the US Treasury Market**

While the US Treasury market is the deepest and most liquid financial market in the world, cracks have recently appeared—most notably during March 2020 when the market became dysfunctional, impairing financial transactions and the flow of credit around the world. Some of these fragilities have worsened since 2020, reflecting recent changes in the US economy and financial system, as well as geopolitical shifts. This confluence of developments risks aggravating existing fragilities, particularly if anything undermines global demand for the US dollar or US Treasuries.

One important development is the increased scale of US Treasury issuance. The CBO estimates that in 2025 the US budget deficit will be \$1.9tn (6.2% of GDP) under current law, growing to \$2.7tn in 2035 (6.1% of GDP), well above the 50-year average of 3.8% of GDP. The large debt issuance required to finance these deficits each year will be aggravated by the growing volume of outstanding debt that expires and will also need to be refinanced. Figure 2 shows that a larger share of US debt issuance has recently been through short-term Treasury bills—debt that will need to be refinanced in a year rather than the longer duration typical before 2020 and in other countries. This necessity to issue and refinance a large volume of debt each month will make the US Treasury market much more vulnerable to any changes in the demand for US Treasuries—even if short-lived.

Figure 2: Treasury Issuance



**Source:** Institute of International Finance, *Global Macro Views*, 4/3/2025.

A second (and related) development in the US Treasury market is the more limited ability of broker-dealers to intermediate between buyers and sellers. The capacity of these middlemen, who are crucial to ensuring liquidity and efficient pricing, has not kept up with the increased size of the US Treasury market. These capacity limitations partly reflect new capital requirements and other regulations aimed at improving the resilience of the broader financial system, and there is an ongoing debate on potential reforms to address these constraints (such as adjusting the Supplementary Leverage Ratio or central clearing). For the time being, however, the limited ability of dealers to intermediate sudden changes in the demand for Treasuries could lead to price dislocations and a spike in borrowing costs in the short-term, as well as undermining confidence in this market over the longer term.

A third development is which entities are purchasing US government debt and how they are structuring their exposure. In the past, a substantial share of US Treasuries was purchased and held by foreigners, including banks and pensions funds as well as central banks and sovereign wealth funds. Although it is difficult to track the holdings of individual countries (as many purchases go through third-party financial centers), this share of US debt held by foreigners appears to have fallen meaningfully. More than compensating for this reduced demand by foreigners, however, has been increased purchases by US financial institutions—including asset managers (e.g., bond mutual funds, pension funds, and

insurance companies) and hedge funds. Many of these institutions engage in the US Treasury market not just by purchasing bills and bonds outright, but through repurchase agreements (repos) and derivatives (e.g., futures and swaps). Various hedging strategies (such as the "basis trade") are often combined with high leverage (particularly for hedge funds).

This shift in who holds US debt and how the transactions are structured has benefits and costs. When a larger share of US government debt is held domestically, the Treasury market is less vulnerable to changes in demand by foreigners and a larger share of the interest payments go to Americans. The leveraged US investors that have partially replaced foreign holdings are also more sensitive to small return differentials across markets, so that during relatively stable periods they can increase pricing efficiency and strengthen the transmission of monetary policy across financial markets and the broader economy. On the other hand, these leveraged investors can be less resilient to sharp market movements and periods of extreme volatility, as they are more prone to margin calls prompting rapid fire sales. In the extreme, these fire sales can trigger a collapse in liquidity, undermine market functioning and generate contagion to other institutions and markets. In contrast, foreigners (and particularly most foreign official institutions) have historically been fairly stable sources of demand for US Treasuries, often helping mitigate volatility during periods of heightened stress.

A final development that may begin to interact with these developments and affect the resilience of the US Treasury market is shifts in geopolitical alliances and the increased use of restrictions on trade and financial flows. These changes could reduce the demand for US dollars and US Treasuries, and appear to already be contributing to the reduced demand for US Treasuries by foreign entities discussed above. To date, this movement away from the dollar has been gradual, likely because there are limited "safe assets" outside of US Treasuries. <sup>10</sup> Alternate currencies, non-US government bonds, and other assets classes each have their own set of challenges. Nonetheless, if foreigners become concerned that they could suffer additional losses on their current holdings of US assets (whether from higher inflation, dollar depreciation, new taxes on their holdings, or restrictions on their ability to sell), this could trigger a sudden unwinding of their US Treasury holdings. This would cause a sharp depreciation of the dollar and increase in borrowing costs throughout the US economy, particularly on longer-term loans such as mortgages.

### **Growing Challenges for Monetary Policy**

Even if the US Treasury market remains resilient to each of these developments, monetary policy faces an additional set of challenges. First, inflation and GDP growth are increasingly affected by global shocks—events outside the control of US policymakers—making it more difficult for the Federal Reserve to hit inflation and employment goals in any given month and opening them up to increased criticism. Second, inflation and GDP growth are increasingly affected by supply shocks (both global and domestic), reflecting a mix of oil price volatility, disruptions to trade and supply chains, and heightened geopolitical uncertainty. Negative supply shocks simultaneously increase both inflation and unemployment—creating difficult tradeoffs for central banks.

Finally, and most important, central bank independence is under pressure in many countries around the world. Central banks should be given strict mandates, should be transparent in how they make

decisions to achieve those mandates, and should be subject to oversight that holds them accountable for their decisions. History and extensive evidence, however, has clearly demonstrated that effective monetary policy requires an independent central bank. <sup>12</sup> In order for monetary policy to support economic prosperity through all of the channels discussed at the start of this testimony, central banks must have the credibility and flexibility to make difficult decisions that will achieve price stability and maximum employment in the years ahead and independent of the political cycle. This credibility will be increasingly important in an environment with larger global and supply shocks, an environment in which the tradeoffs between inflation and growth will be even more challenging. An independent central bank will not be able to avoid difficult economic adjustments, but will be able to stabilize inflation more quickly, reduce the extent of price increases, and require less painful increases in unemployment and declines in growth.

### **Conclusions**

We are at a historic moment. In addition to the slow-moving developments in the US Treasury market and monetary policy discussed above, the global trade and financial architecture is being transformed. Periods of transition create opportunities, but can also aggravate underlying risks and vulnerabilities as households, companies, and governments adjust. These risks are particularly large today given the sharp increase in global debt levels, including in the United States, where the CBO forecasts Federal debt held by the public will reach 100% of GDP by the end of 2025 and 118% of GDP in 2035 (all under current law). Developments further contributing to the fragility of the US Treasury market are: large budget deficits (that need to be financed each month), greater reliance on shorter duration debt (which increases the amount of pre-existing debt that needs to be refinanced each month), the limited capacity of market makers to intermediate this growing volume of debt, changes in who is purchasing US Treasuries (with a greater role for highly leveraged investors), and challenges to the Federal Reserve's independence. Any disruptions to the US Treasury market will impede the ability of the Federal Reserve to stabilize inflation and support maximum employment with moderate long-term interest rates.

This Committee's mandate to ensure the continued resilience of the US Treasury market and ability for the Federal Reserve to implement monetary policy effectively has become even more important for ensuring US economic prosperity than when this Committee was initially formed. I look forward to answering your questions on these important issues.

#### References

Blustein, Paul. (2025). *King Dollar: The Past and Future of the World's Dominant Currency.* Yale University Press.

Stephen Cecchetti and Jens Hilscher. (2024). "Fiscal Consequences of Central Bank Losses." NBER Working Paper #32478. May.

Congressional Budget Office. (2025). "How Changes in Economic Conditions Might Affect the Federal Budget: 2025 to 2035." March.

Du, Wenxin, Kristin Forbes and Matthew Luzzetti. (2024). "Quantitative Tightening Around the Globe: What Have we Learned?" US Monetary Policy Forum. February.

Duffie, Darrell. (2023). "Resilience Redux in the US Treasury Market." Paper prepared for the Federal Reserve Bank of Kansas City's Symposium on Central Banking at Jackson Hole. August.

Forbes, Kristin, Jongrim Ha and Ayhan Kose. (2024). "Rate Cycles." Paper prepared for the ECB Forum on Central Banking in Sintra, Portugal, July.

Forbes, Kristin, Jongrim Ha and Ayhan Kose. (2025). "<u>Tradeoffs and Sacrifice over Rate Cycles: Activity, Inflation and the Price Level.</u>" NBER Annual Conference on Macroeconomics, 2025. April.

Kashyap, Anil, Jeremy Stein, Jonathan Wallen and Joshua Younger. (2025). "<u>Treasury Market Dysfunction and the Role of the Central Bank.</u>" Brookings Papers on Economic Activity, March.

<sup>&</sup>lt;sup>1</sup> This scenario is from Congressional Budget Office (2025) and assumes an increase in the interest rate on short-term Treasury bills and longer duration bonds relative to the CBO's baseline scenario.

<sup>&</sup>lt;sup>2</sup> The term premium is the difference between the yield on a long-term bond relative to a series of short-term bonds. It captures the extra compensation that bond investors require to hold a longer-dated security and is a proxy for the perceived risks around changes in interest rates over this longer window.

<sup>&</sup>lt;sup>3</sup> Data is from the US Federal Reserve Board, Federal Balance Sheet Developments, Dec. 2024. These statistics do not include the value of the Federal Reserve's holdings of agency securities—a market tightly linked to developments in the US Treasury market. Federal Reserve holdings of agency securities at end-2024 were \$2.3tn, down from a peak of \$2.7tn in April 2022.

<sup>&</sup>lt;sup>4</sup> More specifically, when the interest rate that the Federal Reserve pays on reserves is higher than the yield on its existing Treasury holdings (as is occurring today), this can translate into net losses. Cecchetti and Hilscher (2024) report that losses on the Federal Reserve's balance sheet were about 0.75% of GDP over 2023 and 2024. These losses are not directly passed on to the Treasury (as occurs in some other countries, such as the UK). Instead, they generate a deferred asset at the Federal Reserve that is paid off over time when the Federal Reserve returns to profitability. During this period, the Federal Reserve does not pay a share of any profits to the Treasury, however, unlike over the period from 2010 to 2021 when the Federal Reserve paid an average annual transfer of about \$84bn (0.45% of GDP) to the Treasury. Any evaluation of these losses must be weighed against the benefits from the programs corresponding to these asset purchases.

<sup>&</sup>lt;sup>5</sup> Source: Congressional Budget Office (2025).

<sup>&</sup>lt;sup>6</sup> Duffie (2023) states: "Since 2007, the total size of primary dealer balance sheets per dollar of Treasuries' outstanding has shrunk by a factor of nearly four."

<sup>&</sup>lt;sup>7</sup> See Du, Forbes and Luzzetti (2024) for recent evidence, particularly as the Federal Reserve was unwinding its holdings of US Treasuries as part of its program of quantitative tightening.

<sup>&</sup>lt;sup>8</sup> See Du, Forbes and Luzzetti (2024) for more details.

<sup>&</sup>lt;sup>9</sup> Kashyap, Stein, Wallen and Younger (2025) provide a sobering discussion of how the exposures and positioning in the US Treasury market have changed over the last few years. For example, they show that at the end of 2024 hedge funds were net short over \$1tn in Treasury market futures, balanced by a roughly equivalent amount of net repo borrowing. This exposure is roughly double that from before March 2020, when unwinding these trades contributed to extreme market turmoil and required intervention by the Federal Reserve.

<sup>&</sup>lt;sup>10</sup> See Blustein (2025) for a lengthy discussion of the international role of the dollar.

<sup>&</sup>lt;sup>11</sup> See Forbes, Ha and Kose (2024) for evidence.

<sup>&</sup>lt;sup>12</sup> In a new research project, Forbes, Ha and Kose (2025) finds additional evidence supporting this long-standing literature on the importance of central bank independence. This paper evaluates different strategies for central banks to reduce inflation and find that most strategies involve difficult tradeoffs. For example, more aggressive interest rate hikes reduces inflation faster and limits price increases, but comes at the cost of higher unemployment and slower growth. The one policy studied that does not generate a difficult tradeoff is central bank credibility. When faced with an inflation surge, greater central bank credibility corresponds to a lower inflation peak, smaller price increases, and stronger economic activity (including lower unemployment).