

# SAFEGUARDING THE TREASURY MARKET

Anil K Kashyap and Jeremy C. Stein

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The Federal Reserve needs new tools to intervene during future stress

**F**or decades, the US Treasury market has been the most liquid and resilient financial market in the world. Even in times of stress, Treasury securities were assumed to be tradable in large quantities, rapidly, and with little friction—a reliable anchor for the broader financial system. In recent years, however, this assumption has come under question. Severe market dysfunction, most notably in March 2020 but also in April 2025, shows that even the world’s safest securities market can seize up abruptly, with consequences far beyond government bond trading.

These concerns arise in the context of a Treasury market that has grown dramatically. The ratio of publicly held federal debt to GDP is now about 100 percent, and given the current US fiscal stance, this ratio will keep rising (see Chart 1). With expanded issuance, the private financial system’s ability to

intermediate Treasury securities smoothly has not kept up.

In a recent paper with Jonathan Wallen and Joshua Younger, we analyze the trading dynamics that can lead to Treasury market fragility and propose a new way for the Federal Reserve to intervene more surgically when market functioning breaks down. Here we provide a summary of the arguments in that paper.

Recent history suggests that episodes of extreme Treasury market stress are not driven primarily by macroeconomic factors such as changes in interest rates. Instead, they arise from the delicate interplay between the asset managers, hedge funds, and broker-dealers that dominate Treasury trading.

Our central policy recommendation is not more frequent intervention by the Federal Reserve, but rather better-designed intervention when it



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becomes unavoidable. The experience of March 2020 demonstrates both the necessity of a central bank backstop and the cost of relying on blunt tools—particularly large-scale, unhedged bond purchases—that blur the line between market-function support and monetary policy. A more targeted approach would be just as effective and would stabilize markets at lower cost and with fewer side effects.

### **The modern market**

Although the supply of Treasuries has expanded rapidly, traditional intermediaries, especially bank-affiliated broker-dealers, have not expanded their balance sheets to the same degree. Post-2008 financial crisis regulations such as the supplementary leverage ratio, along with heightened risk management standards, make it costly for dealers to hold large inventories of even the safest assets.

Meanwhile, various types of institutional asset managers, including pension funds, insurance companies, mutual funds, and exchange-traded funds, increasingly play a central role in the Treasury market. Although these institutions typically have strong incentives to maintain exposure to long-term interest rates, they face balance sheet constraints and portfolio objectives that discourage them from holding that entire exposure in cash bonds. Instead, they often choose to load up on credit risk to increase their returns while targeting a relatively long overall duration (interest rate exposure) for their portfolios.

To obtain the desired duration exposure, these asset managers increasingly use long positions in derivatives, such as Treasury futures and interest rate swaps, while conserving balance sheet capacity to hold other higher-yielding assets, such as corpo-

rate bonds. This demand for long positions drives derivative prices up relative to cash bonds and creates a natural role for hedge funds and dealers to arbitrage the two markets. By taking the opposite side of asset managers' derivative positions and hedging with cash Treasuries, these intermediaries help align prices across markets and keep spreads small in normal times.

This arrangement works under stable conditions. However, it rests on a fragile foundation: Much of this arbitrage occurs with highly leveraged borrowing. Hedge funds finance their long positions in cash Treasuries by borrowing as much as 99 percent of the overall position in the repurchase (repo) market.

### Who holds risk?

Treasury market fragility can be understood by making a distinction between who bears interest rate risk and who has the balance sheet capacity to arbitrage between cash Treasuries and derivatives, such as futures. In the current market structure, asset managers are the ultimate holders of unhedged duration risk. Their preferences and constraints thus determine the risk premium required to hold long-term Treasuries, known as the "term premium."

Hedge funds and broker-dealers play a different role. They generally do not seek exposure to raw interest rate movements and tend to stay roughly duration-neutral. Instead, they connect the cash and derivative markets via hedged arbitrage positions. The leading example is the cash-futures "basis trade," whereby a hedge fund buys cash Treasuries, sells Treasury futures, and finances the cash side of the purchase in the repo market. Because the price differential between cash bonds and futures is small, profitability depends crucially on the ability to borrow aggressively to fund the position, as also described by Barth and Kahn (2025).

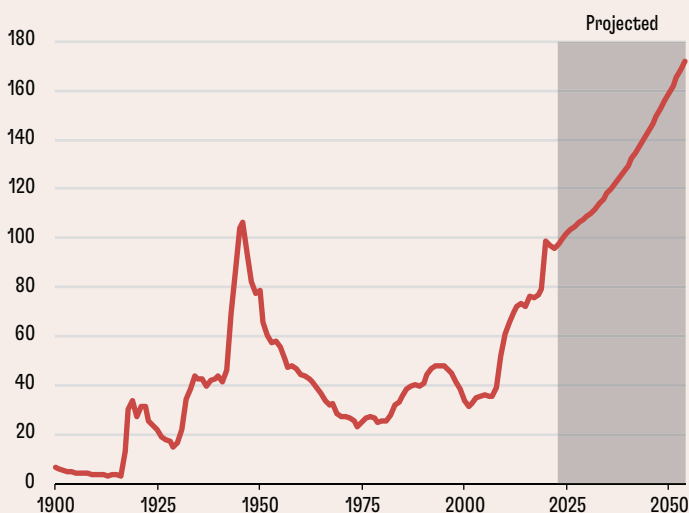
This structure has two important implications. First, given their high leverage, hedge funds are vulnerable to shocks affecting their ability to stay in the trade. This depends on several factors: capital, funding conditions, margin requirements, and risk tolerance. Changes in any of these can lead them to scale back sharply. Second, dealers' limited balance sheet capacity constrains their ability to absorb large flows during stress periods. When hedge funds unwind positions rapidly, dealers can step in only so much. And critically, doing so crowds out their ability to provide other core functions—namely, as market makers in Treasury securities or repo market intermediation.

This system appears stable in normal times but is prone to sudden bouts of dysfunction. One such stress is rapid forced unwinding of hedge-

CHART 1

## More treasuries

Federal government debt could exceed 170 percent of GDP by the mid-2050s, according to the Congressional Budget Office. (US federal government debt held by the public, percent of GDP)



SOURCE: Congressional Budget Office.

fund basis trade positions. This leads to fire sales of cash Treasuries and a rush to cover short derivative positions, causing prices in cash and derivatives to diverge. As constrained dealers struggle to absorb the large flows from fire sales, bid-ask spreads widen, liquidity evaporates, and funding conditions in the repo market deteriorate.

### A stress test

The March 2020 turmoil paints a stark picture of these dynamics. As the COVID-19 shock intensified, investors sought to raise cash, selling Treasuries alongside riskier assets. With market volatility rising, hedge funds faced margin calls on their short futures positions and rapidly pulled back from the basis trade. The selling pressure blew up dealers' balance sheets, forcing them to cut back on market making and repo intermediation.

The Fed intervened to an unprecedented degree, purchasing roughly \$1.6 trillion in Treasury securities in a few weeks. This extraordinary action restored market functioning. But by relying on large unhedged bond purchases that looked like another massive round of quantitative easing, it blurred the line between intervention for market-functioning and monetary-policy purposes. Large-scale Treasury purchases by the Fed continued well after mar-

ket functioning had stabilized, which raises questions about whether the intervention should have been narrower.

The March 2020 episode led to a range of reform proposals: adjustments to leverage regulations, expansion of standing repo facilities, minimum margin requirements for futures, and broader central clearing of Treasury trading. Each proposal has merit and would improve market resilience, but none is a panacea. For instance, broad-access repo facilities can help ensure stable funding conditions even during stress, but fire sales are still likely if hedge funds are forced to exit a trade because of losses on unrelated trades or because of margin calls on futures positions.

These limitations highlight the need for a more direct, yet more targeted, role for central banks in extreme circumstances.

### Narrower interventions

If the Fed is again forced to purchase Treasury bonds during extreme market stress, we propose an alternative approach. It should hedge these purchases against interest rate risk, buying cash Treasuries while simultaneously selling Treasury futures or entering into equivalent derivative positions. This would address the root source of the stress: the need for someone to take the other side of the trade as leveraged intermediaries unwind hedged positions. While this approach may raise legal issues, it is important to recognize that in economic terms it is essentially identical to a standard central bank operation—namely, a repurchase transaction, with the one difference being that the counterparties to the two sides of the trade are different actors.

This strategy has several advantages. First, it relieves pressure on dealer balance sheets more effectively than unhedged purchases since dealers never have significant unhedged exposure to interest rate risk. Second, by remaining duration-neutral, the intervention clearly separates support for market functioning from monetary policy and avoids signaling an unintended monetary policy easing—something that is all the more crucial if market dysfunction occurs during periods of higher inflation.

Third, while unhedged purchases can be cast as market-function-motivated if accompanied by a commitment to quickly unwind the purchases, hedged purchases obviate the need for such potentially dicey commitments. Since the duration-neutrality of the policy is built in up front, it does not require a commitment to future bond sales. Finally, limiting the Fed's interest rate exposure reduces the risk of large ex post losses, which are costly to taxpayers and complicated to explain.

### Moral hazard

Central bank backstops always raise moral hazard concerns. If arbitrageurs expect intervention whenever basis trades move against them, they may take on more leverage. While this legitimate worry should raise the bar for any type of central bank intervention, it is arguably less severe for hedged than for unhedged bond purchases, as the latter do more to establish an absolute floor, a “Fed put,” for bond prices.

A “penalty-rate” approach can further mitigate moral hazard: The Fed could allow basis spreads to widen beyond normal levels and seek to cap only extreme dislocations. By intervening only at clearly dysfunctional thresholds and allowing some private sector losses, the central bank can mitigate worst-case outcomes without fully insulating hedge funds from risk.

### Policy lesson

Episodes of Treasury market dysfunction are not a random bolt from the blue. Rather, they are a consequence of a market structure that relies on leveraged balance sheet intermediation to absorb a rapidly growing supply of government debt. When stress hits, this structure amplifies shocks and overwhelms traditional broker-dealers.

The lesson from March 2020 is not that it was wrong for the Fed to intervene, but that it intervened with a tool that was too blunt and difficult to disentangle from monetary policy. Preparing more surgical, duration-neutral tools in advance will allow future interventions to stabilize markets more effectively and with fewer undesirable side effects.

As the Treasury market continues to grow, the question is not whether the central bank will be called to action again but whether it will be ready with the right tools when the need arises. **F&D**

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**ANIL K KASHYAP** is the Stevens Distinguished Service Professor of Economics and Finance at the University of Chicago's Booth School of Business, and **JEREMY C. STEIN** is the Moise Y. Safra Professor of Economics at Harvard University.

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